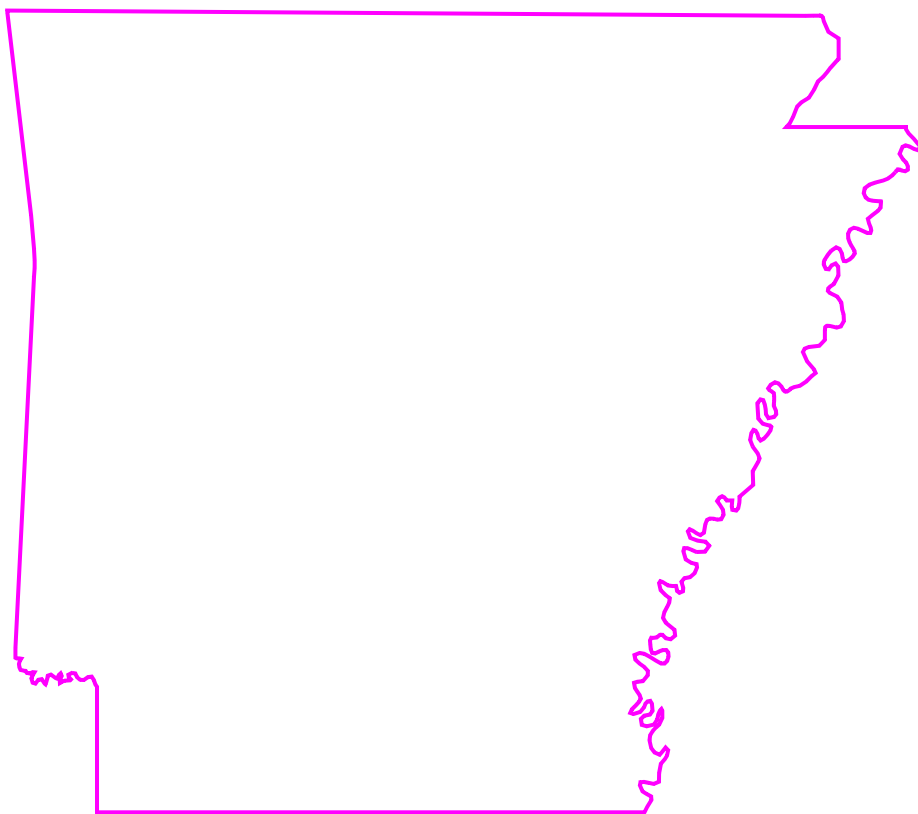


# Water Resources Data Arkansas Water Year 2002

Water-Data Report AR-02-1



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



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

# CALENDAR FOR WATER YEAR 2002

## 2001

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OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

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## 2002

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JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
														31						

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6			1	2	3	4								1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					

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## INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey, in cooperation with local, State, and other Federal agencies, obtains a large amount of data pertaining to the water resources of Arkansas each water year (October 1 through September 30). These data, accumulated during many water years, constitute a valuable database for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the U.S. Geological Survey, these data are published annually in this report series entitled "Water Resources Data-Arkansas" and are stored in the U.S. Geological Survey National Water Information System (NWIS) and U.S. Environmental Protection Agency STORET databases.

Water resources data reported for the 2002 water year for Arkansas consist of records of discharge and water quality (physical measurements and chemical concentrations) of streams, water quality of lakes, and ground-water levels and ground-water quality. Data from selected sites in Missouri and Oklahoma also are included. This report contains daily discharge records for 108 surface-water gaging stations and 87 partial-record stations; water-quality data for 65 surface-water stations and 5 wells, and water levels for 15 observation wells. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements.

Records of stream discharge or gage height, and contents, volume, or elevation of lakes were first published in a series of U.S. Geological Survey Water-Supply Papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these Water-Supply Papers were in an annual series and for 1961-65 and 1966-70 were in a 5-year series. Records of chemical constituent concentrations, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of Water-Supply Papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of Water-Supply Papers entitled "Ground Water Levels in the United States." Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, Colorado, 80225-0286.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual Water-Data Reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate Water-Data Reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an annual Water-Data report on a State-boundary basis. These annual Water-Data reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as U.S. Geological Survey Water-Data Report AR-02-1. Water-Data Reports are for sale in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

## COOPERATION

The Geological Survey and agencies of the State of Arkansas have had cooperative agreements for the systematic collection of surface-water records since 1927, and for collection of ground-water and water-quality records since 1946. Organizations that assisted in collecting information through cooperative agreement with the Geological Survey in water year 2002 are:

**Arkansas Soil and Water Conservation Commission, J. Randy Young, Director**  
**Arkansas Department of Environmental Quality, Marcus C. Devine, Director**  
**Arkansas Geological Commission, Mac B. Woodward, State Geologist**  
**Arkansas Highway and Transportation Department, Dan Flowers, Director**  
**Arkansas Game and Fish Commission, Scott Henderson, Director**  
**Arkansas Department of Parks and Tourism, Richard W. Davies, Director**  
**Central Arkansas Water, James T. Harvey, Manager**  
**Beaver Water District, Alan Fortenberry, Engineer-Manager**  
**City of Fort Smith, Steve Parke, Director of Utilities**  
**City of Fayetteville, Jim Beavers, City Engineer**  
**City of Batesville, Joe M. Biard, City Mayor**  
**City of Cabot, Mickey (Stubby) Stumbaugh, City Mayor**  
**Rogers Water Utilities, Tom McAlister, Utility Manager**  
**Union County Conservation District, Ken Rudder**

Assistance in the form of funds or services was provided to collect records for some of the gaging stations and water-quality stations published in this report by the U.S. Army Corps of Engineers, National Park Service, Southwestern Power Administration, Entergy, U.S. Fish and Wildlife Service, National Weather Service, and Natural Resources Conservation Service. Organizations that supplied data are acknowledged in station descriptions.

## SUMMARY OF HYDROLOGIC CONDITIONS

### Surface Water

Streamflow varies seasonally in Arkansas and generally reflects precipitation patterns unless a stream is regulated. Above-average rainfall resulted in above-average runoff throughout state during the 2002 water year. Streamflow for the year (as a percentage of the median for the base period 1961-2000) was 164 percent for the index station on the Saline River near Rye, in southern Arkansas, 354 percent for the index station on the Buffalo River near St. Joe, in northern Arkansas, 172 percent for the index station on the Big Piney Creek at Highway 164 near Dover, in west-central Arkansas, and 170 percent for the index station on the James Fork near Hackett, in western Arkansas. Monthly and annual mean discharges for the 2002 water year, and median for the monthly and annual mean discharges for the base period 1961-2000 at the St. Joe, Hackett, Dover, and Rye sites are shown on figure 1.

Storm systems during the 2002 water year produced unusually large amounts of rainfall. A storm system in mid-December that moved across the southern half of Arkansas produced locally heavy amounts of rainfall. The raingage at USGS gaging station 07369680 Bayou Macon at Eudora recorded nearly 5.5 inches of rain occurring December 12-13. A storm system that occurred December 15-17 in the northeastern part of the State also produced large amounts of rainfall. USGS gaging station 07069500 Spring River at Imboden recorded 5 inches of rainfall during this time period. A storm system that moved across the northwestern part of the State April 7-8 produced record high gage heights for several gaging stations in the area. USGS gaging station 07251500 Frog Bayou at Rudy recorded 7.6 inches of rainfall during this time with more than 1.3 inches falling during a one-hour period April 7.

Streamflow statistics for the 2002 water year compared to the streamflow statistics for the period of record at 10 stations are presented below.

Station identification	Period of record	Statistics of discharge during 2002 water year (cubic feet per second)			Statistics of discharge during period of record (cubic feet per second)		
		Maximum instantaneous	Minimum instantaneous	Mean	Maximum instantaneous	Minimum instantaneous	Mean
07047942 L'Anguille River near Colt	1970-02	11,600	2.2	1,080	16,600	0.99	724
07060710 North Sylamore Creek near Fifty-Six	1965-02	11,200	.60	83.6	25,200	.60	102
07077380 Cache River at Egypt	1964-02	6,570	.00	1,360	8,490	.00	1,760
07196900 Baron Fork at Dutch Mills	1958-02	3,750	.70	48.2	20,900	.00	45.5
07249400 James Fork near Hackett	1958-02	16,100	.18	251	30,000	.00	148
07261000 Cadron Creek near Guy	1954-02	11,200	.00	283	24,200	.00	272
07264000 Bayou Meto near Lonoke	1954-02	3,090	.00	353	5,750	.00	289
07340300 Cossatot River near Vandervoort	1967-02	12,200	7.7	184	32,000	5.5	195
07356000 Ouachita River near Mt. Ida	1941-02	30,900	21.0	850	102,000	2.3	733
07364150 Bayou Bartholomew near McGehee	1938-42, 1945-02	5,530	14.0	1,140	6,870	.20	695

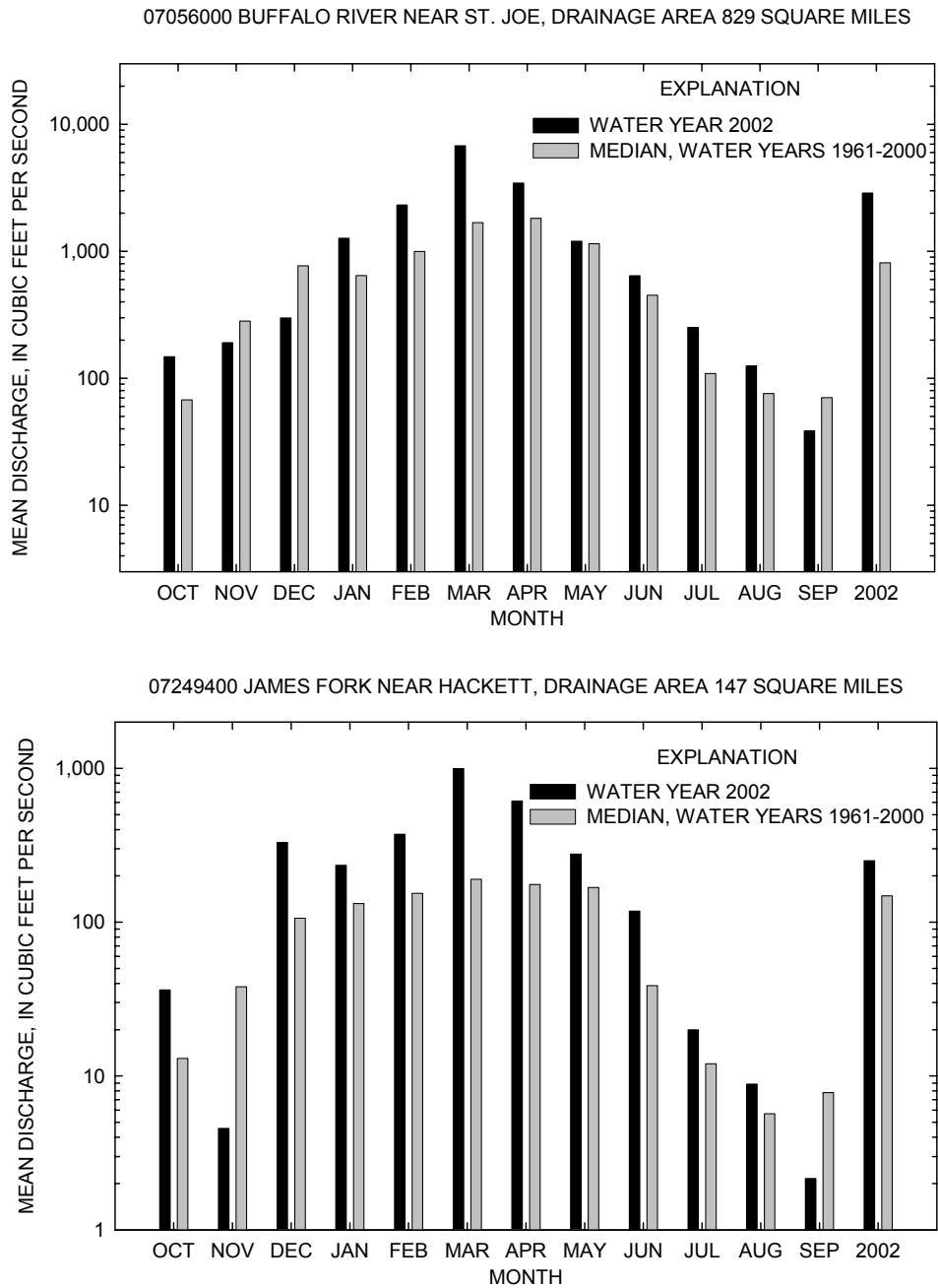
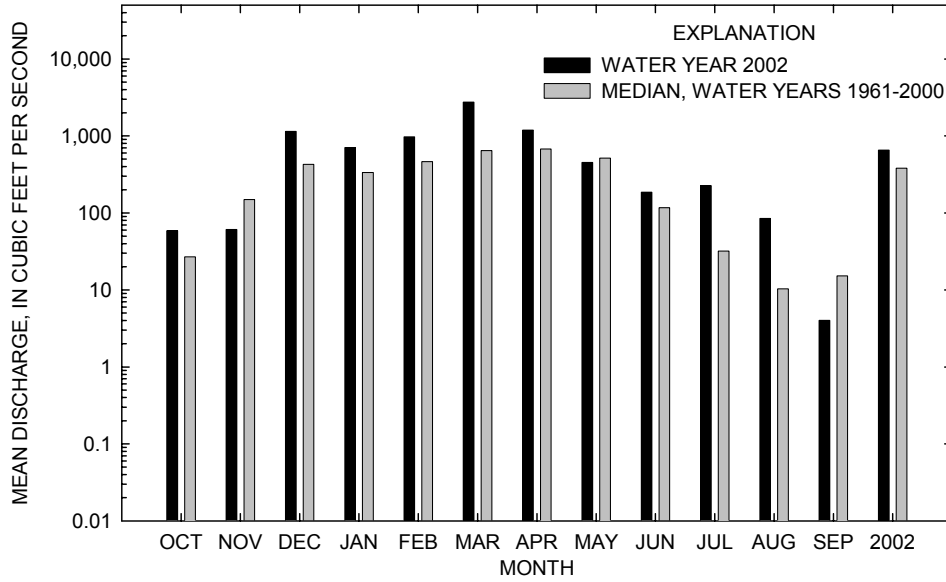


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 2002 water year with the median of the monthly and annual mean discharges for a 40-year base period.

WATER RESOURCES DATA FOR ARKANSAS, 2002

07257006 BIG PINEY CREEK AT HIGHWAY 164 NEAR DOVER, DRAINAGE AREA 297 SQUARE MILES



07363500 SALINE RIVER NEAR RYE, DRAINAGE AREA 2,102 SQUARE MILES

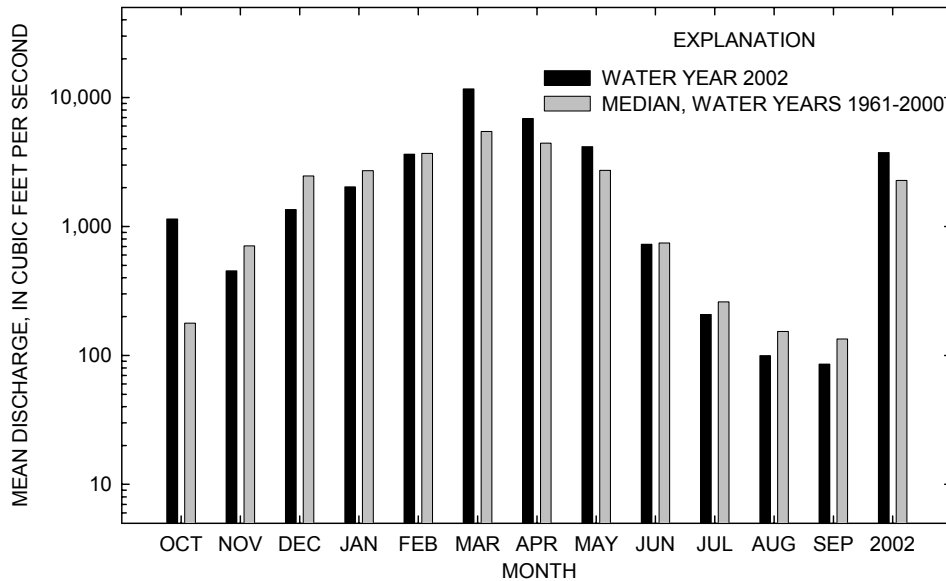


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 2002 water year with the median of the monthly and annual mean discharges for a 40-year base period-continued.

**Surface-Water Quality**

Arkansas streams provide an abundant supply of water of good quality that is suitable for many uses. Localized stream contamination occurs in some areas of agricultural-chemical use, near large urban areas, and near some industrial areas.

Both point and non-point sources of contamination adversely affect the suitability of surface water for drinking, recreation, and aquatic life. The Mississippi Alluvial Plain in the State is particularly susceptible to non-point source effects because of extensive farming and current agricultural practices.

In the Ozark Plateaus, which are experiencing rapid population growth, surface water locally is affected by both point and non-point sources of contamination. Principal point sources are wastewater-treatment plants. Principal non-point source contributions are related to animal farming practices. Watersheds where point and non-point source contamination is a major concern are the upper White River and Illinois River.

Streams in the West Gulf Coastal Plain of southern Arkansas locally are affected by point sources of contamination. Many of these point sources are related to oil and gas production.

Although the Arkansas River and other streams in the Arkansas Valley are affected locally by contaminant sources, they continue to be considered as a source of water for public supply and irrigation. Many of the small streams continue to show effects of coal mining. Municipal and industrial discharges to the Arkansas River may affect its potability, however, upgrading of wastewater-treatment plants, storage effects of the Arkansas River Navigation System, and tributary dams have moderated the effects of inflowing contaminants.

Retrieving data for water-quality sites now can be achieved via the internet. Real-time data from monitors and water-quality data from laboratory analyses can be retrieved from the website at:

<http://water.usgs.gov>

Concentrations of selected water-quality constituents are listed below for sampling sites on some principal streams in the State. Concentrations of the constituents for the 2002 water year are compared to concentrations for the period of record to indicate changes in water quality

## WATER RESOURCES DATA FOR ARKANSAS, 2002

The highest dissolved-solids concentration found in selected streams in 2002 water year was 400 mg/L in the Arkansas River at David D. Terry Lock and Dam below Little Rock. Dissolved-solids concentrations, in milligrams per liter, for selected sampling sites are presented below.

	Period of Record	2002 water year		Period of record through 2002	
		Minimum	Maximum	Minimum	Maximum
07047942 L'Anguille River near Colt	1970-02	45	259	45	424
07250550 Arkansas River at David D. Terry Lock and Dam below Little Rock	1969-02	238	400	85	690

The highest dissolved chloride concentration found in selected streams in 2002 water year was 120 mg/L in the Arkansas River at David D. Terry Lock and Dam below Little Rock. Dissolved chloride concentrations, in milligrams per liter, for selected sampling sites are presented below.

	Period of Record	2002 water year		Period of record through 2002	
		Minimum	Maximum	Minimum	Maximum
07047942 L'Anguille River near Colt	1977-02	3.0	30	1.9	49
07053250 Yocum Creek near Oak Grove	1970-02	7.3	12.1	4.6	16.1
07060710 North Sylamore Creek near Fifty-Six	1966-02	1.2	2.2	.3	18
07250550 Arkansas River at David D. Terry Lock and Dam below Little Rock	1969-02	52.0	120	11	290
07362000 Ouachita River at Camden	1947-52, 1974-02	2.9	4.0	2.1	79
07047942 L'Anguille River near Colt	1977-02	3.0	30	1.9	49

The highest total phosphorus concentration found in selected streams in 2002 water year was 0.136 mg/L in Yocum Creek near Oak Grove. Total phosphorus concentrations, in milligrams per liter, for selected sampling sites are presented below. [E, Results estimated]

	Period of Record	2002		Period of record through 2002	
		Minimum	Maximum	Minimum	Maximum
07053250 Yocum Creek near Oak Grove	1977-02	0.035	0.136	<0.01	0.45
07060710 North Sylamore Creek near Fifty-Six	1970-02	E.002	.006	E.002	.34
07250550 Arkansas River at David D. Terry Lock and Dam below Little Rock	1966-02	.04	.11	<.01	.61
07362000 Ouachita River at Camden	1969-02	<.02	.04	<.01	.31

### Ground-Water Levels

A majority of the ground-water consumption in Arkansas is from two major aquifers--the Mississippi River Valley alluvial aquifer (hereafter referred to as the alluvial aquifer) and the Sparta-Memphis aquifer. The alluvial aquifer occurs within the Quaternary deposits of the Mississippi Alluvial Plain, which covers approximately the eastern one-third of the State, and is the most productive aquifer within Arkansas. The Sparta-Memphis aquifer occurs within the Sparta and Memphis Sands of the Claiborne Group of Eocene age and is the second most productive aquifer within the State. The Sparta-Memphis aquifer underlies the alluvial aquifer within the Mississippi Alluvial Plain and extend into the West Gulf Coastal Plain in the south-central part of the State. The alluvial aquifer provides a majority of Arkansas' ground-water used for irrigation and fish farming; the Sparta-Memphis aquifer provides most of the ground water for industry and public supply.

The regional potentiometric gradient in the alluvial aquifer is toward the south and southeast from an altitude of approximately 280 feet above sea level in the northeastern part of the State to about 80 feet in the southern part. The natural gradient of the water surface has been interrupted at three locations where large withdrawals for irrigation have created cones of depression. The first cone of depression has become elongated along a northwest to southeast axis, and is located in parts of Lonoke, Prairie, and Arkansas Counties; the second cone has developed west of Crowleys Ridge in Craighead, Cross, and Poinsett Counties. The third cone has developed in eastern Monroe and western Lee and St. Francis Counties.

The regional potentiometric gradient of the Sparta-Memphis aquifer generally is southeastward except where affected by large withdrawals. Three cones of depression, centered in Columbia, Union, and Jefferson



Counties, have developed because of large withdrawals for industrial and public supplies in those areas. Additional large withdrawals for irrigation in the Grand Prairie region have resulted in a northeasterly elongation of the cone centered under Arkansas County. The deepest water level in the Sparta and Memphis aquifers during the spring of 2001 was 460 feet below land surface, which occurred in Union County.

### DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

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

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

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

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

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

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

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

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

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

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

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

**Bacteria** are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in

nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

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

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

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

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

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

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

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

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

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

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

**Blue-green algae** (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

**Bottom material** (See "Bed material")

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

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

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

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

$\pi$  is the ratio of the circumference to the diameter of a circle;  $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume ( $\mu\text{m}^3/\text{mL}$ ) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

**Cfs-day** (See “Cubic foot per second-day”)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Dissolved-solids concentration** in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Flow-duration percentiles** are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

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

Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

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

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

**Gaging station** is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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

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

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

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

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

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

**High tide** is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

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

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

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

**Horizontal datum** (See “Datum”)

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

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

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

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

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

**Laboratory reporting level (LRL)** is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a “less than” (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

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

**Latent heat flux** (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

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

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

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

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

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

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

**Low tide** is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>*

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

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

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

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

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

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

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

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

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

**Methylene blue active substances (MBAS)** are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

**Micrograms per gram (UG/G,  $\mu\text{g/g}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

**Micrograms per kilogram (UG/KG,  $\mu\text{g/kg}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

**Micrograms per liter (UG/L,  $\mu\text{g/L}$ )** is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

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

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

**Minimum reporting level (MRL)** is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

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

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

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

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

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

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

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



**Nephelometric turbidity unit (NTU)** is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

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

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

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

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

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

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

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

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

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

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

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

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

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

**Peak flow (peak stage)** is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the

year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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

**Percent shading** is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

**Periodic-record station** is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

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

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

**pH** of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

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

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

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

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

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

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

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

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

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg O}/(\text{m}^3/\text{time})$ ] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-

oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

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

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

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

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

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

**Return period** (See "Recurrence interval")

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

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

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

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

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

**Sediment** is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the

occurrence of sediment in streams are influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

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

**Seven-day 10-year low flow (7Q10)** is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

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

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

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

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

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

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

**Stage** (See "Gage height")

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

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

**Substrate** is the physical surface upon which an organism lives.

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

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

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

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

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

**Suspended, recoverable** is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of “suspended, recoverable” constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

**Suspended sediment** is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

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

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

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

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

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

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

**Taxa (Species) richness** is the total number of distinct species or groups and usually decreases with pollution. (See also “Percent Shading”)

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

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta

Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

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

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

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

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

**Tons per day (T/DAY, tons/d)** is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

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

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

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

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

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

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

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

**Total recoverable** is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of

analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

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

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

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

**Turbidity** is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the “REMARKS” column of the Annual Data Report.

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

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

**Vertical datum** (See “Datum”)

**Volatile organic compounds (VOCs)** are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

**Water table** is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

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

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

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

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

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

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

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

### STATION IDENTIFICATION NUMBERS

Each data station, whether stream site or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The system used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water sites will differ, but both are based on geographic location. The “downstream order” system is used for regular surface-water stations and the “latitude-longitude” system is used for wells.

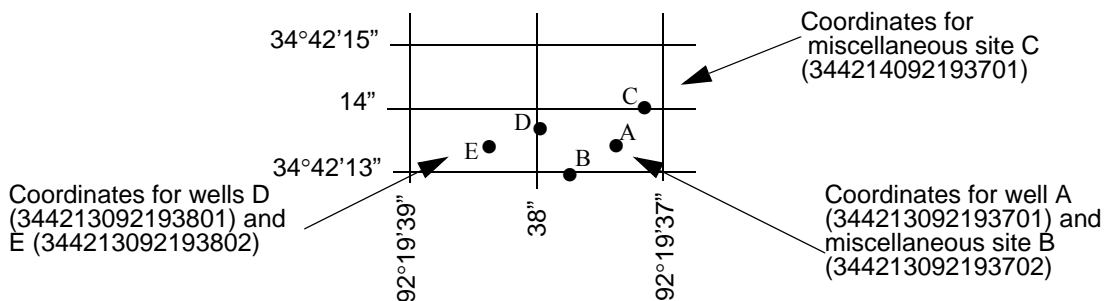
#### Downstream Order and Station Number

Since October 1, 1950, the order of listing hydrologic-station records in Geological Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations of first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated, with respect to the stream to which it is immediately tributary, is indicated by an indentation in the list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These numbers are in the same downstream order as described in the paragraph above. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The downstream order number for each station, such as 07060710, which appears just to the left of the station name, includes the two-digit Part number “07” plus the six-digit downstream-order number “060710.” This six-digit number can be expanded to 12 digits if necessary because of station density.

#### Numbering System for Wells

The well numbering system of the Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15-digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the well within a 1-second grid. See diagram below.



### SPECIAL NETWORKS AND PROGRAMS

**Hydrologic Benchmark Network** is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative of undeveloped watersheds nationwide,



and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at:

<http://water.usgs.gov/hbn/>

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and remobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at:

<http://water.usgs.gov/nasqan/>

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at:

<http://bqs.usgs.gov/acidrain/>

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at:

<http://water.usgs.gov/nawqa>

Two NAWQA study units include parts of Arkansas. The Ozark Plateaus NAWQA study began in 1991 and sampled ground and surface water and aquatic biology intensively from 1993-95. The low intensity phase continued in 2002 with three streams sampled with NAWQA support. Included in this report are approximately monthly water quality and daily mean discharge for three surface-water stations, Yocum Creek near Oak Grove, Buffalo River near Boxley, and North Sylamore Creek near Fifty-Six. The Mississippi Embayment NAWQA

study began in 1994 and intensive sampling occurred in 1996 through 1998. Additional information about the Ozark Plateaus NAWQA and the Mississippi Embayment NAWQA are available at:

<http://ar.water.usgs.gov>

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

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

### EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or any period of time. They may be obtained using a continuous stage-recording device, but need not be. Daily discharge records were computed and included in this report for 89 stations in Arkansas in 2002. Locations of surface-water stations are shown in figure 2 (page 46).

By contrast, partial records are obtained at stations where daily mean discharge values are not computed. Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

### Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observation of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either a continuous reading on a nonrecording gage or from a water-stage recorder that collects and stores the data in some form at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations (TWRI's), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For streamgaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), stepbackwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily-mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is

given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

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

### **Data Presentation**

The records published for each continuous-record surface-water discharge station (gaging station) consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

### **Station Manuscript**

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

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

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

**PERIOD OF RECORD.**--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

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

**GAGE.**--The type of gage in current use, the datum of the current gage referred to sea level and a condensed history of the types, locations, and datums of previous gages are given under this heading.

**REMARKS.**--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

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

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

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

#### **Data Table of Daily Mean Values**

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

#### **Statistics of Monthly Mean Data**

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS \_\_\_ - \_\_\_, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

#### **Summary Statistics**

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS \_\_\_ - \_\_," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

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

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

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

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

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

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

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

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

**MAXIMUM PEAK FLOW.**--The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

**MAXIMUM PEAK STAGE.**--The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

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

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

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

**10 PERCENT EXCEEDS.**--The discharge that has been exceeded 10 percent of the time for the designated period.

**50 PERCENT EXCEEDS.**--The discharge that has been exceeded 50 percent of the time for the designated period.

**90 PERCENT EXCEEDS.**--The discharge that has been exceeded 90 percent of the time for the designated period.

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

#### **Identifying Estimated Daily Discharge**

Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site, are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not

indicated. The methods used computing discharge for various unusual conditions have been explained in preceding paragraphs.

### **Accuracy of Field Data and Computed Results**

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

The 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; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft<sup>3</sup>/s; to tenths, between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers, between 10 and 1,000 ft<sup>3</sup>/s; and to three significant figures, above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to the discharge figures listed for partial-record stations.

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

### **Other Data Available**

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the District Office. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made. Information on the availability of unpublished data or statistical analyses may be obtained from the District Office. Real-time stream stage and flow data are available on the Arkansas District World Wide Web Home Page located at:

<http://ar.water.usgs.gov>

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals, a table showing the daily discharge and monthly and yearly discharge is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published by water year.

## **EXPLANATION OF SURFACE-WATER QUALITY RECORDS**

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

### **Collection and Examination of Data**

Surface-water samples for analyses usually are collected at or near gaging stations. The water-quality records are given immediately after the water-discharge records for these stations. Seventy stations are included for 2001. The locations of these stations are shown in figure 3 (page 47).

The descriptive heading for surface-water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

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

1028 U.S. Geological Survey  
80513 Arkansas District, WRD, USGS

80020 National Water-Quality Laboratory, WRD, USGS  
81213 District Water-Quality Laboratory, Ocala, Florida  
82913 Rolla, Missouri Sediment Lab

The column heading "SAMPLE SOURCE" in the water-quality tables of this report designates the location from which the sample was taken. In this report, two locations are shown; location of the main channel is designated by a 67 sample-source code, and the location of the overbank is designated by a 68 sample-source code.

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

### **On-Site Measurements and Sample Collection**

In obtaining water-quality data, a major concern is that the data obtained represent the in situ quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. A1, A3, and Book 9, Chap. A1-A9. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

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

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly values beginning at 0100 hours and ending at 2400 hours for the day or record. More detailed records (hourly values) may be obtained from the Geological Survey District Office whose address is given on the back of the title page of this report.

### **Dissolved Trace-Element Concentrations**

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

### Change in National Trends Network Procedures

Sample handling procedures at all National Trends Network stations were changed substantially January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, Illinois 61820.

#### Water Temperature

Water temperatures are measured at most water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. To convert from degrees Celsius to degrees Fahrenheit or from degrees Fahrenheit to degrees Celsius, use one of these formulae:  $^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$  or  $^{\circ}\text{F} = 9/5 ^{\circ}\text{C} + 32$ .

#### Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment-discharge value differs from the value computed as the product of the discharge multiplied by mean concentration multiplied by 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

#### Laboratory Measurements

Samples for biochemical-oxygen demand (BOD) and samples for indicator bacteria are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colorado, Ocala, Florida, or Rolla, Missouri. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

#### Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the **LOCATION** nor the **DRAINAGE AREA** statements are repeated. The following information, as appropriate,



are provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

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

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

**PERIOD OF RECORD.**--This indicates the period for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

**REMARKS.**--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

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

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

**REVISIONS.**--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system NWISWeb [<http://water.usgs.gov/nwis/nwis>]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

### Remarks Codes

The following remark codes may appear with water-quality data:

#### PRINT OUTPUT REMARK

- E Estimated value
- > Actual value is known to be greater than the value shown
- < Actual value is known to be less than the value shown
- <0.00 Due to numeric rounding format; actual value is known to be less than 0.005
- K Results based on colony count outside the acceptance range (non-ideal colony count)
- V Indicates the analyte was detected in both the sample and associated field blank

### EXPLANATION OF GROUND-WATER LEVEL RECORDS

The ground-water-level data in this report comprise information for a basic network of observation wells. The water-level measurements are intended to provide a sample and historical record of water-level fluctuations in the State's most productive aquifers.

Data are included for 15 wells in Arkansas (fig. 4, page 429). Four wells are measured manually one or more times each year. Eleven wells are measured using water-stage recorders. Each well is identified by means of a 15-digit number that is based on latitude and longitude (see diagram on page 22).

### Data Collection and Computation

Measurements of water levels are made in many types of wells and under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized, it is determined by conditions at a particular site. However, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary

identification number is the local well number, an alphanumeric number derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or by a water-stage recorder. The water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Land-surface datum is the datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the depth to water may be a few tenths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or to the nearest foot.

### **Data Presentation**

Each well record consists of the following information:

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

**AQUIFER.**--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

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

**DATUM.**--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

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

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

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

## **EXPLANATION OF GROUND-WATER QUALITY RECORDS**

### **Collection of the Data**

In an attempt to detect long-term changes in ground-water quality, a network of 25 monitoring sites has been established. The monitoring sites for sampling ground water were selected from all major aquifers. Each year two or more sites are sampled from large aquifers such as those in the Quaternary alluvium and Sparta Sand. Water samples are collected from all monitoring sites at 5-year intervals. Sampling schedules are staggered so that five or six sites are usually sampled each year. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years. In 2001, five sites in the network were sampled.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey TWRI publications referred to in the "On-Site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and

generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

### Data Presentation

The records of ground-water levels and quality are published in a section titled Ground-Water Levels and Quality of Ground Water. Data for levels and quality of ground water are listed alphabetically by county and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. The well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARKS codes listed for surface-water-quality records are also applicable to ground-water-quality records.

### QUALITY-CONTROL DATA

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

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

**Source solution blank** – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

**Ambient blank** – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

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

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

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

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

**Pump blank** – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

**Standpipe blank** – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

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

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

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

**Canister blank** – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

**REFERENCE SAMPLES**—Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

**REPLICATE SAMPLES**—Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

**Concurrent sample** – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

**Sequential sample** – a type of replicate sample in which the samples are collected one after the other, typically over a short time.

**Split sample** – a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

**SPIKE SAMPLES**—Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

**Concurrent sample** – a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

**Split sample** – a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

#### ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

<http://ar./water.usgs.gov>

Some water-quality and ground-water data are also available through the WWW. This report is available in its entirety in pdf format through the WWW. In addition, data can be provided in various machine-readable formats. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Discipline's District Offices (see address on the back of the title page).

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

**Book 1. Collection of Water Data by Direct Measurement****Section D. Water Quality**

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

**Book 2. Collection of Environmental Data****Section D. Surface Geophysical Methods**

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

**Section E. Subsurface Geophysical Methods**

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

**Section F. Drilling and Sampling Methods**

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

**Book 3. Applications of Hydraulics****Section A. Surface-Water Techniques**

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

#### **Section B. Ground-Water Techniques**

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

#### **Section C. Sedimentation and Erosion Techniques**

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

### **Book 4. Hydrologic Analysis and Interpretation**

#### **Section A. Statistical Analysis**

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

- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

#### **Section B. Surface Water**

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

#### **Section D. Interrelated Phases of the Hydrologic Cycle**

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

### **Book 5. Laboratory Analysis**

#### **Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

#### **Section C. Sediment Analysis**

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

### **Book 6. Modeling Techniques**

#### **Section A. Ground Water**

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6, 1996. 125 p.
- 6-A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7, 2002. 77 p.

### **Book 7. Automated Data Processing and Computations**

#### **Section C. Computer Programs**

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

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

#### **Book 8. Instrumentation**

##### **Section A. Instruments for Measurement of Water Level**

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

##### **Section B. Instruments for Measurement of Discharge**

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

#### **Book 9. Handbooks for Water-Resources Investigations**

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

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.



## DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in Arkansas have been discontinued or converted to partial-record stations. Daily streamflow records were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi <sup>2</sup> )	Period of record
ST. FRANCIS RIVER BASIN			
07047000	St. Francis River floodway near Marked Tree (Dam)	4,644	1934-65
07047500	St. Francis River at Marked Tree	5,148	1934-73
07047815	Cross County Ditch near Birdeye	--	1995-00
07047882	Straight Slough near Birdeye	--	1995-00
07047904	Clark Corner Cut-Off near Colt	--	1995-00
WHITE RIVER BASIN			
07048000	West Fork White River at Greenland	83.1	1945-83
07048500	West Fork White River near Fayetteville	118	1937-45
07049500	White River near Rogers	1,020	1952-63
**07055000	White River near Flippin	6,081	1928-80
*07055608	Crooked Creek at Yellville	406	1988-94
07057000	Buffalo River near Rush	1,096	1928-70
07057250	White River at Shipps Ferry	8,007	1963-64
07060892	Sullivan Creek at Sandtown	27.2	1990-91, 1993-94
**07061000	White River at Batesville	11,070	1937-58, 1987-94
07068890	Fourche River above Pocahontas	229	1964-70
**07069000	Black River at Pocahontas	4,845	1936-70
07069220	Spring River near Mammoth Springs	280	1988-94
*07069500	Spring River at Imboden	1,183	1936-94
07072000	Eleven Point River near Ravenden Springs	1,134	1930-33, 1936-94
07073000	Strawberry River near Evening Shade	217	1939-79
*07074000	Strawberry River near Poughkeepsie	473	1936-94
07073500	Piney Fork at Evening Shade	99.2	1939-84
**07075000	Middle Fork of Little Red River at Shirley	302	1939-84
*07075300	South Fork Little Red River at Clinton	148	1962-94
07076000	Little Red River near Heber Springs	1,153	1927-80
07076620	Little Red River near Searcy	1,648	1983-96
*07076750	White River at Georgetown	22,387	1991-94
07076850	Cypress Bayou near Beebe	166	1961-76
07077930	Big Creek near Moro	77.4	1961-70
07077950	Big Creek at Poplar Grove	448	1970-93
07078000	LaGrue Bayou near Stuttgart	176	1935-54
ARKANSAS RIVER BASIN			
07194760	Illinois River near Viney Grove	80.7	1986
07195400	Illinois River near Siloam Springs	509	1986 1979-80,
*07249500	Cove Creek near Lee Creek	35.3	1950-70
07251000	Frog Bayou near Mountainburg	74.2	1936-61
*07251500	Frog Bayou at Rudy	216	1950-70
07252500	Sixmile Creek Subwatershed No. 6 near Chismville	4.23	1960-70
07253000	Sixmile Creek at Chismville	24.1	1954-70
07253500	Sixmile Creek near Branch	36.7	1954-70

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## DISCONTINUED GAGING STATIONS--CONTINUED

Station Number	Station name	Drainage area (mi <sup>2</sup> )	Period of record
ARKANSAS RIVER BASIN--CONTINUED			
07254000	Sixmile Creek Subwatershed No. 5 near Chismville	2.76	1960-70
07254500	Sixmile Creek Subwatershed No. 2 near Caulksville	5.81	1960-70
07255000	Sixmile Creek at Caulksville	104	1954-70
07255100	Sixmile Creek near Subwatershed No. 23 near Branch	4.49	1960-70
07255500	Hurricane Creek near Branch	17.2	1954-70
07256000	Hurricane Creek near Caulksville	53	1954-70
*07256500	Spadra Creek at Clarksville	61.1	1952-70
*07258000	Arkansas River at Dardanelle	153670	1937-94
07259500	Petit Jean River near Waveland	516	1939-80
07262500	Fourche LaFave River near Nimrod	684	1936-80
07263465	Storm Ditch at Rolling Oaks Drive at Maumelle	0.36	1997
07264500	Bayou Meto near Stuttgart	574	1935-54
RED RIVER BASIN			
*07339500	Rolling Fork near DeQueen	182	1948-80
*07340500	Cossatot River near DeQueen	360	1938-80
*07341000	Saline River near Dierks	121	1938-80
07349430	Bodcau Creek at Stamps	234	1958-70
07356500	South Fork Ouachita River at Mount Ida	64	1949-70
07358000	Ouachita River near Hot Springs	1,405	1922-30
07359700	Caddo River at Glenwood	201	1988
07361000	Little Missouri River near Murfreesboro	380	1928-31, 1937-77
*07362500	Moro Creek near Fordyce	240	1951-83
*07363200	Saline River near Sheridan	1,123	1970
07364000	Saline River near Warren	2,476	1928-31, 1937-40
*07365800	Cornie Bayou near Three Creeks	180	1956-87
07365900	Three Creeks near Three Creeks	50.3	1956-71

\*Converted to partial-record station

\*\*Converted to stage-only station

## DISCONTINUED WATER-QUALITY STATIONS

The following water-quality stations have been discontinued in Arkansas. Continuous daily records of water temperature or sediment and monthly or periodic samples of chemical quality were collected and published for the period of record shown for each station.

Station number	Station name	Type of record	Period of record
MISSISSIPPI RIVER MAIN STEM			
07024181	Mississippi River at Huffman	Chem.	1974-83
07029150	Mississippi River at Barfield	Chem.	1974-83
07032010	Mississippi River at West Memphis	Chem.	1969-70
07040496	Cockle Burr Slough Ditch near Monette	Chem, Sed	1979-97
07047970	Mississippi River at Helena	Chem.	1972-74
07265450	Mississippi River near Arkansas City	Chem.	1974-93
		Sp. Cond.,	1974-81
		Temp.	
07265455	Mississippi River near Greenville, Mississippi	Chem.	1973-74
ST. FRANCIS RIVER BASIN			
07040350	Big Slough Ditch near Paragould	Chem., Sed.	1978-84
07040424	Locust Creek Ditch near Paragould	Chem., Sed.	1978-84
07040428	Eight Mile Ditch near Paragould	Chem., Sed.	1978-84
07040440	Thompson Creek near Lester	Chem., Sed.	1978-81
07040445	Big Bay Ditch near Lester	Chem., Sed.	1978-81
07040500	Cockle Burr Slough Ditch near Black Oak	Chem., Sed.	1978-79
07046500	Big Lake Outlet near Manila	Chem., Sed.	1972-83
07046535	Penniscot Bayou near Yarbrow	Chem.	1972-74
07047400	Penniscot Bayou near Dell	Chem.	1974-83
07047500	St. Francis River at Marked Tree	Chem.	1946, 1950-55, 1966-73
07047560	Tyronza River near Dyess	Chem.	1977
07047570	Tyronza Bayou near Dyess	Chem.	1977
07047575	Tyronza River Ditch No. 40 near Chelford	Chem.	1977
07047585	Tyronza River Ditch No. 6 near Lepanto	Chem.	1977
07047590	Tyronza River near Spear Lake	Chem.	1977
07047700	Tyronza River near Twist	Chem.	1974-88
07047800	St Francis River at Parkin	Chem.	1973-94
07047810	St Francis River Floodway near Marked Tree	Sed.	1990-2000
07047815	Cross County Ditch near Birdeye	Sed.	1996-2000
07047882	Straight Slough near Birdeye	Chem., Sed.	1977-1984 1996-2000
07047904	Clark Corner Cut-Off near Colt	Sed.	1990-2000
07047936	L'Anguille River near Cherry Valley	Chem., Sed.	1981-84
07047950	L'Anguille River at Palestine	Chem., Sed.	1978-79, 1981-84
07047968	St. Francis River north of Helena	Chem.	1972-83
WHITE RIVER BASIN			
07048000	West Fork White River at Greenland	Chem.	1946-54, 1956-57, 1959,1963, 1976-79 1976-81
07049693	White River at Campground E near Busch	Temp., D.O.	1991-Dec 98

## WATER RESOURCES DATA FOR ARKANSAS, 2002

## DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
07049695	White River above Busch	Chem., Temp.	1969, 1972-82
07050000	White River at Beaver	Chem.	1945-46, 1948-53, 1974-83
07053700	Lake Taneycomo at Branson, Missouri	Chem.	1977-91
07054471	Bull Shoals Lake below Big Music Creek near Midway fishpens	Chem.	1978-91
07054474	Bull Shoals Lake below Big Music Creek near Midway mouth of cove	Chem.	1978-79, 1982-91
07054535	White River below Bruce Creek near Lakeview	D.O., Temp	1992-93
07055000	White River near Flippin	Chem.	1945-50, 1953,1979
07055550	Crooked Creek Tributary near Dog Patch	Chem.	1947-59, 1966-82
07055600	Crooked Creek at Pyatt	Chem.	1963,1964, 1974-78
07055630	White River at Buffalo City	Temp.	1963-64
07055700	Little Buffalo River at Jasper	Temp.	1963-70
07056507	Bear Creek West of Marshall	Chem.	1983-86
07057000	Buffalo River near Rush	Chem.	1946-54, 1958-59, 1961,1963
07057246	White River near Lone Rock	Temp.	1979-82
07057250	White River at Shipps Ferry	Temp.	1963-64
07060000	North Fork River at Norfork Dam	Temp., D.O.	1991-98
07060004	North Fork River near Salesville	Temp., D.O.	1993-94
07060010	North Fork River at Norfork	Chem., Temp.	1974-83
07060660	White River at Sylamore	Temp.	1967-82
07060700	South Sylamore Creek at Allison	Chem.	1957-63, 1987-88, 1992-93
07060839	White River above Lock and Dam 3 near St. James	Temp., D.O.	1989-91
07061000	White River at Batesville	Chem.	1983-86
07061094	White River near Salado	Chem.	1983-86
07061950	Clearwater Lake at Carter Hollow, Missouri	Chem.	1978-91
07061980	Clearwater Lake near Carter Spring on Webb Creek, Missouri	Chem.	1978-91
07068600	Little Black River at Success	Chem., Temp.	1965, 1980-86
07068867	Fourche River near Middlebrook	Chem.	1969-75
07069268	South Fork of Spring River near Moko	Chem.	1972-74
07069500	Spring River at Imboden	Chem.	1945-63, 1966-72, 1976-79
07072000	Eleven Point River near Ravenden Springs	Chem.	1945-60, 1963,1966, 1972-79
07072500	Black River at Black Rock	Chem	1946,1953, 1967-94

**WATER RESOURCES DATA FOR ARKANSAS, 2002**

**DISCONTINUED WATER-QUALITY STATIONS--Continued**

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
07073000	Strawberry River near Evening Shade	Chem.	1946-57, 1979
07073500	Piney Fork at Evening Shade	Chem.	1959,1979
07074000	Strawberry River near Poughkeepsie	Chem.	1949-60, 1971,1972, 1979
07074490	Black River at Jacksonport	Chem.	1964, 1974-83
07074491	White River at Jacksonport	Chem.	1983-86
07074595	Village Creek near Walnut Ridge	Chem.	1973-74, 1976-77
07074645	Lick Pond near Alicia	Chem.	1976-77
07074660	Village Creek near Swifton	Chem.	1973-74, 1976-77
07074665	Maple Ditch near Swifton	Chem.	1976-77
07074675	Swan Pond Ditch near Tuckerman	Chem.	1976-77
07074700	Village Creek near Newport	Chem.	1960-61, 1963-64, 1973-74, 1976-77
07074849	White River above Augusta	Temp.	1967-71
07074850	White River near Augusta	Chem.	1954,1979
07075000	Middle Fork of Little Red River at Shirley	Chem.	1954,1979
07076200	Little Red River near Wilburn	Chem., Temp.	1968-83
07076500	Little Red River at Pangburn	Temp.	1967-82
07076620	Little Red River near Searcy	Temp.	1967-82
		Chem.	1984-93
07076634	Little Red River at Judsonia	Chem.	1975-83
07076640	Little Red River near West Point	Temp.	1967-72
07076750	White River at Georgetown	Temp.	1967-81
07076850	Cypress Bayou near Beebe	Chem.	1976-78
07077000	White River at DeValls Bluff	Temp.	1963-70
07077080	Little Cache River Ditch No. 1 near McDougal	Chem.	1973-75
07077380	Cache River at Egypt	Chem	1966, 1976-79, 1996-98
07077400	Cache River near Cash	Chem.	1974-83
07077555	Cache River near Cotton Plant	Chem	1987-90, Nov 1992- June 1993, Oct 1994-98
07077600	Cache River at Brasfield	Chem.	1974-83
07077750	Bayou DeView near Brasfield	Chem.	1956-57, 1974-83
07077790	Cache River at 100 Yards below Dredging	Chem.	1977-80
07077794	Cache River at Mouth near Clarendon	Chem.	1977-80
07077800	White River at Clarendon	Chem., Temp.	1948-67, 1970-86
07077950	Big Creek at Poplar Grove	Chem.	1972, 1976-79

## WATER RESOURCES DATA FOR ARKANSAS, 2002

## DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
07077952	Big Creek near Poplar Grove	Chem.	1970-73
07077960	Big Creek near Watkins Corner	Chem.	1974-83
07078120	Little LaGrue Bayou near Stuttgart	Chem.	1954-55
07078285	White River at Arkansas Post Canal near Nady	Chem.	1972-83
ARKANSAS RIVER BASIN			
07188910	Butler Creek near Sulphur Springs	Chem.	1969-93
07195686	North Flint Creek near Springtown	Chem.	1995-96
07195800	Flint Creek at Springtown	Chem.	1975-79 1996
07195850	Flint Creek north of Siloam Springs	Chem.	1972-81
07195855	Flint Creek near West Siloam Springs	Chem.	1979-96
07196950	Evansville Creek at Evansville	Chem.	1958-59
07247012	Poteau River south of Bates	Chem.	1972-83
07247903	Lee Creek near Natural Dam	Chem.	1972-74
07250000	Lee Creek near Van Buren	Chem.	1951-59, 1972-79
07252000	Mulberry River near Mulberry	Chem.	1947-59, 1975-79
07252400	Arkansas River at Ozark	Chem.	1962-63, 1965-66
07252500	Sixmile Creek Subwatershed near Chismville	Chem.	1959-67
07256040	Short Mountain Creek west of Paris	Chem.	1987-93
07257000	Big Piney Creek near Dover	Chem.	1951-56
07257500	Illinois Bayou near Scottsville	Chem.	1971-72
07257995	Lake Dardanelle at Dardanelle	Chem.	1966-67
07260500	Petit Jean River at Danville	Chem.	1949-52, 1976-78
07260640	Petit Jean River near Centerville	Chem.	1974-83
07261000	Cadron Creek near Guy	Chem.	1976-78
07261235	East Fork Cadron Creek north of Conway	Chem.	1973
07261250	Cadron Creek west of Conway	Chem.	1955-56, 1973-83
07263010	Fourche LaFave River near Aplin	Chem.	1952-53
07263150	Fourche LaFave River near Bigelow	Chem.	1975-83
072632971	Yount Creek near Martindale	Chem.	2000
072632962	Bringle Creek at Martindale	Chem.	2000
072632982	Reece Creek at Little Italy	Chem.	2000
07263500	Arkansas River at Little Rock	Chem.	1946-69
07263650	Arkansas River at Pine Bluff	Chem.	1963
07263720	Arkansas River near Altheimer	Chem.	1954
07264000	Bayou Meto near Lonoke	Chem.	1968-83
07263750	Arkansas River at Lock and Dam 3 near Swan Lake	Chem.	1974-83
07264050	Bayou Two Prairie near Furlow (formerly published as "near Cabot")	Chem.	1975-83
07264500	Bayou Meto near Stuttgart	Chem.	1950-52, 1973-74
07265280	Arkansas River at Pendleton	Chem.	1963
RED RIVER BASIN			
07339500	Rolling Fork near DeQueen	Temp.	1976-79

**WATER RESOURCES DATA FOR ARKANSAS, 2002**

**DISCONTINUED WATER-QUALITY STATIONS--Continued**

Station number	Station name	Type of record	Period of record
RED RIVER BASIN--CONTINUED			
07339850	Rolling Fork near Horatio	Chem.	1974-83
07340500	Cossatot River near DeQueen	Temp.	1976-79
07340520	Cossatot River near Lockesburg	Chem.	1974-83
07341000	Saline River near Dierks	Temp.	1975-79
07341280	Millwood Lake on Mine Creek near Okay	Chem.	1983-93
07341500	Red River at Fulton	Chem., Temp.	1946-47, 1952-61, 1978-79
07342000	Red River at Garland	Chem.	1976
07344290	Days Creek south of Texarkana	Chem.	1973-74
07344340	Sulphur River near Fort Lynn	Chem.	1975-78
07348615	Bayou Dorcheat near Bussey	Chem.	1973-74
07348680	Crooked Creek at Arkansas-Louisiana State Line	Chem.	1973-74
07349445	Bodcau Creek near Taylor	Chem.	1952, 1973-74
07349453	Wheeler Creek near Arkana	Chem.	1973-74
07349455	Bear Creek near Arkana	Chem.	1973
07349457	Dooley Creek near Arkansas-Louisiana State Line	Chem.	1973
07356150	Ouachita River near Washita	Chem.	1970-72
07356320	Irons Fork Creek near Fannie	Chem.	1970-78
07356500	South Fork Ouachita River at Mount Ida	Chem.	1970-72, 1978
07357500	Lake Ouachita near Hot Springs	Chem.	1970-78
07357501	Ouachita River at Blakely Mountain Dam near Hot Springs	Chem.	1970-83
07357503	Ouachita River at Mountain Pine	Temp.	1979-82
07358501	Ouachita River at Carpenter Dam near Hot Springs	Chem.	1974-86
07359900	DeGray Lake near Arkadelphia	Chem.	1950-52, 1976-78
07359910	Caddo River at DeGray Regulating Dam near Arkadelphia	Chem.	1976-78
07360000	Ouachita River at Arkadelphia	Chem.	1949-70
07360162	Ouachita River near Sparkman	Chem.	1974-83
07360182	Brushy Creek near Ouachita	Chem.	1978-81
07360250	Little Missouri River near Newhope	Chem.	1970-78
07360350	Self Creek near Daisy	Chem.	1970-72, 1976-78
07360500	Lake Greeson near Murfreesboro	Chem.	1970-72, 1976-78
07361022	Prairie Creek at Murfreesboro	Chem.	1984-93
07361025	Prairie Creek near Murfreesboro	Chem.	1984-93
07361500	Antoine River at Antoine	Chem.	1976-79
07363080	Saline River near Tull	Chem.	1974-75
07363400	Hurricane Creek below Sheridan	Chem.	1950-55
07363500	Saline River near Rye	Chem.	1947-55, 1958-60, 1968-71, 1976-80
07364020	L'Aigle Creek at Hermitage	Chem.	1980
07364060	Bayou Lapile at Strong	Chem.	1952-55
07364080	Ouachita River near Felsenthal	Chem., Temp.	1950-67, 1971-81

## WATER RESOURCES DATA FOR ARKANSAS, 2002

## DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
RED RIVER BASIN--CONTINUED			
07364088	Coffee Creek near Crossett	Chem.	1973-83
07365900	Three Creeks near Three Creeks	Chem.	1953-55, 1973-74
07366105	Little Cornie Bayou east of Junction City	Chem.	1973-74
07367666	Big Bayou near Jerome	Chem.	1974-81
07367695	LaFourche Bayou near Wilmot	Chem.	1973-74



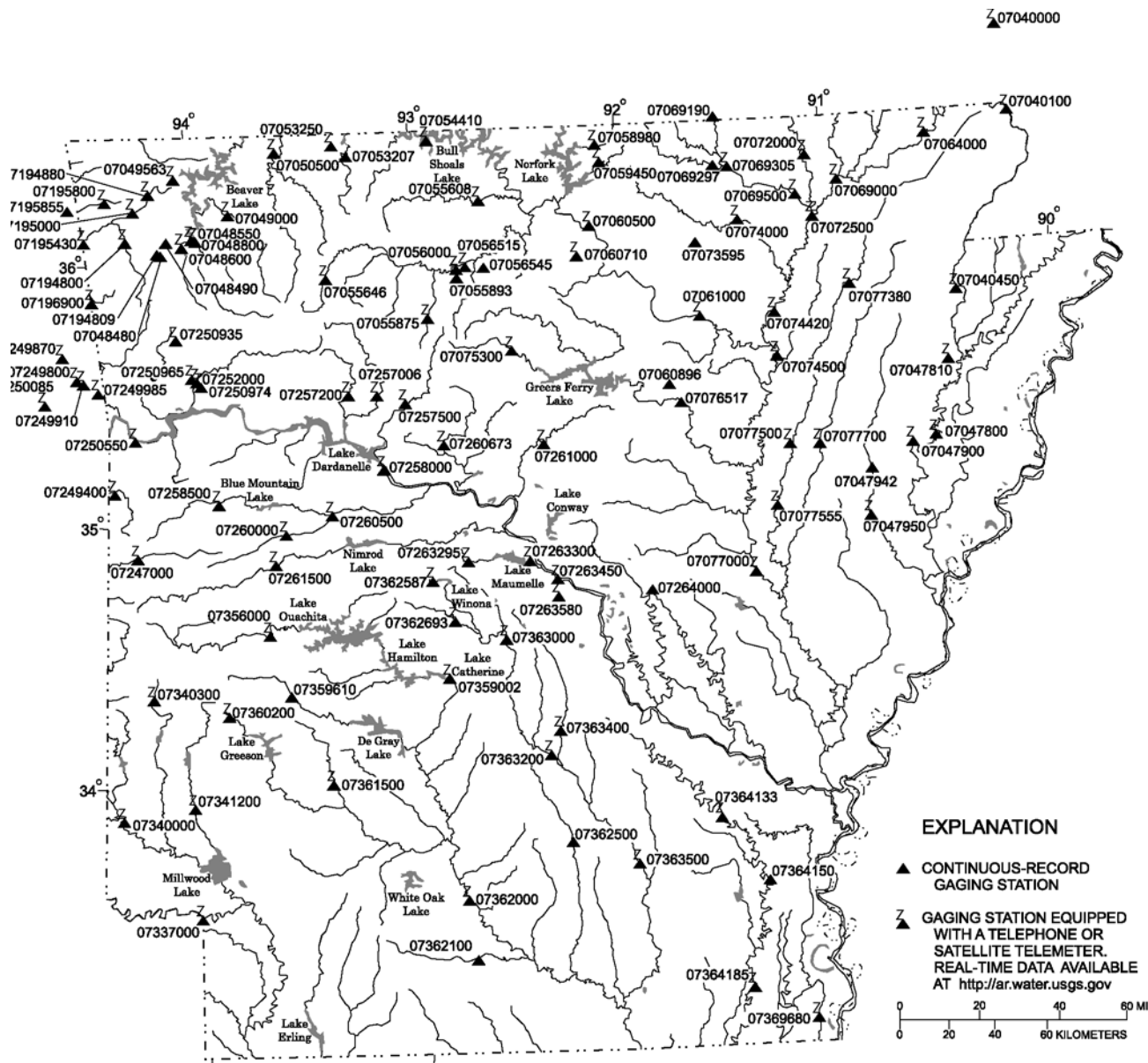


Figure 2.--Locations of continuous-record gaging stations in Arkansas.

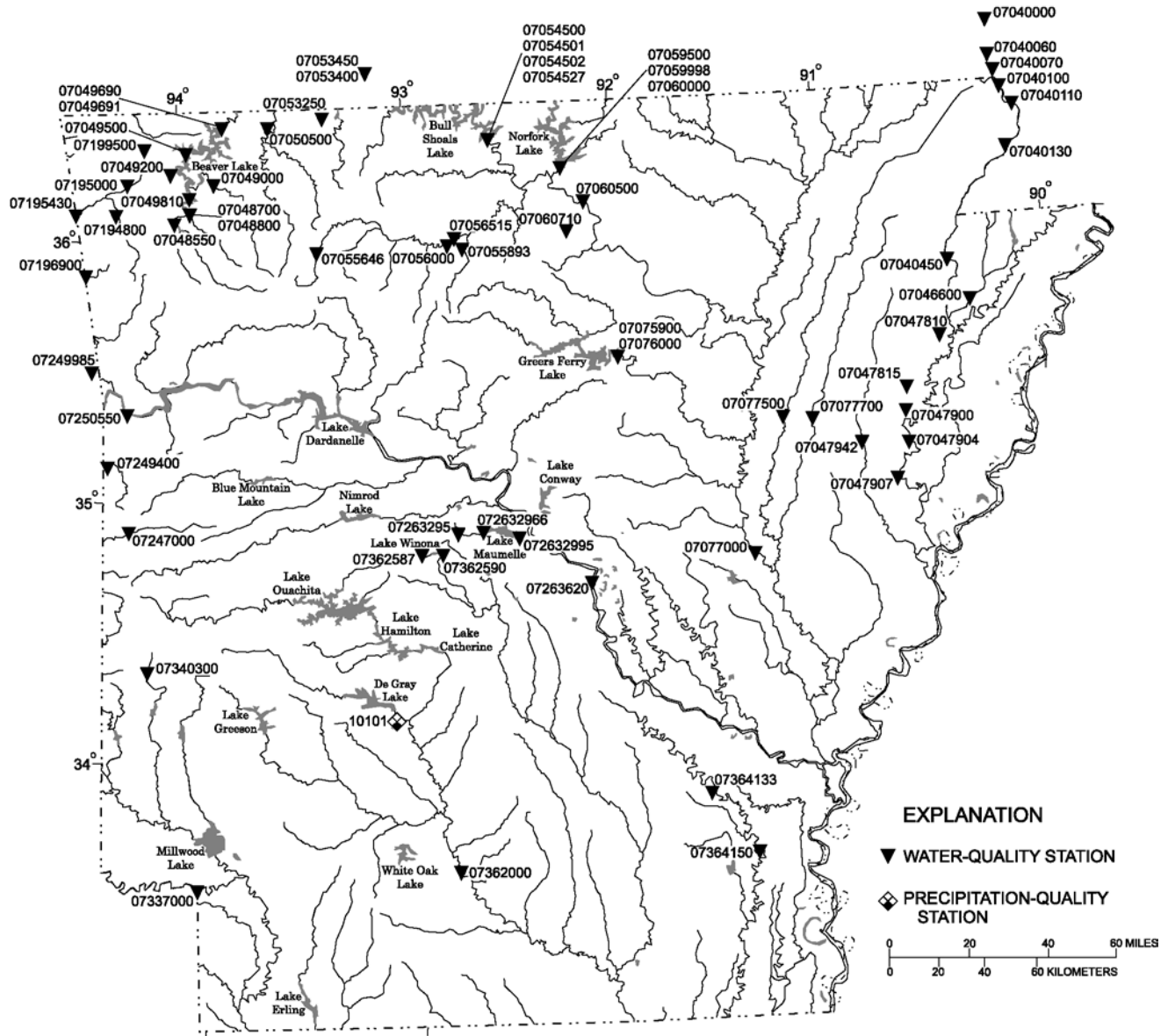


Figure 3.--Locations of water-quality stations in Arkansas.

## ST. FRANCIS RIVER BASIN

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## 07040000 ST. FRANCIS RIVER AT FISK, MISSOURI

**LOCATION.**--Lat 36°46'50", long 90°12'08", in NW1/4SW1/4 sec.28, T.24 N., R.8 E., Butler-Stoddard County line, Hydrologic Unit 08020203, at bridge on State Highway 51, at Fisk, Missouri.

**DRAINAGE AREA.**--1,370 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1927 to September 1941 and October 1997 to current year. Daily stages January 1917 to February 1922 and August 1992 to date, daily discharges January 1984 to date, and results of discharge measurements March 1935 to September 1997 in reports of U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 307.46 ft above NGVD of 1929.

**REMARKS.**--Water-discharge records good except estimated daily discharges which are poor. Some regulation by Wapapello Lake, 36.3 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1917, 28.0 ft, from floodmark, Apr. 18, 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e70	265	1290	4490	2530	2450	6290	3930	9370	3290	e200	e264
2	e70	270	1890	4380	3830	2120	5840	3920	9350	3170	e201	e240
3	e70	270	2390	4040	4970	1770	5350	3910	9360	3060	e201	e220
4	e70	269	2490	3730	5270	1900	4820	3910	9340	2910	e192	e210
5	e129	267	2490	3340	5180	1720	4240	3890	9340	2730	e171	e200
6	e147	269	2440	2900	4960	595	3670	3860	9380	2630	e168	e190
7	e123	269	2050	2530	4720	278	3210	3860	9350	2540	e179	e180
8	e115	269	1920	2250	4490	175	2820	4110	9310	2420	e202	e175
9	e119	272	1750	2070	4210	498	2830	4360	9260	e1910	e190	e175
10	e124	277	1510	1930	3960	2600	3380	4660	9270	e1730	e180	e160
11	e139	239	1350	1790	3710	4550	3550	5740	9080	e1500	e160	e160
12	e233	e136	1150	1570	3470	5310	3570	6250	8540	e1200	e150	e160
13	e395	e130	1080	1350	3240	5530	3580	7170	7950	e1010	e175	e160
14	388	e131	1060	1140	2980	5570	3910	8000	7310	e795	e209	e150
15	376	e133	1380	1010	2710	5540	4140	8540	6600	e492	e473	e185
16	374	e133	2130	970	2460	5430	4200	8980	5660	e344	e659	e225
17	465	e133	3880	879	2220	5230	4270	9650	4860	e336	e677	e315
18	509	e133	3420	759	1980	5140	4260	10100	4330	e325	e660	e364
19	514	e129	3680	651	1790	5240	4240	9650	4120	e323	e652	e427
20	514	e151	4490	609	2120	6020	4090	9540	4020	e319	e671	e469
21	513	220	4690	598	3070	6540	4020	9480	3870	e316	e848	e480
22	431	263	4710	580	3640	6980	4000	9400	3710	e324	e1220	e379
23	387	274	4700	597	3500	7200	3990	9380	3640	e316	e1320	e447
24	392	284	4660	1940	3230	7190	4010	9380	3590	e243	e902	e460
25	400	283	4600	1620	3050	7160	4140	9360	3560	e206	e748	e461
26	399	283	4560	1530	2870	8060	3960	9340	3500	e204	e775	e465
27	629	292	4520	1580	2790	7780	3930	9370	3440	e204	e813	e429
28	742	311	4570	1580	2700	7450	3930	9390	3450	e205	e720	e327
29	453	621	4540	1570	---	7260	3920	9380	3400	e206	e514	e222
30	290	1160	4490	1560	---	7060	3920	9400	3340	e214	e359	e180
31	266	---	4540	1690	---	6730	---	9390	---	e211	e318	---
TOTAL	9846	8136	94420	57233	95650	147076	122080	227300	191300	35683	14907	8479
MEAN	317.6	271.2	3046	1846	3416	4744	4069	7332	6377	1151	480.9	282.6
MAX	742	1160	4710	4490	5270	8060	6290	10100	9380	3290	1320	480
MIN	70	129	1060	580	1790	175	2820	3860	3340	204	150	150
AC-FT	19530	16140	187300	113500	189700	291700	242100	450800	379400	70780	29570	16820

ST. FRANCIS RIVER BASIN

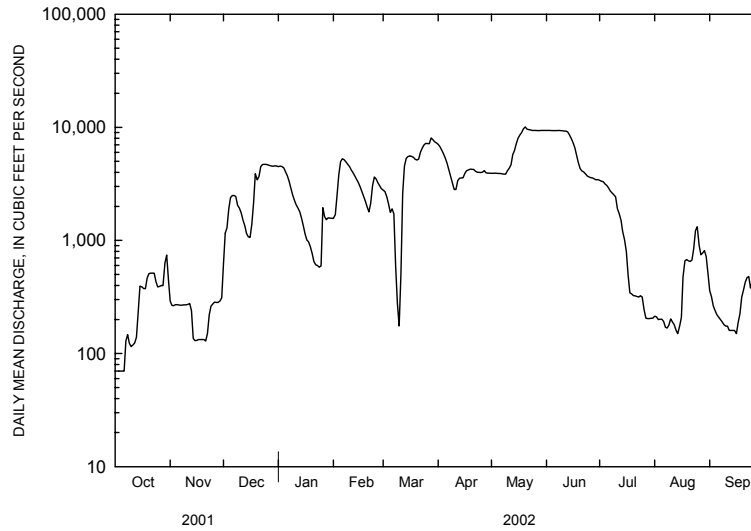
07040000 ST. FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928-41, 1998-02, BY WATER YEAR (WY)

MEAN	308.9	414.3	1054	2171	2643	2709	2856	2099	1306	606.8	496.5	163.1
MAX	1115	1587	3046	7905	4817	5391	5107	7332	6377	1151	2204	361
(WY)	1937	1937	2002	1937	1999	1939	1999	2002	2002	2002	1998	1998
MIN	125	205	243	603	571	328	326	195	234	112	109	58.8
(WY)	1941	2000	1939	1940	1940	1941	1941	2000	1941	1941	1941	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928-41, 1998-02	
ANNUAL TOTAL	349333		1012110			
ANNUAL MEAN	957.1		2773		1378	
HIGHEST ANNUAL MEAN					2773	
LOWEST ANNUAL MEAN					437	
HIGHEST DAILY MEAN	5370	Feb 28	10100	May 18	36000	May 16 1933
LOWEST DAILY MEAN	70	Jul 11	70	Oct 1	8.0	Jul 25 1940
ANNUAL SEVEN-DAY MINIMUM	73	Sep 28	97	Oct 1	16	Jul 20 1940
MAXIMUM PEAK FLOW			10200	May 18	49900	Mar 13 1935
MAXIMUM PEAK STAGE			20.97	May 18	26.71	Mar 13 1935
INSTANTANEOUS LOW FLOW					5.0	Jul 26 1940
ANNUAL RUNOFF (AC-FT)	692900		2008000		998100	
10 PERCENT EXCEEDS	2700		7220		3540	
50 PERCENT EXCEEDS	437		1920		520	
90 PERCENT EXCEEDS	130		180		142	

<sup>e</sup>Estimated



ST. FRANCIS RIVER BASIN

07040000 ST.FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK (M) (00078)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT										
16...	1315	82913	80513	384	.18	765	7.2	69	7.8	214
NOV										
26...	1500	82913	80513	259	.27	754	7.9	75	7.4	229
DEC										
27...	0805	82913	80513	4550	.09	764	12.0	96	7.7	141
JAN										
14...	1550	82913	80513	1080	.18	756	12.3	98	7.5	174
FEB										
11...	1530	82913	80513	3630	.09	765	11.0	90	7.4	143
MAR										
12...	1425	82913	80513	5760	.09	757	9.3	83	7.7	112
APR										
08...	1530	82913	80513	2700	.12	752	8.6	84	8.3	139
MAY										
13...	1630	82913	80513	6900	.09	761	8.2	90	7.2	199
JUN										
10...	1645	82913	80513	8790	.09	756	7.8	93	7.5	241
JUL										
09...	1400	82913	80513	2060	.15	759	7.1	91	7.5	148
AUG										
12...	1645	82913	80513	152	.18	758	7.8	102	8.3	194
SEP										
11...	0720	82913	80513	161	.18	757	5.5	69	7.4	280

Date	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SEDI-MENT, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)
OCT										
16...	13.5	95	95	100	--	--	41	42.5	23	35
NOV										
26...	12.5	98	98	100	--	--	35	24.5	13	41
DEC										
27...	6.2	89	94	98	100	--	60	737	49	81
JAN										
14...	5.3	98	98	98	99	100	32	93.3	3	22
FEB										
11...	7.1	84	86	94	100	--	64	627	16	49
MAR										
12...	9.8	77	88	97	100	--	188	2920	14	35
APR										
08...	13.5	93	93	95	100	--	71	518	79	90
MAY										
13...	20.0	85	90	94	100	--	91	1700	16	38
JUN										
10...	23.5	77	85	96	100	--	39	926	19	47
JUL										
09...	27.8	96	96	96	100	--	73	406	9	27
AUG										
12...	28.7	96	96	100	--	--	72	29.5	2	10
SEP										
11...	26.9	99	99	100	--	--	69	30.0	13	45

## ST. FRANCIS RIVER BASIN

## 07040000 ST.FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)
	OCT 16...	93	99	100	--	--
NOV 26...	98	99	100	--	--	--
DEC 27...	100	--	--	--	--	--
JAN 14...	96	100	--	--	--	--
FEB 11...	98	100	--	--	--	--
MAR 12...	95	100	--	--	--	--
APR 08...	97	99	100	--	--	--
MAY 13...	84	94	98	100	--	--
JUN 10...	92	98	100	--	--	--
JUL 09...	94	99	100	--	--	--
AUG 12...	91	99	100	--	--	--
SEP 11...	93	98	98	--	98	100

ST. FRANCIS RIVER BASIN

07040060 St. FRANCIS RIVER NEAR GLENNONVILLE, MISSOURI

LOCATION.--Lat 36°34'22", long 90°11'06", in NE1/4NW1/4 sec.10, T.22 N., R.8 E., Butler-Dunklin County line, Hydrologic Unit 08020203, at bridge on Missouri State Highway 53, 1.7 mi southwest of Glennonville, Missouri.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED, SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
NOV	27... 0740	82913	80513	1280	.06	12.3	99	100	--	--	--
DEC	27... 1120	82913	80513	5480	.12	6.0	79	86	96	99	100
JAN	15... 0800	82913	80513	1260	.12	4.5	97	97	99	100	--
FEB	12... 0915	82913	80513	3950	.09	6.6	80	87	98	100	--
MAR	13... 1015	82913	80513	6380	.06	9.8	85	89	98	100	--
APR	09... 0730	82913	80513	3210	.12	13.6	91	96	100	--	--
MAY	14... 0840	82913	80513	14500	.09	18.8	56	60	85	100	--
JUN	11... 0900	82913	80513	10300	.12	22.8	67	75	97	100	--

Date	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)
NOV	27... 786	2720	40	61	82	99	100	--	--	--
DEC	27... 134	1980	6	25	96	100	--	--	--	--
JAN	15... 35	119	6	39	98	100	--	--	--	--
FEB	12... 91	971	16	40	97	100	--	--	--	--
MAR	13... 268	4620	11	30	95	100	--	--	--	--
APR	09... 100	867	5	12	85	100	--	--	--	--
MAY	14... 373	14600	7	24	77	89	96	--	99	100
JUN	11... 170	4730	15	40	92	97	98	100	--	--

## ST. FRANCIS RIVER BASIN

## 07040070 WILHELMINA CUTOFF NEAR CAMPBELL, MISSOURI

LOCATION.--Lat 36°30'53", long 90°09'30", in SW1/4SW1/4 sec.25, T.22 N., R.8 E., Dunklin County, Hydrologic Unit 08020203, at bridge on county road 4.7 mi northwest of Campbell, Missouri, off Missouri State Highway 53.

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
NOV 26...	1305	82913	80513	281	.09	12.0	100	--	--	--
DEC 27...	0955	82913	80513	5200	.09	5.9	92	98	99	100
JAN 14...	1415	82913	80513	1570	.12	5.2	82	89	95	100
FEB 11...	1315	82913	80513	4300	.09	7.4	89	94	97	100
MAR 12...	1455	82913	80513	5830	.06	9.8	80	87	98	100
APR 08...	1410	82913	80513	3590	.09	13.9	94	97	100	--
MAY 13...	1250	82913	80513	14100	.09	19.4	94	96	100	--
JUN 10...	1530	82913	80513	17200	.12	23.0	78	78	87	99

Date	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)
NOV 26...	--	318	241	14	41	97	100	--
DEC 27...	--	111	1560	41	54	75	86	93
JAN 14...	--	60	254	35	48	97	100	--
FEB 11...	--	98	1140	1	4	84	100	--
MAR 12...	--	393	6190	39	62	98	100	--
APR 08...	--	176	1710	3	14	93	100	--
MAY 13...	--	958	36500	2	22	95	100	--
JUN 10...	100	166	7710	20	64	98	100	--



## ST. FRANCIS RIVER BASIN

55

## 07040100 ST. FRANCIS RIVER AT ST. FRANCIS

LOCATION.--Lat 36°27'21", long 90°08'13", in sec.18, T.21 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on U.S. Highway 62 at St. Francis, and at mile 229.

DRAINAGE AREA.--1,772 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1930 to September 1977 and October 1997 to current year in reports of the U.S. Geological Survey. January 1930 to December 1946 in files of U. S. Army Corps of Engineers, Memphis District. January 1946 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of Corps of Engineers. Gage-height records since 1916 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 270.57 ft above NGVD of 1929. Prior to Apr. 1, 1946, nonrecording gage.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor. Some regulation by Wappapello Lake (Missouri), 80 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	310	4200	4910	9800	3050	10600	4260	10500	3350	390	452
2	86	336	2320	4860	10000	2820	9540	4270	10500	3310	339	410
3	84	393	2270	4720	7520	2550	8410	4260	10400	3220	291	e380
4	83	331	2460	4410	6860	2260	7070	4270	10400	3050	261	e360
5	100	307	2490	4060	6620	2360	5760	4300	10400	2900	253	e320
6	404	299	2860	3670	6290	1760	4880	4230	10500	2760	238	e300
7	321	296	3410	3260	5860	1010	4230	4200	10500	2670	234	e280
8	154	297	3960	2920	5440	782	3720	5030	10400	2560	251	e270
9	110	295	3790	2660	5030	905	3420	6090	10300	2370	247	e250
10	98	292	2190	2500	4750	2480	3490	5940	10400	2220	250	e240
11	262	294	1660	2330	4440	3520	3800	5520	10500	2200	244	e220
12	814	266	1680	2150	4150	4800	3870	5730	10200	1890	236	e200
13	601	183	2300	1900	3870	5390	3900	8900	9960	1730	247	e190
14	2320	143	3250	1660	3610	5720	4320	12300	9460	1600	400	e185
15	1650	133	3510	1440	3350	5890	5030	12000	8770	1430	369	e190
16	745	128	4550	1280	3090	6470	4820	11200	7780	1010	553	e320
17	558	125	17800	1230	2830	6970	4630	12700	6330	841	782	e580
18	576	123	21300	1140	2570	6230	4550	15900	5210	794	780	e650
19	590	141	17100	1040	2390	6940	4500	14600	4640	758	778	e1300
20	578	136	13700	959	4730	12700	4540	12400	4300	694	778	2020
21	566	121	11500	930	4670	13900	4430	11400	4100	640	804	2660
22	551	147	9560	933	4110	12200	4330	11000	3930	557	1160	1180
23	479	265	8340	1320	4130	11300	4250	10700	3790	519	1670	726
24	449	535	7110	6650	3910	10900	4270	10700	3710	537	1590	618
25	453	657	6090	11600	3650	11100	5160	10600	3870	477	1390	567
26	445	513	5560	8940	3460	18200	5060	10600	3950	418	1070	549
27	446	1580	5240	5220	3290	19400	4560	10600	3620	382	1050	532
28	680	2170	5070	3290	3190	15900	4530	10500	3590	375	1000	508
29	726	4760	5030	2490	---	13500	4440	10500	3660	357	877	421
30	490	5680	4970	2380	---	12300	4290	10500	3430	444	619	309
31	344	---	4930	3540	---	11500	---	10500	---	497	472	---
TOTAL	15851	21256	190200	100392	133610	234807	150400	275700	219100	46560	19623	17187
MEAN	511.3	708.5	6135	3238	4772	7574	5013	8894	7303	1502	633.0	572.9
MAX	2320	5680	21300	11600	10000	19400	10600	15900	10500	3350	1670	2660
MIN	83	121	1660	930	2390	782	3420	4200	3430	357	234	185
AC-FT	31440	42160	377300	199100	265000	465700	298300	546900	434600	92350	38920	34090

ST. FRANCIS RIVER BASIN

07040100 ST. FRANCIS RIVER AT ST. FRANCIS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-77, 1998-02, BY WATER YEAR (WY)

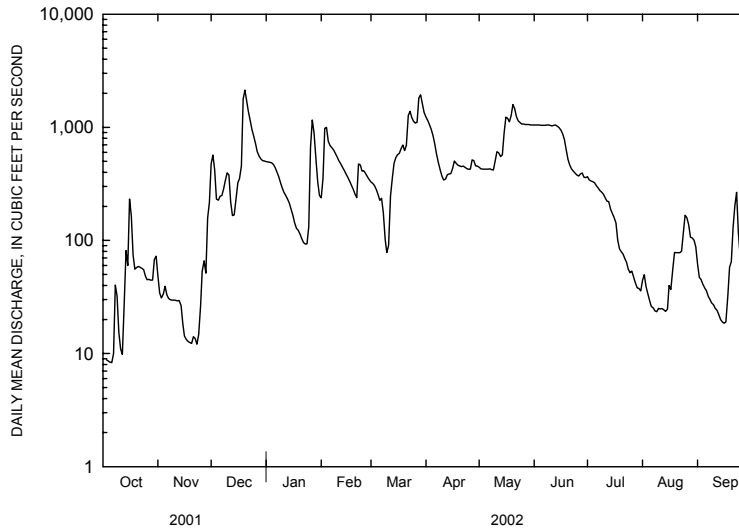
MEAN	543.4	1055	1899	3038	3178	3868	4212	3453	2012	1110	608.4	496.9
MAX	3754	5428	9014	13660	12300	9556	14680	11680	9294	6467	4514	1929
(WY)	1950	1973	1974	1950	1949	1935	1945	1945	1957	1945	1945	1951
MIN	91.5	77.7	254	306	344	384	473	308	211	194	121	95.9
(WY)	1957	1954	1954	1956	1963	1941	1941	1987	1936	1964	1965	1955

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1930-77, 1998-02

ANNUAL TOTAL	522051		1424686				
ANNUAL MEAN	1430		3903		2103		
HIGHEST ANNUAL MEAN					4886 1973		
LOWEST ANNUAL MEAN					548 1941		
HIGHEST DAILY MEAN	21300	Dec 18	21300	Dec 18	37900	Mar 16 1935	
LOWEST DAILY MEAN	83	Oct 4	83	Oct 4	55	Sep 20 1954	
ANNUAL SEVEN-DAY MINIMUM	89	Sep 29	130	Nov 15	63	Nov 15 1953	
MAXIMUM PEAK FLOW			22200		Dec 18	39200 Mar 15 1935	
MAXIMUM PEAK STAGE			24.17		Dec 18	28.20 Mar 15 1935	
INSTANTANEOUS LOW FLOW			81		Oct 3	1.55 Sep 20 1954	
ANNUAL RUNOFF (AC-FT)	1035000		2826000		1524000		
10 PERCENT EXCEEDS	4000		10500		5620		
50 PERCENT EXCEEDS	551		2830		873		
90 PERCENT EXCEEDS	165		264		180		

<sup>1</sup>Minimum instantaneous low flow for the period 1978-97, 48 ft<sup>3</sup>/s

<sup>e</sup>Estimated



ST. FRANCIS RIVER BASIN

07040100 ST. FRANCIS RIVER AT ST. FRANCIS--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT										
16...	1105	82913	80513	692	.15	768	6.7	66	7.2	212
NOV										
26...	1205	82913	80513	391	.06	756	8.1	76	7.4	218
DEC										
26...	1650	82913	80513	5590	.09	767	12.0	96	8.3	123
JAN										
14...	1300	82913	80513	1610	.12	755	11.5	91	7.5	158
FEB										
12...	1055	82913	80513	4140	.09	764	9.5	77	7.5	135
MAR										
12...	1355	82913	80513	4880	.06	757	9.9	88	7.8	127
APR										
09...	0830	82913	80513	3460	.09	762	8.5	82	8.4	129
MAY										
13...	1350	82913	80513	9390	.09	762	8.1	89	7.2	201
JUN										
11...	1020	82913	80513	10400	.09	758	7.5	88	7.5	220
JUL										
09...	1155	82913	80513	2410	.12	761	5.8	74	7.6	171
AUG										
12...	1315	82913	80513	244	.15	760	8.2	105	8.4	417
SEP										
10...	1405	82913	80513	240	.18	757	8.0	103	7.2	219

Date	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (070342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (070343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT							
16...	14.8	97	97	100	--	112	209
NOV							
26...	12.0	99	99	100	--	256	270
DEC							
26...	6.0	81	87	98	100	144	2170
JAN							
14...	5.2	100	--	--	--	47	204
FEB							
12...	6.6	85	90	97	100	100	1120
MAR							
12...	9.8	88	94	99	100	342	4510
APR							
09...	13.8	73	77	93	100	159	1490
MAY							
13...	20.0	96	98	100	--	970	24600
JUN							
11...	22.8	61	67	98	100	212	5950
JUL							
09...	28.0	97	97	100	--	159	1030
AUG							
12...	27.9	97	98	100	--	111	73.1
SEP							
10...	28.2	83	83	94	100	97	62.9

## ST. FRANCIS RIVER BASIN

## 07040100 ST. FRANCIS RIVER AT ST. FRANCIS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)
	OCT 16...	1	3	91	100	--
NOV 26...	12	42	96	100	--	--
DEC 26...	16	40	98	100	--	--
JAN 14...	4	25	98	100	--	--
FEB 12...	4	14	91	100	--	--
MAR 12...	5	26	96	100	--	--
APR 09...	2	4	70	98	100	--
MAY 13...	2	10	96	99	100	--
JUN 11...	9	37	92	96	100	--
JUL 09...	6	23	93	100	--	--
AUG 12...	9	37	96	99	100	--
SEP 10	8	35	94	98	99	100

ST. FRANCIS RIVER BASIN

07040110 ST. FRANCIS RIVER NEAR PIGGOTT

LOCATION.--Lat 36°23'50", long 90°04'40", in SE1/4SW1/4 sec.3, T.20 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on State Highway 1, 6.0 mi east of Piggott.

DRAINAGE AREA.--1,776 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT											
16...	1000	82913	80513	737	.12	16.0	96	97	99	100	132
NOV											
26...	1050	82913	80513	413	.06	12.8	100	--	--	--	342
DEC											
26...	1530	82913	80513	5200	.09	5.9	76	77	99	100	174
26...	1550	82913	80513	338	.09	5.9	94	94	94	100	47
JAN											
14...	1205	82913	80513	1650	.09	5.1	90	93	98	100	63
FEB											
12...	1205	82913	80513	4010	.09	6.6	78	83	97	100	135
12...	1235	82913	80513	158	.09	6.8	94	97	97	100	96
MAR											
12...	1100	82913	80513	4320	.06	9.9	87	92	99	100	412
12...	1150	82913	80513	336	.09	9.7	98	98	100	--	106
APR											
08...	1235	82913	80513	3630	.09	13.7	94	95	95	100	133
MAY											
13...	1050	82913	80513	5820	.09	19.7	94	97	100	--	235
13...	1130	82913	80513	1090	.09	18.8	92	92	98	100	217
JUN											
10...	1355	82913	80513	6870	.09	23.0	76	83	97	100	87
10...	1430	82913	80513	3630	.12	22.5	83	88	97	100	44
JUL											
09...	1045	82913	80513	2210	.15	28.5	65	79	100	--	179
AUG											
12...	1030	82913	80513	257	.15	27.9	98	98	100	--	112
SEP											
10...	1245	82913	80513	250	.12	28.5	93	94	96	100	103

Date	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL SIEVE DIAM. % FINER THAN 4.00 MM (80170)	SAMPLE SOURCE (72005)
OCT									
16...	263	1	3	81	98	100	--	--	--
NOV									
26...	381	2	3	90	99	100	--	--	--
DEC									
26...	2440	17	58	98	99	100	--	--	67.00
26...	42.9	87	91	95	98	100	--	--	68.00
JAN									
14...	281	5	28	98	100	--	--	--	--
FEB									
12...	1460	7	44	99	100	--	--	--	67.00
12...	41.0	58	61	67	72	89	92	100	68.00
MAR									
12...	4810	6	26	97	100	--	--	--	67.00
12...	96.2	83	88	94	98	100	--	--	68.00
APR									
08...	1300	0	2	72	98	100	--	--	--
MAY									
13...	3690	14	66	99	100	--	--	--	67.00
13...	639	79	87	91	98	100	--	--	68.00
JUN									
10...	1610	20	64	99	99	100	--	--	67.00
10...	431	18	48	82	90	97	98	100	68.00
JUL									
09...	1070	9	27	92	100	--	--	--	--
AUG									
12...	77.7	2	3	88	100	--	--	--	--
SEP									
10...	69.5	1	3	82	99	100	--	--	--

## ST. FRANCIS RIVER BASIN

## 07040130 ST. FRANCIS RIVER AT HOLLY ISLAND

LOCATION.--Lat 36°14'11", long 90°07'52", in SW1/4NE1/4 sec.32, T.19 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on State Highway 90, at Holly Island.

DRAINAGE AREA.--1,788 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
OCT										
17...	0845	82913	80513	610	.09	14.9	54	88	98	100
NOV										
27...	0915	82913	80513	987	.06	13.0	50	70	99	100
DEC										
27...	1410	82913	80513	4140	.09	5.7	49	60	98	100
27...	1440	82913	80513	1780	.09	4.2	85	90	90	100
JAN										
15...	1035	82913	80513	1520	.12	5.1	90	90	100	--
FEB										
12...	1330	82913	80513	3710	.09	6.8	48	51	85	98
12...	1405	82913	80513	832	.09	6.8	97	97	100	--
MAR										
13...	1240	82913	80513	4190	.09	9.8	76	82	98	99
13...	1310	82913	80513	645	.12	9.6	96	96	96	100
APR										
09...	0950	82913	80513	3360	.09	13.9	74	79	98	100
09...	1030	82913	80513	402	.15	14.5	93	93	93	100
MAY										
14...	1005	82913	80513	4900	.09	18.9	70	75	92	99
14...	1045	82913	80513	2620	.15	19.9	95	95	98	100
JUN										
10...	1230	82913	80513	5530	.12	23.0	63	73	97	100
10...	1305	82913	80513	5970	.15	23.5	95	95	97	100
JUL										
10...	0845	82913	80513	2210	.15	28.5	95	95	100	--
AUG										
13...	0845	82913	80513	262	.18	28.2	98	98	100	--
SEP										
11...	1035	82913	80513	225	.15	27.8	100	--	--	--

Date	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)
OCT									
17...	--	356	586	10	60	97	100	--	--
NOV									
27...	--	755	2010	5	70	98	100	--	--
DEC									
27...	--	318	3550	3	15	96	100	--	--
27...	--	51	245	3	5	24	93	100	--
JAN									
15...	--	53	218	5	46	99	100	--	--
FEB									
12...	100	245	2450	9	42	98	100	--	--
12...	--	57	128	8	46	99	100	--	--
MAR									
13...	100	432	4890	7	45	99	100	--	--
13...	--	84	146	6	10	43	57	59	59
APR									
09...	--	194	1760	2	7	85	98	100	--
09...	--	46	49.9	18	36	75	90	94	94
MAY									
14...	100	384	5080	1	4	73	98	100	--
14...	--	205	1450	2	5	78	99	100	--
JUN									
10...	--	81	1210	2	8	91	99	100	--
10...	--	40	645	9	21	70	84	86	91
JUL									
10...	--	127	758	2	6	74	100	--	--
AUG									
13...	--	84	59.4	3	11	91	99	100	--
SEP									
11...	--	71	43.1	6	14	87	99	100	--

ST. FRANCIS RIVER BASIN

07040130 ST. FRANCIS RIVER AT HOLLY ISLAND--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	SAMPLE SOURCE
	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)	
OCT				
17...	--	--	--	--
NOV				
27...	--	--	--	--
DEC				
27...	--	--	--	67.00
27...	--	--	--	68.00
JAN				
15...	--	--	--	--
FEB				
12...	--	--	--	67.00
12...	--	--	--	68.00
MAR				
13...	--	--	--	67.00
13...	63	68	100	68.00
APR				
09...	--	--	--	67.00
09...	100	--	--	68.00
MAY				
14...	--	--	--	67.00
14...	--	--	--	68.00
JUN				
10...	--	--	--	67.00
10...	98	100	--	68.00
JUL				
10...	--	--	--	--
AUG				
13...	--	--	--	--
SEP				
11...	--	--	--	--

## ST. FRANCIS RIVER BASIN

## 07040450 ST. FRANCIS RIVER AT LAKE CITY

**LOCATION.**--Lat 35°49'16", long 90°25'56", in SE1/4 sec.22, T.14 N., R.6 E., Craighead County, Hydrologic Unit 08020203, at bridge on State Highway 18 at Lake City, and at mile 173.6.

**DRAINAGE AREA.**--2,374 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1965 to September 1977, October to November 1997, September 1999 to current year. January 1931 to December 1945 in files of Corps of Engineers. January 1946 to December 1963 in reports of Mississippi River Commission. January 1964 to November 1997 and September 1999 to date in reports of the U.S. Army Corps of Engineers. Gage-height records 1916 to November 1997 and September 1999 to date in files of the U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 217.69 ft above NGVD of 1929. Prior to Sept. 1, 1948, non-recording gage at railroad bridge 0.1 mi downstream at present datum.

**REMARKS.**--No estimated daily discharges. Water-discharge records fair. Some regulation by Wappapello Lake (Missouri) 135 mi upstream since Apr. 1, 1941, capacity, 625,000 acre-feet.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1916, 14.4 ft April 3, 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	567	9440	8420	11500	5120	17400	6360	11900	4940	1810	1050
2	89	600	8530	7960	11200	4900	15200	6190	11700	4770	2210	934
3	82	630	7270	7600	9920	4730	13400	5840	11500	4700	1530	822
4	75	668	6430	7320	8720	4460	12000	5610	11400	4600	941	720
5	70	604	6200	7190	7930	4230	11100	5360	11400	4450	751	644
6	80	543	6200	7210	8560	4010	10400	5180	11400	4300	666	578
7	93	498	6480	7130	9020	3760	9880	5080	11400	4140	576	530
8	105	467	7870	6840	9050	3470	9470	5120	11400	3970	520	484
9	142	443	8660	6420	8850	3280	9050	5460	11300	3810	481	443
10	188	423	8220	5870	8660	3100	8500	5670	11300	3650	455	417
11	333	407	7400	5360	8400	2950	7410	5630	11400	3540	437	392
12	676	399	7060	4800	7920	3960	6280	5670	11500	3480	432	373
13	842	390	7860	4300	7440	3840	5510	7120	11900	3680	1130	356
14	1200	383	9140	3900	6900	3400	5270	9580	11900	3720	2090	345
15	1340	376	9420	3580	6400	3510	5720	10000	11800	3840	1540	335
16	1330	362	9730	3310	5890	4270	5800	9630	11500	3710	977	326
17	1210	342	14800	3060	5460	5670	5750	10400	11100	3210	784	399
18	1070	314	21700	2800	5000	7030	5660	15600	10800	2950	676	564
19	1010	295	19900	2580	4850	8480	5870	18900	10300	2890	642	607
20	985	283	16500	2280	7560	12200	6260	18400	9820	2550	689	2260
21	917	276	17000	2000	7220	13900	6380	17500	9250	2020	768	4210
22	822	270	18900	1830	6090	13000	6250	16800	8600	1510	816	3740
23	737	267	18400	3080	5000	11500	6000	16000	7620	1150	793	2960
24	689	280	15900	5210	4510	11000	5850	14900	6720	1000	835	2340
25	662	385	13900	6050	4910	11600	5710	13900	6110	899	1930	2070
26	635	442	12300	5240	5450	13300	5580	13100	5720	827	1860	2030
27	601	661	11100	4470	5570	15100	5500	12800	5610	777	1960	1800
28	566	2010	10200	4180	5370	14800	5450	12800	5410	736	1910	1250
29	540	5930	9640	5590	---	14400	5680	12700	5210	699	1750	916
30	524	9310	9160	8130	---	15800	6120	12400	5080	679	1500	784
31	530	---	8760	9490	---	18500	---	12200	---	760	1230	---
TOTAL	18246	28825	344070	163200	203350	249270	234450	321900	292050	87957	34689	34679
MEAN	588.6	960.8	11100	5265	7262	8041	7815	10380	9735	2837	1119	1156
MAX	1340	9310	21700	9490	11500	18500	17400	18900	11900	4940	2210	4210
MIN	70	267	6200	1830	4510	2950	5270	5080	5080	679	432	326
AC-FT	36190	57170	682500	323700	403300	494400	465000	638500	579300	174500	68810	68790



**ST. FRANCIS RIVER BASIN**

**07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED**

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-77, 1997, 1999-02, BY WATER YEAR (WY)

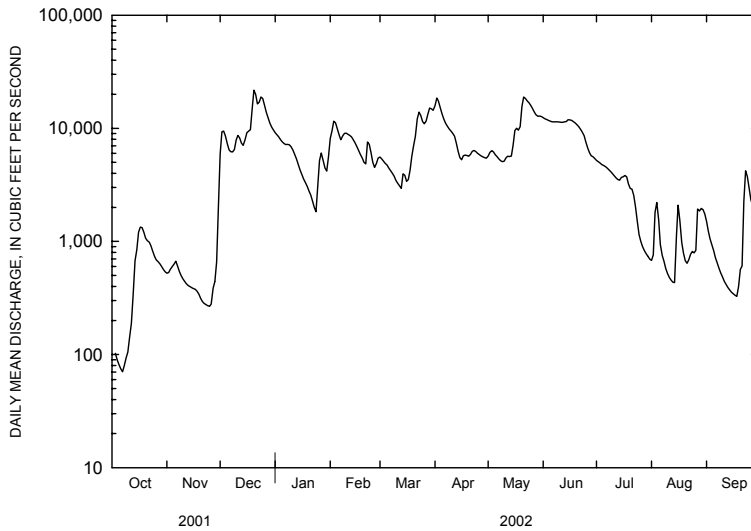
MEAN	737.6	1471	2540	4253	4650	5281	5600	4702	2843	1612	888.6	724.6
MAX	5125	9582	11100	18200	17270	10710	18160	14440	13370	7720	5303	2494
(WY)	1950	1958	2002	1950	1950	1975	1945	1973	1945	1957	1945	1965
MIN	111	114	227	496	553	836	831	634	202	187	109	126
(WY)	1954	1954	1954	1944	1977	1941	1941	2001	1932	1934	1936	1941

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1931-77, 1997, 1999-02	
ANNUAL TOTAL	888659		2012686			
ANNUAL MEAN	2435		5514		2964	
HIGHEST ANNUAL MEAN					6937 1973	
LOWEST ANNUAL MEAN					782 1941	
HIGHEST DAILY MEAN	21800	Feb 17	21700	Dec 18	36700	Jan 22 1937
LOWEST DAILY MEAN	70	Oct 5	70	Oct 5	39	Oct 7 1999
ANNUAL SEVEN-DAY MINIMUM	85	Oct 1	85	Oct 1	41	Oct 2 1999
MAXIMUM PEAK FLOW			22400	Dec 18	<sup>1</sup> 36700	<sup>2</sup> Jan 22 1937
MAXIMUM PEAK STAGE			11.02	Dec 18	<sup>3</sup> 13.30	<sup>b</sup> Jan 22 1937
INSTANTANEOUS LOW FLOW			69	Oct 5	37	Oct 8 1999
ANNUAL RUNOFF (AC-FT)	1763000		3992000		2147000	
10 PERCENT EXCEEDS	8090		12100		7640	
50 PERCENT EXCEEDS	727		4940		1440	
90 PERCENT EXCEEDS	269		435		282	

<sup>1</sup>Maximum discharge for period of record, 42,700 ft<sup>3</sup>/s Apr. 3, 1979

<sup>2</sup>Also January 23-24, 1937

<sup>3</sup>Maximum gage height for period of record, 14.37 ft Apr. 3, 1979



## ST. FRANCIS RIVER BASIN

## 07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

## WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OF (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT										
17...	1200	82913	80513	1130	.09	770	4.5	43	7.2	218
NOV										
27...	1100	82913	80513	768	.06	762	7.2	69	7.3	186
DEC										
27...	1625	82913	80513	2560	.09	767	11.1	84	7.5	124
27...	1655	82913	80513	7900	.03	767	13.3	101	7.4	125
JAN										
15...	1400	82913	80513	1620	.18	768	11.8	94	7.5	174
15...	1510	82913	80513	1680	.15	768	8.8	70	7.5	174
FEB										
13...	0715	82913	80513	2200	.09	771	7.3	60	7.3	143
13...	0810	82913	80513	5980	.12	771	6.2	51	7.2	132
MAR										
13...	1655	82913	80513	1680	.09	757	9.2	84	7.9	127
13...	1730	82913	80513	2290	.15	757	8.7	80	7.8	136
APR										
09...	1435	82913	80513	2420	.09	768	8.2	80	8.3	179
09...	1530	82913	80513	6310	.15	768	7.1	69	8.3	183
MAY										
14...	1435	82913	80513	2630	.09	764	8.1	89	7.1	171
14...	1520	82913	80513	6390	.15	764	7.2	79	7.2	180
JUN										
11...	1600	82913	80513	2810	.09	760	8.2	98	7.2	188
11...	1645	82913	80513	9590	.15	760	7.1	85	7.2	190
JUL										
10...	1320	82913	80513	1740	.12	760	6.9	89	7.8	198
10...	1410	82913	80513	1850	.15	760	6.0	78	7.8	197
AUG										
13...	1250	82913	80513	1470	.09	760	7.8	93	7.9	173
SEP										
11...	1545	82913	80513	390	.12	760	7.2	93	7.3	280

Date	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)
OCT										
17...	14.2	97	97	100	--	59	180	20	29	67
NOV										
27...	13.3	99	100	--	--	661	1370	9	15	58
DEC										
27...	3.9	95	95	97	100	52	359	2	3	33
27...	4.1	88	93	99	100	128	2730	2	7	81
JAN										
15...	5.9	92	92	96	100	32	140	19	30	70
15...	5.9	84	84	84	100	37	168	13	23	70
FEB										
13...	7.2	92	92	92	100	49	291	16	27	72
13...	7.2	88	92	100	--	49	791	18	27	58
MAR										
13...	10.8	97	98	99	100	100	454	19	22	55
13...	11.2	95	95	95	100	78	482	27	38	70
APR										
09...	14.8	95	95	98	100	40	261	8	35	92
09...	14.4	97	99	100	--	66	1120	4	7	20
MAY										
14...	19.9	95	98	99	100	100	710	12	20	66
14...	20.1	91	96	96	100	153	2640	17	29	70
JUN										
11...	24.0	95	95	98	100	43	326	15	26	65
11...	24.0	97	97	97	100	46	1190	18	31	64
JUL										
10...	28.2	95	97	100	--	147	691	6	12	35
10...	28.7	98	98	100	--	54	270	10	14	28
AUG										
13...	23.9	100	--	--	--	100	397	18	27	65
SEP										
11...	28.5	97	97	100	--	71	74.8	5	18	68

**ST. FRANCIS RIVER BASIN**  
**07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)	BED MAT. FALL DIAM. % FINER THAN (80163)	BED MAT. FALL DIAM. % FINER THAN (80169)	BED MAT. FALL DIAM. % FINER THAN (80170)	BED MAT. FALL DIAM. % FINER THAN (80171)	BED MAT. FALL DIAM. % FINER THAN (80172)	BED MAT. FALL DIAM. % FINER THAN (80173)	SAMPLE SOURCE (72005)
OCT									
17...	95	100	--	--	--	--	--	--	--
NOV									
27...	90	95	--	95	95	100	--	--	--
DEC									
27...	71	83	--	85	91	100	--	--	67.00
27...	98	100	--	--	--	--	--	--	68.00
JAN									
15...	97	100	--	--	--	--	--	--	67.00
15...	97	100	--	--	--	--	--	--	68.00
FEB									
13...	96	100	--	--	--	--	--	--	67.00
13...	77	80	--	80	80	82	100	--	68.00
MAR									
13...	92	99	--	99	100	--	--	--	67.00
13...	93	96	--	96	97	100	--	--	68.00
APR									
09...	98	100	--	--	--	--	--	--	67.00
09...	30	32	--	32	33	34	100	--	68.00
MAY									
14...	95	96	100	--	--	--	--	--	67.00
14...	95	98	--	100	--	--	--	--	68.00
JUN									
11...	98	100	--	--	--	--	--	--	67.00
11...	84	87	--	88	90	100	--	--	68.00
JUL									
10...	55	60	--	60	61	61	100	--	67.00
10...	45	49	--	50	52	58	58	100	68.00
AUG									
13...	92	96	--	99	100	--	--	--	--
SEP									
11...	96	99	100	--	--	--	--	--	--

## ST. FRANCIS RIVER BASIN

## 07046600 RIGHT HAND CHUTE OF LITTLE RIVER AT RIVERVALE

LOCATION.--Lat 35°40'20", long 90°29'12", in SW1/4 sec.10, T.12 N., R.7 E., Poinsett County, Hydrologic Unit 08020204, at bridge on State Highway 135 at Rivervale, 9.0 mi upstream from St. Francis River.

DRAINAGE AREA.--2,106 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT										
17...	1605	82913	80513	6120	.06	770	6.1	59	7.2	221
NOV										
27...	1205	82913	80513	463	.46	762	7.6	73	7.6	483
DEC										
28...	0805	82913	80513	17400	.06	767	8.2	63	7.6	73
JAN										
16...	0705	82913	80513	1710	.49	767	9.4	79	7.4	318
FEB										
13...	1025	82913	80513	4240	.09	771	9.0	73	7.4	259
MAR										
13...	1535	82913	80513	3690	.09	758	8.9	82	7.7	304
APR										
09...	1310	82913	80513	4110	.12	767	8.0	79	8.3	219
MAY										
14...	1320	82913	80513	6910	.09	764	7.8	85	7.4	225
JUN										
11...	1435	82913	80513	4880	.09	760	7.2	86	7.5	239
JUL										
10...	1545	82913	80513	1110	.18	760	6.9	89	7.5	398
AUG										
13...	1615	82913	80513	659	.46	760	7.7	101	7.9	366
SEP										
11...	1415	82913	80513	529	.37	760	7.2	93	7.1	208

Date	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (070342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (070343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI-MENT, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)
OCT							
17...	14.6	98	99	100	--	100	1650
NOV							
27...	13.6	98	98	100	--	51	63.8
DEC							
28...	4.4	85	89	93	100	95	4460
JAN							
16...	8.0	98	98	99	100	54	249
FEB							
13...	6.8	95	96	98	100	118	1350
MAR							
13...	11.4	100	--	--	--	217	2160
APR							
09...	14.9	99	99	99	100	137	1520
MAY							
14...	19.8	95	97	98	100	246	4590
JUN							
11...	24.0	94	94	96	100	194	2560
JUL							
10...	28.5	98	100	--	--	68	204
AUG							
13...	29.1	99	99	100	--	89	158
SEP							
11...	28.4	100	--	--	--	76	109

## ST. FRANCIS RIVER BASIN

67

## 07046600 RIGHT HAND CHUTE OF LITTLE RIVER AT RIVERVALE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
	% FINER THAN .062 MM (80158)	% FINER THAN .125 MM (80159)	% FINER THAN .250 MM (80160)	% FINER THAN .500 MM (80161)	% FINER THAN 1.00 MM (80162)	% FINER THAN 2.00 MM (80163)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)
OCT 17...	22	32	71	95	100	--	--	--
NOV 27...	9	23	76	96	99	--	99	100
DEC 28...	16	37	71	90	97	--	97	100
JAN 16...	2	8	53	97	100	--	--	--
FEB 13...	5	26	89	98	100	--	--	--
MAR 13...	7	26	87	96	100	--	--	--
APR 09...	7	48	100	--	--	--	--	--
MAY 14...	13	39	88	98	99	100	--	--
JUN 11...	3	23	89	98	100	--	--	--
JUL 10...	8	20	89	98	99	100	--	--
AUG 13...	6	19	91	99	100	--	--	--
SEP 11...	4	17	85	98	98	100	--	--

## ST. FRANCIS RIVER BASIN

## 07047800 ST. FRANCIS RIVER AT PARKIN

**LOCATION.**--Lat 35°16'23", long 90°33'33", in NE1/4SE1/4 sec.33, T.8 N., R.5 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Parkin, 1.1 mi downstream from Tyroneza River, and at mile 102.0.

**DRAINAGE AREA.**--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1965 to September 1994 and October 1997 to current year in reports of Geological Survey. January 1930 to date in reports of Mississippi River Commission. Gage-height records since December 1892 in reports of Mississippi River Commission and National Weather Service.

**GAGE.**--Water-stage recorder. Datum of gage is 175.30 ft above NGVD of 1929. Prior to Sept. 11, 1948, nonrecording gage, and Sept. 11, 1948 to Apr. 24, 1968, water-stage recorder at site 1.8 mi downstream at present datum.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. The greater part of St. Francis River floodflow is diverted through St. Francis River floodway at lock and dam about 4.0 mi northwest of Marked Tree, and is not included in records for this station. Diverted flow is included in records for St. Francis Bay at Riverfront and returns to the St. Francis River below Marianna (see station 07047900). Some regulation by Wappapello Lake (Missouri), 207 mi upstream since Apr. 1, 1941, capacity, 625,000 acre-ft. Stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1892, 41.6 ft Apr. 4-6, 1897 (not comparable to stages since 1930 due to levee construction).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	717	11600	1050	4130	1840	8460	2450	3100	1640	2290	1590
2	129	690	11900	894	5610	1800	9300	2630	2620	1590	2390	1470
3	49	716	11500	802	5280	1750	8390	2210	2290	1590	2140	1390
4	27	563	10300	729	3810	1710	6300	2010	2110	1650	1850	1330
5	20	344	8310	655	2380	1740	4010	1860	2100	1760	1660	1290
6	16	153	6050	652	1550	1720	2220	1650	2500	1880	1530	1250
7	14	90	3970	667	1300	1670	1350	1550	2930	1800	1470	1180
8	13	71	3080	634	2100	1640	1040	1490	3350	1690	1450	1130
9	11	59	3060	581	2380	1650	913	1450	3390	1610	1420	1100
10	11	53	3080	537	1820	1650	837	1500	3240	1580	1380	1060
11	1180	48	2270	507	1210	1730	792	1700	3250	1590	1310	716
12	3820	45	2040	473	1000	4920	858	1630	3320	1620	1120	315
13	4530	44	6200	436	1630	7320	1440	1710	3460	1840	1010	181
14	5280	41	9750	407	1960	7150	1690	2060	3390	2110	1330	148
15	6390	41	11400	383	2010	5630	1660	1880	3300	2310	2150	132
16	6530	39	12300	364	1970	3910	1640	1750	3270	2400	2790	120
17	5680	38	15000	354	1900	3350	1600	2470	3250	2290	3260	219
18	4120	37	16300	361	1840	6460	1570	5360	3200	2110	3210	239
19	2630	40	16600	880	1890	8400	1560	5880	3110	2350	2710	229
20	1800	39	16600	1830	4340	10300	1550	5050	3010	3280	2200	754
21	1460	37	16400	1470	6240	11800	1530	3850	2910	3120	1870	2200
22	1300	38	15900	946	5980	12000	1490	2980	2780	2550	1680	2890
23	1210	40	15100	888	4560	10900	1460	2620	2630	2010	1590	3280
24	1160	41	13700	3960	3190	8760	1460	2490	2480	1740	1560	2880
25	1140	40	11600	7140	2450	6350	1480	2420	2270	1620	1600	2320
26	1160	43	9270	7810	2120	4440	1480	2380	2080	1580	2040	1990
27	1120	802	7010	6710	1940	3890	1470	2380	1890	1570	2570	2160
28	1010	2050	4850	4600	1850	3550	1480	2390	1760	1590	2680	2770
29	850	6040	3070	2790	---	2610	1510	2530	1700	1600	2400	3220
30	766	9930	1960	2410	---	2410	1600	2840	1670	1580	2040	3000
31	745	---	1360	2530	---	5730	---	3330	---	1750	1770	---
TOTAL	54482	22929	281530	54450	78440	148780	72140	78500	82360	59400	60470	42553
MEAN	1757	764.3	9082	1756	2801	4799	2405	2532	2745	1916	1951	1418
MAX	6530	9930	16600	7810	6240	12000	9300	5880	3460	3280	3260	3280
MIN	11	37	1360	354	1000	1640	792	1450	1670	1570	1010	120
AC-FT	108100	45480	558400	108000	155600	295100	143100	155700	163400	117800	119900	84400

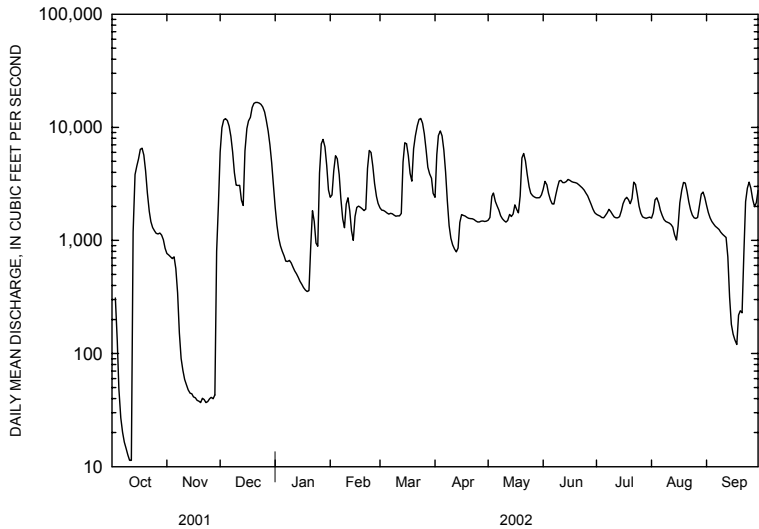
ST. FRANCIS RIVER BASIN

07047800 ST. FRANCIS RIVER AT PARKIN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-94, 1998-02, BY WATER YEAR (WY)

MEAN	1152	1636	2386	3262	4081	3942	3979	3466	2708	2060	1536	1242
MAX	3898	6532	9082	14140	18100	9627	14360	12900	8172	4038	3998	3920
(WY)	1946	1958	2002	1932	1932	1932	1933	1933	1933	1945	1998	1950
MIN	141	97.3	201	197	382	928	1080	1054	685	879	376	83.7
(WY)	2001	2000	1990	2000	1964	1954	1954	1977	1977	1941	1990	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1931-94, 1998-02	
ANNUAL TOTAL	778954		1036034			
ANNUAL MEAN	2134		2838		2621	
HIGHEST ANNUAL MEAN					6511 1933	
LOWEST ANNUAL MEAN					1145 1977	
HIGHEST DAILY MEAN	16600	Dec 19	16600	Dec 19	21600	Jan 31 1932
LOWEST DAILY MEAN	11	Oct 9	11	Oct 9	11	Oct 9 2001
ANNUAL SEVEN-DAY MINIMUM	16	Oct 4	16	Oct 4	16	Oct 4 2001
MAXIMUM PEAK FLOW			16700		25300 Jan 31 1930	
MAXIMUM PEAK STAGE			26.53		34.20 Feb 4 1937	
INSTANTANEOUS LOW FLOW			10		10 Oct 10 2001	
ANNUAL RUNOFF (AC-FT)	1545000		2055000		1898000	
10 PERCENT EXCEEDS	5020		6420		5500	
50 PERCENT EXCEEDS	1370		1840		1890	
90 PERCENT EXCEEDS	49		235		490	



## ST. FRANCIS RIVER BASIN

## 07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE

**LOCATION.**--Lat 35°32'15", long 90°29'05", in SE1/4NE1/4 sec.31, T.11 N., R.6 E., Poinsett County, Hydrologic Unit 08020203, at bridge on U.S. Highway 63 3.6 mi west of Marked Tree.

**DRAINAGE AREA.**--Not determined

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--September 1927 to September 1931, July 1934 to September 1970, October 1990 to current year. Results of discharge measurements April 1973 to March 1977 and daily stages and flows February 1977 to date in reports of U.S. Army Corps of Engineers. Prior to October 1, 1965 published as "07047000 St. Francis River Floodway near Marked Tree (Dam)".

**GAGE.**--Water-stage recorder. Datum of gage is 188.83 ft above NGVD of 1929. Prior to October 1, 1965 non-recording gage 4.8 mi upstream at datum 3.25 ft higher. Prior to February 1977 non-recording gage at present site and datum.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Flow diverted from St. Francis River bypasses Marked Tree and returns to St. Francis River below Parkin. Some regulation by Wappapello Lake (Missouri) since April 1, 1941 (capacity, 625,000 acre-ft). Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	116	8770	22000	14100	5520	26000	8440	18500	5080	661	1000
2	178	99	9760	20200	15700	5610	26700	8060	17300	5010	945	773
3	298	284	10900	18400	17500	5600	26600	7760	15900	4740	1270	721
4	270	650	11900	15900	18600	5370	26000	7640	14600	4090	1370	601
5	148	912	12900	13200	19000	4820	24900	7650	13400	4130	674	442
6	118	1120	13900	11500	19200	4710	23300	7590	12800	3830	474	358
7	135	1240	14200	9860	19200	4280	21500	7310	12500	3750	414	275
8	113	1050	13900	7750	19000	4110	19700	6910	12300	3480	302	242
9	182	685	13400	7890	18700	4240	18100	6240	12000	3230	159	205
10	144	516	13300	7990	18000	4110	16300	6330	12000	3260	141	581
11	352	718	13300	8010	16500	4210	14400	7920	11900	2750	251	1220
12	713	787	13600	7420	14400	4740	12600	8460	12200	2750	448	1610
13	1780	520	13800	7120	12800	5520	11000	8920	12700	2840	637	880
14	2510	587	13700	7040	11400	5930	9880	9340	13100	3280	935	643
15	4870	742	13700	6700	10300	5760	8800	10100	13600	3560	1380	888
16	6480	786	14900	5560	9210	5210	8320	11200	13800	3880	1380	1090
17	6220	512	17400	5470	8170	4370	8610	12400	13400	4290	1650	1370
18	4620	590	19000	5170	7170	5710	8800	13700	12700	4330	2040	1400
19	3580	536	22300	4850	6760	7860	8690	15400	11900	3510	1890	1060
20	2050	649	25800	4710	7240	9870	8190	18000	11100	2740	470	1350
21	828	511	27700	4820	8000	11700	7480	20300	10300	2320	526	2230
22	554	615	29700	4810	9040	14400	6920	22700	9680	1990	450	3140
23	515	671	31600	5030	9280	17500	7490	24400	9030	1620	618	4580
24	191	582	32500	7600	9020	18900	8180	25200	8510	1420	567	4460
25	236	560	32400	9430	8250	19400	8210	25300	7800	1060	852	3650
26	194	589	31300	10600	6670	19800	7910	24900	6840	927	1540	3080
27	130	713	29700	11700	5420	20200	8050	24100	5760	806	2110	2680
28	138	1060	27900	12500	5340	21100	8370	23000	5830	710	2370	2370
29	167	4010	26400	12800	---	22400	8490	22000	5580	670	2270	2790
30	193	8350	25100	12900	---	23700	8610	20800	5440	526	1590	2430
31	134	---	23600	13100	---	25100	---	19600	---	593	1630	---
TOTAL	38179	30760	608330	302030	343970	321750	408100	441670	342470	87172	32014	48119
MEAN	1232	1025	19620	9743	12280	10380	13600	14250	11420	2812	1033	1604
MAX	6480	8350	32500	22000	19200	25100	26700	25300	18500	5080	2370	4580
MIN	113	99	8770	4710	5340	4110	6920	6240	5440	526	141	205
AC-FT	75730	61010	1207000	599100	682300	638200	809500	876100	679300	172900	63500	95440



# ST. FRANCIS RIVER BASIN

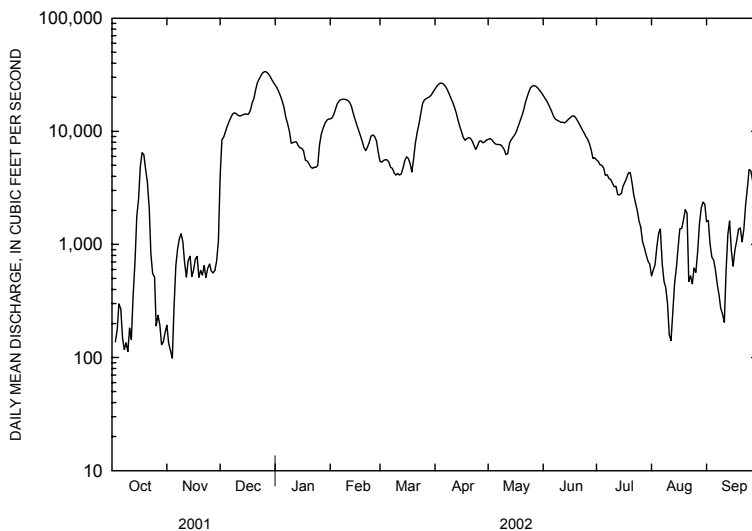
## 07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928-31, 1938-70, 1991-02, BY WATER YEAR (WY)

MEAN	829.9	1774	4357	6810	8025	8338	8817	6810	4435	2111	1056	622.6
MAX	5933	19780	19620	31060	30990	22970	30180	20530	23550	12630	12880	3970
(WY)	1950	1958	2002	1950	1950	1997	1945	1945	1957	1957	1998	1965
MIN	0.000	0.000	0.000	39.1	190	225	441	0.39	0.000	0.000	0.000	0.000
(WY)	1935	1944	1944	1944	1936	1941	1941	1941	1941	1941	1936	1935

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928-31, 1938-70, 1991-02	
ANNUAL TOTAL	1364994		3004564			
ANNUAL MEAN	3740		8232		4479	
HIGHEST ANNUAL MEAN					10390 1950	
LOWEST ANNUAL MEAN					258 1941	
HIGHEST DAILY MEAN	32500	Dec 24	32500	Dec 24	48300	Jan 27 1937
LOWEST DAILY MEAN	80	Sep 30	99	Nov 2	<sup>1</sup> 0.00	Oct 1 1934
ANNUAL SEVEN-DAY MINIMUM	123	Aug 23	140	Oct 27	0.00	Oct 1 1934
MAXIMUM PEAK FLOW			32800	Dec 24	<sup>2</sup> 48300	<sup>3</sup> Jan 26 1937
MAXIMUM PEAK STAGE			25.89	Dec 24	<sup>4</sup> 31.1	<sup>c</sup> Jan 26 1937
INSTANTANEOUS LOW FLOW			86	Oct 7	0.00	at times
ANNUAL RUNOFF (AC-FT)	2707000		5960000		3244000	
10 PERCENT EXCEEDS	13300		20200		12200	
50 PERCENT EXCEEDS	1050		6220		2020	
90 PERCENT EXCEEDS	187		496		0.00	

<sup>1</sup>No flow at times in most years prior to 1965  
<sup>2</sup>Maximum discharge during period 1971-90 67,000 ft<sup>3</sup>/s Apr. 7, 1979  
<sup>3</sup>Also January 27-28, 1937  
<sup>4</sup>At former site and datum



## ST. FRANCIS RIVER BASIN

## 07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
NOV										
27...	1315	82913	80513	766	.24	762	7.3	70	7.8	405
DEC										
28...	1015	82913	80513	12700	.09	767	9.6	74	7.6	80
28...	1040	82913	80513	108	.09	--	--	--	--	--
28...	1105	82913	80513	818	.09	--	--	--	--	--
28...	1130	82913	80513	5730	.09	--	--	--	--	--
JAN										
16...	0915	82913	80513	4580	.18	766	11.1	89	7.2	222
16...	1005	82913	80513	995	.12	--	--	--	--	--
FEB										
13...	1245	82913	80513	9640	.09	765	7.5	63	7.4	172
13...	1325	82913	80513	2730	.09	--	--	--	--	--
13...	1355	82913	80513	87	.09	--	--	--	--	--
13...	1420	82913	80513	289	.06	--	--	--	--	--
MAR										
14...	0915	82913	80513	4970	.09	757	9.1	83	7.7	240
14...	0945	82913	80513	1190	.12	--	--	--	--	--
APR										
10...	0730	82913	80513	11000	.09	770	7.3	71	7.3	183
10...	0805	82913	80513	3690	.09	--	--	--	--	--
10...	0835	82913	80513	350	.15	--	--	--	--	--
10...	0910	82913	80513	441	.15	--	--	--	--	--
MAY										
15...	0745	82913	80513	7570	.09	764	8.2	90	7.1	197
15...	0815	82913	80513	1910	.09	--	--	--	--	--
15...	0840	82913	80513	137	.09	--	--	--	--	--
JUN										
12...	0620	82913	80513	9880	.09	760	7.4	83	7.6	195
12...	0650	82913	80513	890	.09	--	--	--	--	--
12...	0715	82913	80513	128	.15	--	--	--	--	--
12...	0740	82913	80513	200	.15	--	--	--	--	--

Date	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (070342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (070343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED, SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV								
27...	13.5	92	95	100	--	--	57	118
DEC								
28...	4.6	50	51	85	98	100	127	4350
28...	4.8	98	98	98	100	--	79	23.0
28...	5.8	93	93	97	100	--	92	203
28...	4.8	95	95	97	100	--	234	3620
JAN								
16...	6.3	89	92	95	100	--	50	618
16...	6.5	89	93	98	100	--	53	142
FEB								
13...	7.9	72	76	92	100	--	96	2500
13...	8.2	94	96	98	100	--	82	604
13...	8.0	99	99	100	--	--	100	23.5
13...	8.9	100	--	--	--	--	118	92.1
MAR								
14...	11.1	91	92	98	100	--	142	1910
14...	11.2	84	86	91	100	--	148	476
APR								
10...	14.9	89	92	95	100	--	62	1840
10...	14.2	97	97	97	100	--	67	668
10...	13.6	94	94	100	--	--	118	112
10...	13.9	96	100	--	--	--	107	127
MAY								
15...	20.1	86	90	96	100	--	226	4620
15...	20.2	98	99	100	--	--	190	980
15...	21.4	98	100	--	--	--	122	45.1
JUN								
12...	21.0	94	95	96	97	100	82	2190
12...	21.5	95	95	98	100	--	79	190
12...	21.5	95	95	95	100	--	46	15.9
12...	21.0	99	99	100	--	--	60	32.4

ST. FRANCIS RIVER BASIN

07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL SIEVE DIAM.	BED MAT. FALL SIEVE DIAM.
	% FINER THAN .062 MM (80158)	% FINER THAN .125 MM (80159)	% FINER THAN .250 MM (80160)	% FINER THAN .500 MM (80161)	% FINER THAN 1.00 MM (80162)	% FINER THAN 2.00 MM (80163)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)
NOV								
27...	12	44	96	98	100	--	--	--
DEC								
28...	7	25	77	96	99	--	99	100
28...	37	57	86	96	99	--	99	100
28...	72	76	89	97	100	--	--	--
28...	38	51	78	88	90	--	90	91
JAN								
16...	1	4	85	100	--	--	--	--
16...	2	12	90	100	--	--	--	--
FEB								
13...	2	9	86	99	100	--	--	--
13...	6	16	92	99	100	--	--	--
13...	39	51	82	98	99	100	--	--
13...	45	58	87	97	100	--	--	--
MAR								
14...	10	38	95	100	--	--	--	--
14...	11	38	96	100	--	--	--	--
APR								
10...	8	20	78	98	100	--	--	--
10...	8	13	70	96	100	--	--	--
10...	10	14	30	56	66	--	69	76
10...	46	46	61	83	97	--	97	100
MAY								
15...	14	24	78	98	100	--	--	--
15...	11	19	80	97	99	100	--	--
15...	31	34	46	74	83	--	89	95
JUN								
12...	14	22	63	96	99	100	--	--
12...	14	23	65	97	100	--	--	--
12...	23	31	44	51	53	--	55	57
12...	42	59	80	93	97	--	100	--

## ST. FRANCIS RIVER BASIN

## 07047815 CROSS COUNTY DITCH NEAR BIRDEYE

LOCATION.--Lat 35°21'38", long 90°39'00", in NE1/4SE1/4 sec.34, T.9 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on State Highway 42 2.3 mi east of Birdeye.

DRAINAGE AREA.--Not determined

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER (0.062 MM) (70342)	SED. SUSP. FALL DIAM. % FINER (.125 MM) (70343)	SED. SUSP. FALL DIAM. % FINER (.250 MM) (70344)	SED. SUSP. FALL DIAM. % FINER (.500 MM) (70345)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV											
27...	1425	82913	80513	629	.21	13.6	94	94	96	100	46
DEC											
28...	1245	82913	80513	25400	.09	5.0	83	85	95	100	79
28...	1335	82913	80513	7250	.09	4.8	95	95	98	100	75
JAN											
16...	1520	82913	80513	6190	.12	6.2	95	98	99	100	49
FEB											
13...	1545	82913	80513	13900	.09	8.1	78	81	97	100	99
MAR											
14...	1240	82913	80513	6590	.09	12.2	32	58	98	100	812
APR											
10...	1230	82913	80513	19000	.09	14.9	92	94	97	100	80
10...	1300	82913	80513	574	.18	14.6	97	97	97	100	71
MAY											
15...	1035	82913	80513	10400	.09	20.1	89	92	98	100	163
JUN											
12...	0850	82913	80513	12100	.12	22.5	90	94	100	--	76

Date	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER (.062 MM) (80158)	BED MAT. FALL DIAM. % FINER (.125 MM) (80159)	BED MAT. FALL DIAM. % FINER (.250 MM) (80160)	BED MAT. FALL DIAM. % FINER (.500 MM) (80161)	BED MAT. FALL DIAM. % FINER (1.00 MM) (80162)	BED MAT. FALL SIEVE DIAM. % FINER (2.00 MM) (80169)	BED MAT. FALL SIEVE DIAM. % FINER (4.00 MM) (80170)	BED MAT. FALL SIEVE DIAM. % FINER (8.00 MM) (80171)	SAMPLE SOURCE (72005)
NOV										
27...	78.1	24	78	98	100	--	--	--	--	--
DEC										
28...	5420	4	6	12	42	80	84	93	100	67.00
28...	1470	5	9	16	37	67	69	87	100	68.00
JAN										
16...	819	2	11	89	100	--	--	--	--	--
FEB										
13...	3720	6	39	98	100	--	--	--	--	--
MAR										
14...	14400	2	18	90	100	--	--	--	--	--
APR										
10...	4100	4	16	88	99	100	--	--	--	67.00
10...	110	60	70	80	85	90	93	100	--	68.00
MAY										
15...	4580	7	31	94	99	100	--	--	--	--
JUN										
12...	2480	5	33	97	100	--	--	--	--	--

## ST. FRANCIS RIVER BASIN

75

## 07047900 ST. FRANCIS BAY AT RIVERFRONT

**LOCATION.**--Lat 35°15'34", long 90°40'48", in W1/2 sec.4, T.7 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Riverfront, 7.0 mi west of Parkin.

**DRAINAGE AREA.**--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1965 to September 1994 and October 1997 to current year in reports of the U.S. Geological Survey. January 1935 to date in reports of Mississippi River Commission.

**GAGE.**--Nonrecording gage read once daily. Datum of gage is 171.25 ft above NGVD of 1929. Aug. 20, 1948 to Jan. 6, 1999, water-stage recorder at present site and datum. Prior to Aug. 20, 1948, nonrecording gage at present site and datum. Water-stage recorder from Clark Corner Cut-Off near Colt (07047904) 9.1 mi downstream at datum 154.87 ft above NGVD of 1929 was used as auxiliary gage for this station October 1, 1997 to September 30, 2000.

**REMARKS.**--Water-discharge records fair, except estimated daily discharges which are poor. Part of the flow at this station is diverted from the St. Francis River at lock and dam about 4.0 mi northwest of Marked Tree (see station 07047800). Some regulation by Wappapelo Lake (Missouri) since Apr. 1, 1941, capacity, 625,000 acre-ft. Stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	144	12700	29900	13600	4850	24900	e9580	e24600	e5470	e1150	e1350
2	22	104	11400	28300	14500	5630	26000	e9170	e23600	e5250	e1120	e964
3	47	92	10200	26500	14700	5750	26700	e8500	e22200	e4990	e1220	e623
4	153	200	10000	24100	15600	5510	27200	e8290	e20300	e4380	e1600	e546
5	163	940	11300	18700	16200	4430	27600	e8290	e18600	e4230	e1380	e521
6	124	1130	12000	14600	16600	3970	27400	e8400	e16800	e4080	e816	e449
7	35	948	12800	12300	17200	3580	26600	e8480	e14800	e3880	e845	e358
8	26	373	13500	9530	17300	3480	25600	e8400	e13700	e3600	e760	e315
9	e40	1040	13700	8790	17300	3430	24100	e7940	e12900	e3320	e521	e100
10	345	808	12800	8390	17100	3480	21400	e7340	e13200	e3230	e458	e235
11	1960	558	12300	8320	16400	4350	18700	e8040	e13000	e3000	e449	e732
12	1240	643	12700	8350	15000	8180	16000	e8600	e12600	e2620	e472	e1280
13	1420	786	15600	8060	13600	8350	13300	e8980	e12700	e2700	e875	e1090
14	2950	580	16200	7620	11900	6760	11400	e9270	e13200	e2960	e2870	e788
15	3800	427	16000	7110	10800	6410	10100	e9660	e13300	e3320	e3700	e650
16	4840	860	16400	6670	9650	5890	8680	e10200	e13500	e3980	e2450	e1120
17	5080	805	20900	6360	8700	5840	8620	e11300	e13600	e4680	e1890	e1970
18	e5070	553	23100	5580	7750	6910	8800	e12900	e13200	e4830	e2120	e1600
19	2970	554	24100	5430	7550	8620	8850	e15300	e12600	e4380	e2200	e1350
20	1650	598	24600	5420	9440	12900	8600	e16100	e11900	e3230	e1520	e1890
21	946	580	25100	5420	9770	15000	8050	e17500	e11000	e2870	e597	e3980
22	1010	544	26000	5420	8870	14200	7280	e19400	e10200	e2530	e546	e4080
23	888	567	28900	6110	e8870	14100	7350	e21000	e9130	e2360	e572	e4280
24	732	628	33800	10000	9090	15400	8000	e22000	e8940	e2080	e704	e4830
25	377	557	30800	12200	8710	16700	8320	e23500	e8500	e1820	e934	e4230
26	361	597	31800	11500	7610	17500	8260	e25300	e8310	e1600	e1740	e3530
27	319	699	33200	10800	6140	18000	8120	e26200	e6640	e1250	e1930	e3290
28	172	1570	33300	11000	5410	18200	e8450	e26500	e6240	e1120	e2530	e2540
29	150	5490	32900	11400	---	18600	e8400	e26700	e6020	e1120	e2620	e2850
30	104	12000	32200	11700	---	19700	e8710	e26600	e5850	e1120	e2050	e2620
31	113	---	31200	12100	---	22800	---	e26000	---	e1120	e1710	---
TOTAL	37231	35375	641500	357680	335360	308520	451490	455440	391130	97120	44349	54161
MEAN	1201	1179	20690	11540	11980	9952	15050	14690	13040	3133	1431	1805
MAX	5080	12000	33800	29900	17300	22800	27600	26700	24600	5470	3700	4830
MIN	22	92	10000	5420	5410	3430	7280	7340	5850	1120	449	100
AC-FT	73850	70170	1272000	709500	665200	611900	895500	903400	775800	192600	87970	107400

ST. FRANCIS RIVER BASIN

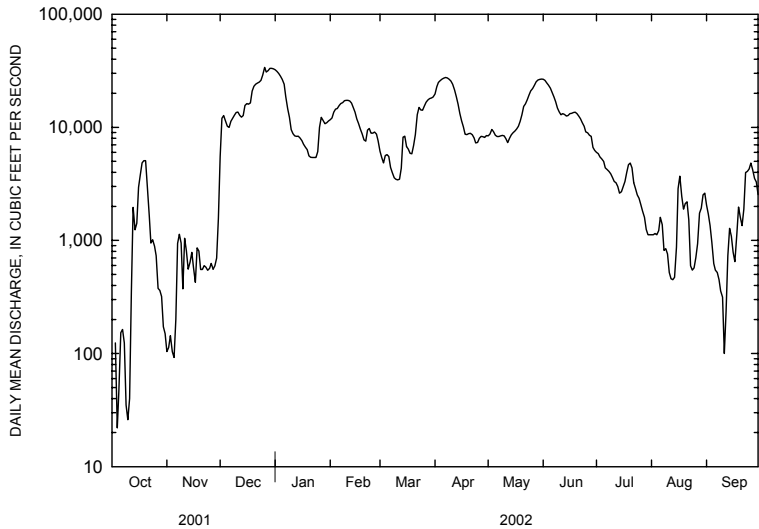
07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935-94, 1998-02, BY WATER YEAR (WY)

MEAN	1180	2208	5441	7815	9443	10110	10320	8385	5130	2595	1518	1061
MAX	6413	16410	23870	30270	37420	27400	36220	33660	27120	14280	13240	3942
(WY)	1950	1958	1958	1950	1937	1979	1979	1973	1957	1957	1998	1965
MIN	36.8	24.7	89.0	103	336	465	625	292	78.3	70.0	61.0	48.0
(WY)	1940	1942	1941	1944	1936	1941	1941	1941	1941	1941	1936	1941

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1935-94,1998-02	
ANNUAL TOTAL	1422318		3209356			
ANNUAL MEAN	3897		8793		5462	
HIGHEST ANNUAL MEAN					13580 1973	
LOWEST ANNUAL MEAN					344 1941	
HIGHEST DAILY MEAN	33800	Dec 24	33800	Dec 24	53000	Apr 8 1979
LOWEST DAILY MEAN	22	Oct 2	22	Oct 2	0.00	Nov 17 1941
ANNUAL SEVEN-DAY MINIMUM	81	Oct 2	81	Oct 2	0.00	Nov 17 1941
MAXIMUM PEAK FLOW			35000 Dec 24		54700 Apr 8 1979	
MAXIMUM PEAK STAGE			34.30 Dec 24		139.03 May 3 1973	
INSTANTANEOUS LOW FLOW			10 Oct 2		0.00 Nov 17 1941	
ANNUAL RUNOFF (AC-FT)	2821000		6366000		3957000	
10 PERCENT EXCEEDS	13700		22900		15000	
50 PERCENT EXCEEDS	805		7110		2630	
90 PERCENT EXCEEDS	152		550		219	

<sup>1</sup>Backwater from Mississippi River  
<sup>e</sup>Estimated



ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT										
18...	1130	82913	80513	5190	.09	767	7.1	70	7.1	230
NOV										
28...	1245	82913	80513	1420	.09	763	7.1	67	7.2	237
DEC										
28...	1510	82913	80513	33100	.09	765	11.0	87	7.7	95
JAN										
16...	1350	82913	80513	6740	.15	764	10.1	82	7.3	236
FEB										
14...	0655	82913	80513	11800	.09	771	8.2	65	7.4	181
MAR										
15...	0650	82913	80513	6180	.09	756	8.6	81	7.2	209
APR										
10...	1425	82913	80513	21500	.09	768	7.2	71	7.3	197
MAY										
15...	1505	82913	80513	9570	.09	764	7.9	88	7.1	180
JUN										
13...	0900	82913	80513	12500	.12	757	7.3	85	7.4	189
JUL										
11...	1240	82913	80513	3190	.15	760	6.8	89	7.5	297
AUG										
14...	1145	82913	80513	3210	.09	760	6.9	83	8.2	204
SEP										
12...	1320	82913	80513	1390	.12	760	7.1	94	7.2	221

Date	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (070342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (070343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED, SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT								
18...	14.8	35	37	72	100	--	324	4540
NOV								
28...	12.8	97	98	100	--	--	502	1920
DEC								
28...	5.6	82	83	95	100	--	78	6970
JAN								
16...	6.4	94	98	100	--	--	54	983
FEB								
14...	6.0	99	99	100	--	--	96	3060
MAR								
15...	12.3	98	99	100	--	--	518	8640
APR								
10...	15.1	92	94	97	100	--	76	4410
MAY								
15...	20.8	85	87	95	99	100	171	4420
JUN								
13...	22.5	58	62	78	100	--	173	5840
JUL								
11...	29.4	86	86	91	100	--	123	1060
AUG								
14...	24.7	99	99	100	--	--	100	867
SEP								
12...	29.5	87	91	97	100	--	143	537

## ST. FRANCIS RIVER BASIN

## 07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. FALL SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL SIEVE DIAM. % FINER THAN 4.00 MM (80170)
OCT								
18...	26	80	99	100	--	--	--	--
NOV								
28...	25	79	98	100	--	--	--	--
JAN								
16...	6	18	82	98	100	--	--	--
FEB								
14...	5	28	96	99	100	--	--	--
MAR								
15...	9	28	94	100	--	--	--	--
APR								
10...	58	63	80	92	99	--	99	100
MAY								
15...	5	35	96	99	100	--	--	--
JUN								
13...	7	17	67	94	100	--	--	--
JUL								
11...	25	34	62	93	98	100	--	--
AUG								
14...	15	56	97	100	--	--	--	--
SEP								
12...	6	13	63	97	100	--	--	--



ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUT-OFF NEAR COLT

LOCATION.--Lat 35°08'41", long 90°39'23", in NW1/4NE1/4 sec.15, T.6 N., R.4 E., St. Francis County, Hydrologic Unit 08020203, at bridge on Old Military Road 9.0 mi east of Colt.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)
NOV 28...	1150	82913	80513	1230	.12	768	7.3	68	7.2
JAN 16...	1245	82913	80513	7210	.12	765	10.5	84	7.3
FEB 14...	0840	82913	80513	15300	.09	771	7.2	59	7.2
MAR 14...	1400	82913	80513	8650	.09	755	9.3	87	7.9
APR 10...	1600	82913	80513	24000	.09	768	7.6	75	7.1
MAY 15...	1220	82913	80513	10000	.09	764	7.9	87	7.3
JUN 12...	1120	82913	80513	12900	.09	760	7.5	88	7.2

Date	SPE-CIFIC CON-DUCT ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 28...	198	12.4	98	98	99	100	203	674
JAN 16...	223	6.2	98	98	100	--	52	1010
FEB 14...	177	7.5	94	96	99	100	88	3640
MAR 14...	227	12.0	98	99	100	--	178	4160
APR 10...	187	15.2	89	92	96	100	79	5120
MAY 15...	192	20.1	96	97	98	100	114	3080
JUN 12...	202	23.0	96	97	99	100	80	2790

Date	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)
NOV 28...	28	76	94	98	100
JAN 16...	3	33	99	100	--
FEB 14...	6	39	99	100	--
MAR 14...	4	18	98	100	--
APR 10...	5	38	98	100	--
MAY 15...	2	23	99	100	--
JUN 12...	5	36	99	100	--

## ST. FRANCIS RIVER BASIN

## 07047907 ST. FRANCIS RIVER AT MADISON

LOCATION.--Lat 35°00'38", long 90°43'05", in NE1/4SW1/4 sec.30, T.5 N., R.4 E., St. Francis County, Hydrologic Unit 08020203, at bridge on State Highway 50 at Madison.

PERIOD OF RECORD.--October 1977 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT										
18...	1505	82913	80513	5950	.09	765	7.3	72	7.3	219
NOV										
28...	0745	82913	80513	886	.09	764	7.4	70	7.3	207
DEC										
29...	0930	82913	80513	33600	.09	775	9.9	77	8.0	78
JAN										
17...	0915	82913	80513	6240	.12	766	10.1	81	7.3	231
FEB										
14...	1335	82913	80513	14300	.09	771	8.6	72	7.3	178
MAR										
14...	1520	82913	80513	7430	.09	754	8.9	84	7.6	223
APR										
11...	1015	82913	80513	22800	.09	765	8.0	80	7.3	181
MAY										
15...	1320	82913	80513	9500	.09	764	7.9	87	7.1	184
JUN										
12...	1340	82913	80513	12300	.12	760	7.7	93	7.2	212
JUL										
11...	1520	82913	80513	3620	.12	760	6.3	83	7.4	284
AUG										
14...	1415	82913	80513	2150	.15	760	7.8	99	8.1	382
SEP										
12...	1540	82913	80513	1180	.12	760	6.4	85	7.2	197

Date	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (070342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (070343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT							
18...	15.2	97	98	99	100	151	2430
NOV							
28...	13.1	99	99	100	--	108	258
DEC							
29...	5.0	75	86	95	100	105	9530
JAN							
17...	6.0	95	98	100	--	62	1040
FEB							
14...	8.2	99	99	100	--	110	4250
MAR							
14...	12.2	99	99	100	--	257	5160
APR							
11...	15.8	88	90	93	100	76	4680
MAY							
15...	20.3	37	71	99	100	551	14100
JUN							
12...	24.5	94	97	97	100	82	2720
JUL							
11...	29.6	95	95	97	100	122	1190
AUG							
14...	27.4	97	97	100	--	135	784
SEP							
12...	29.8	97	97	100	--	97	309

ST. FRANCIS RIVER BASIN

07047907 ST. FRANCIS RIVER AT MADISON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM ( 80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. FALL DIAM. % FINER THAN 8.00 MM (80171)
OCT 18...	23	75	94	100	--	--	--	--
NOV 28...	30	81	99	100	--	--	--	--
DEC 29...	78	79	82	86	89	91	94	100
JAN 17...	3	13	97	100	--	--	--	--
FEB 14...	4	20	95	100	--	--	--	--
MAR 14...	4	19	94	100	--	--	--	--
APR 11...	4	78	100	--	--	--	--	--
MAY 15...	6	16	94	99	100	--	--	--
JUN 12...	24	48	95	100	--	--	--	--
JUL 11...	4	9	93	99	100	--	--	--
AUG 14...	21	39	94	97	97	98	100	--
SEP 12...	3	6	95	100	--	--	--	--

## ST. FRANCIS RIVER BASIN

## 07047942 L'ANGUILLE RIVER NEAR COLT

**LOCATION.**--Lat 35°08'40", long 90°52'40", in NE1/4NW1/4 sec.15, T.6 N.,R.2 E., St. Francis County, Hydrologic Unit 08020205, near center of span on downstream side of bridge on State Highway 306, 1.1 mi downstream from Lick Creek, 3.9 mi northwest of Colt, and at mile 52.8.

**DRAINAGE AREA.**--535 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1970 to current year.

**GAGE.**--Water-stage recorder. Datum of gage is 192.52 ft above NGVD of 1929. Auxiliary water-stage recorder 8.7 mi downstream.

**REMARKS.**--Water-discharge records good except estimated daily discharges and those below 50 ft<sup>3</sup>/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	353	2260	2130	1990	1130	2530	235	566	20	648	496
2	5.2	299	2520	1980	2050	1100	2570	200	497	19	570	485
3	3.8	241	2390	1850	2090	1060	2410	188	442	27	505	466
4	3.1	191	e1700	1730	1970	999	2110	185	392	39	467	438
5	2.9	e140	e1600	1630	1790	944	1850	185	341	40	444	406
6	2.8	130	e1500	1580	1680	891	1670	192	285	35	419	368
7	2.6	91	e1500	1490	1610	844	1540	188	233	29	385	331
8	2.5	59	e1500	1370	1600	794	1430	180	188	26	346	287
9	2.3	35	e1400	1270	1560	779	1330	197	180	19	301	243
10	2.7	22	e1400	1210	1520	764	1240	252	185	15	263	203
11	520	13	e1400	1150	1450	747	1150	265	161	57	228	184
12	745	7.3	e1500	1090	1350	2060	1080	234	133	321	191	154
13	724	8.1	e3500	1030	1270	2110	1020	245	112	402	179	128
14	976	7.8	e4100	961	1210	2370	939	238	103	335	465	104
15	1210	7.0	4480	889	1170	2350	871	198	108	303	574	84
16	1330	8.7	4760	831	1130	2080	815	e670	115	379	539	83
17	1310	9.1	9990	774	1080	1970	766	e920	93	345	635	453
18	1190	9.6	9030	725	1030	2510	708	e1200	60	382	691	743
19	1060	11	7690	767	1010	2620	635	e1500	35	685	715	878
20	941	12	6370	736	1570	4080	571	1660	22	1310	724	1390
21	852	13	5400	680	1560	3930	512	1610	17	1430	718	2260
22	790	13	4790	671	1710	3640	461	1400	14	1710	690	2280
23	737	14	4430	691	1740	3260	417	1200	11	1950	654	2190
24	701	15	4170	1150	1600	2940	374	1070	13	1920	618	2000
25	682	16	3920	1560	1440	2650	337	950	13	1690	583	1740
26	638	18	3640	1910	1320	2470	291	904	18	1420	550	1510
27	599	83	3310	2070	1230	2250	257	1050	18	1200	525	1330
28	552	353	3000	1940	1180	2060	229	900	13	1050	507	1180
29	503	1220	2730	1780	---	1890	208	811	16	897	496	1070
30	448	1890	2500	1670	---	1830	228	730	19	801	492	793
31	392	---	2300	1710	---	2400	---	639	---	742	496	---
TOTAL	16936.8	5289.6	110780	41025	41910	61522	30549	20396	4403	19598	15618	24277
MEAN	546.3	176.3	3574	1323	1497	1985	1018	657.9	146.8	632.2	503.8	809.2
MAX	1330	1890	9990	2130	2090	4080	2570	1660	566	1950	724	2280
MIN	2.3	7.0	1400	671	1010	747	208	180	11	15	179	83
AC-FT	33590	10490	219700	81370	83130	122000	60590	40460	8730	38870	30980	48150
CFSM	1.02	0.33	6.68	2.47	2.80	3.71	1.90	1.23	0.27	1.18	0.94	1.51
IN.	1.18	0.37	7.70	2.85	2.91	4.28	2.12	1.42	0.31	1.36	1.09	1.69

ST. FRANCIS RIVER BASIN

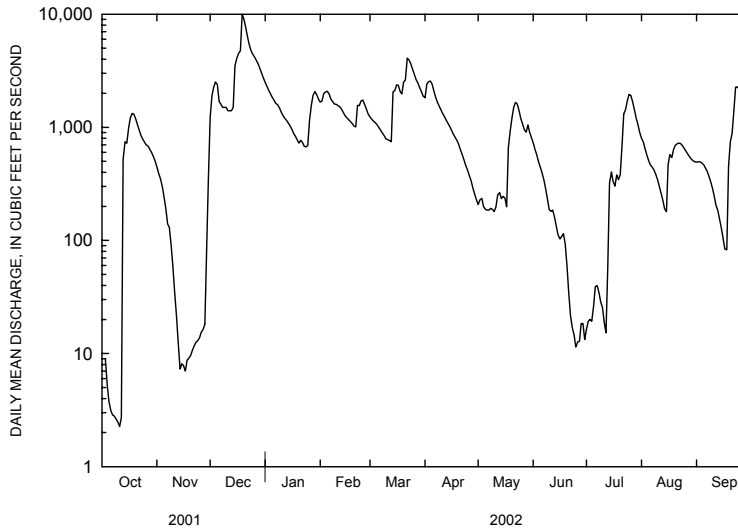
07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

MEAN	309.9	635.3	1241	998.9	1127	1155	1075	720.7	486.7	259.1	265.7	434.9
MAX	1509	2807	3574	2857	4091	2977	3428	3033	2617	1507	800	2784
(WY)	1991	1989	2002	1991	1989	1975	1991	1983	1974	1994	1998	1978
MIN	5.10	9.91	11.9	43.2	151	222	228	39.6	25.3	23.8	63.8	65.1
(WY)	1995	1999	1990	1986	1972	1982	1998	1992	1988	1993	1980	1998

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1971 - 2002	
ANNUAL TOTAL	286345.9		392304.4			
ANNUAL MEAN	784.5		1075		723.5	
HIGHEST ANNUAL MEAN					1321 1989	
LOWEST ANNUAL MEAN					271 1972	
HIGHEST DAILY MEAN	9990	Dec 17	9990	Dec 17	15000	Dec 29 1987
LOWEST DAILY MEAN	2.3	Oct 9	2.3	Oct 9	1.0	Oct 27 1971
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 4	2.7	Oct 4	1.0	Oct 9 1992
MAXIMUM PEAK FLOW			11600 Dec 17		16600 Apr 29 1991	
MAXIMUM PEAK STAGE			16.53 Dec 17		17.34 Dec 30 1987	
INSTANTANEOUS LOW FLOW			2.2 Oct 9,10		0.99 Jul 20 1980	
ANNUAL RUNOFF (AC-FT)	568000		778100		524100	
ANNUAL RUNOFF (CFSM)	1.47		2.01		1.35	
ANNUAL RUNOFF (INCHES)	19.91		27.28		18.37	
10 PERCENT EXCEEDS	2210		2290		1880	
50 PERCENT EXCEEDS	300		742		358	
90 PERCENT EXCEEDS	14		19		30	

<sup>1</sup>From floodmark  
<sup>e</sup>Estimated



## ST. FRANCIS RIVER BASIN

## 07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1970 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARDS) UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
22...	1345	81213	80513	797	--	765	.8	8	7.4	255	16.9
NOV											
28...	1015	82913	80513	271	.09	--	--	--	--	--	12.9
DEC											
29...	1120	82913	80513	1620	.12	776	7.3	56	7.7	121	4.6
29...	1145	82913	80513	650	.09	776	7.3	57	7.7	121	5.3
JAN											
09...	1400	81213	80513	1280	--	768	10.2	77	7.3	147	3.9
17...	0730	82913	80513	792	.09	766	7.6	62	6.8	168	7.1
FEB											
14...	1030	82913	80513	1230	.12	771	6.8	55	7.1	168	6.5
MAR											
12...	0930	81213	80513	2630	--	769	8.3	67	8.1	74	6.5
15...	0750	82913	80513	2250	.09	757	8.2	77	7.1	115	12.1
15...	0820	82913	80513	770	.15	757	7.9	74	7.1	106	12.1
APR											
11...	0750	82913	80513	916	.12	765	6.9	70	7.1	190	16.3
30...	0855	81213	80513	167	--	767	5.0	55	7.7	179	20.6
MAY											
16...	0745	82913	80513	149	.09	762	7.0	78	7.2	202	20.5
JUN											
12...	1635	82913	80513	104	.09	760	7.1	86	7.3	191	25.0
18...	1335	81213	80513	57	--	760	6.6	77	7.5	429	22.5
AUG											
29...	1045	81213	80513	448	--	763	4.1	50	7.7	439	25.2

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS C) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO- RIDE, DIS- SOLVED (MG/ AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT										
22...	94	23.0	8.90	13.0	.3	7.1	12	95	12.0	9.00
JAN										
09...	54	14.0	4.70	4.80	.3	4.8	15	67	6.60	4.50
MAR										
12...	24	6.30	2.10	2.30	.2	2.8	18	27	3.00	3.00
APR										
30...	69	18.0	5.90	4.50	.3	5.7	14	87	5.60	5.40
JUN										
18...	150	35.0	15.0	6.00	.9	25.0	26	176	30.0	24.0
AUG										
29...	170	40.0	16.0	4.60	.6	18.0	19	174	26.0	12.0

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
OCT									
22...	.25	392	182	131	.03	1.6	.04	--	--
JAN									
09...	.12	314	91	80	<.01	.50	--	--	--
MAR									
12...	.06	320	45	37	.19	1.4	.24	--	--
APR									
30...	.15	48.7	108	99	.09	1.0	.12	.22	.974
JUN									
18...	.34	38.4	248	242	.11	1.2	.14	.32	1.42
AUG									
29...	.35	313	259	222	.03	.60	.04	--	--

ST. FRANCIS RIVER BASIN

07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	
OCT	22...	1345	<.02	--	<.010	1.6	--	.613	.18	.20	.63	8.0
JAN	09...	1400	.06	--	<.010	--	.56	.061	.04	.02	.07	6.1
MAR	12...	0930	.23	--	<.010	1.2	1.6	.123	.05	.04	.43	.4
APR	30...	0855	.23	.033	.010	.91	1.2	.184	.06	.06	.26	3.3
JUN	18...	1335	.35	.099	.030	1.1	1.5	.245	.07	.08	.18	11
AUG	29...	1045	.08	--	<.010	.57	.68	.215	.08	.07	.14	7.0

DATE	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STREP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	
OCT	22...	360	930	1100	--	--	--	--	97	50
NOV	28...	--	--	--	100	--	--	--	--	375
DEC	29...	--	--	--	97	98	98	100	--	35
JAN	09...	E20	E30	E20	--	--	--	--	95	32
FEB	14...	--	--	--	95	95	100	--	--	29
MAR	12...	2200	E1900	E16000	--	--	--	--	99	222
APR	11...	--	--	--	97	97	97	100	--	96
MAY	16...	--	--	--	--	--	--	--	--	125
JUN	12...	--	--	--	99	100	--	--	--	115
AUG	29...	77	90	110	--	--	--	--	97	37

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. FALL DIAM. % FINER THAN 8.00 MM (80171)	SAMPLE SOURCE (72005)
OCT	22...	108	--	--	--	--	--	--	--	--	--
NOV	28...	274	--	--	--	--	--	--	--	--	--
DEC	29...	153	50	52	66	86	98	100	--	--	67.00
JAN	09...	56.2	18	45	78	86	91	--	93	100	68.00
FEB	17...	111	--	--	--	--	--	--	--	--	--
MAR	14...	62.0	96	96	97	98	100	--	--	--	--
APR	12...	824	45	47	52	70	100	--	--	--	--
MAY	15...	1580	--	--	--	--	--	--	--	--	--
JUN	15...	644	53	55	63	78	99	--	99	100	67.00
AUG	15...	170	77	77	78	80	86	--	86	94	68.00
JUN	11...	237	98	98	99	99	100	--	--	--	--
MAY	30...	41.0	--	--	--	--	--	--	--	--	--
JUN	16...	50.3	98	99	100	--	--	--	--	--	--
JUN	12...	32.3	99	100	--	--	--	--	--	--	--
AUG	18...	12.9	--	--	--	--	--	--	--	--	--
AUG	29...	44.8	--	--	--	--	--	--	--	--	--

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ST. FRANCIS RIVER BASIN

## 07047950 L'ANGUILLE RIVER AT PALESTINE

**LOCATION.**--Lat 34°58'20", long 90°53'10", in NW1/4 sec.10, T.4 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on U.S. Highway 70 1.0 mi east of Palestine, and at mile 33.6.

**DRAINAGE AREA.**--786 mi<sup>2</sup>.

**PERIOD OF RECORD.**--April 1949 to current year. October 1965 to September 1977 and October 1997 to current year in reports of the U.S. Geological Survey. April 1949 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 166.68 ft above NGVD of 1929. Prior to Nov. 1, 1949, nonrecording gage. Prior to Jan. 1, 1952, datum of gage was 0.32 ft below NGVD of 1929.

**REMARKS.**--Records fair, except those below 50 ft<sup>3</sup>/s which are poor. The stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1933, 39.7 ft Feb. 13, 1937, at present site and datum, from records of U.S. Army Corps of Engineers (backwater from Mississippi River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	740	2410	2510	2070	1430	3960	206	7280	9.1	1440	656
2	10	649	3080	2110	2240	1310	4320	211	5770	11	1310	634
3	5.7	545	3670	1880	2560	1200	4230	198	4320	11	1200	612
4	2.7	427	4110	1710	2740	1130	3960	192	2990	12	1100	588
5	1.4	333	4080	1590	2700	1080	3530	212	1800	20	1000	556
6	0.52	250	3700	1540	2610	1020	3020	226	1070	28	901	525
7	0.01	177	3260	1450	2480	973	2620	216	726	27	799	490
8	0.00	106	2980	1370	2320	920	2290	207	465	25	702	450
9	0.00	46	2720	1320	2200	882	2000	223	351	25	594	400
10	0.0	17	2460	1260	2110	846	1760	247	260	22	498	338
11	402	4.8	2200	1190	2000	864	1570	307	200	76	428	278
12	804	0.34	2210	1140	1890	1580	1390	381	164	92	386	229
13	924	0.00	2910	1090	1780	2620	1270	428	143	308	334	186
14	1040	0.00	4790	1030	1660	3220	1180	413	170	e600	443	154
15	1100	0.00	7200	966	1550	3400	1090	405	125	e860	852	121
16	1160	0.00	8620	911	1460	3480	1010	401	121	e950	1060	104
17	1210	0.00	15500	866	1350	3950	947	437	118	e1000	1150	91
18	1260	0.00	e22400	826	1240	5140	880	677	101	e945	1160	192
19	1310	0.00	e21600	808	1180	5280	816	968	78	e910	1140	e310
20	1370	0.00	e18800	799	1390	5900	744	1440	49	914	1100	e395
21	1390	0.00	e16100	797	1580	7470	664	2210	27	1050	1050	e560
22	1360	0.00	e13900	803	1830	7860	568	3240	15	1220	1010	e760
23	1300	0.00	e12000	805	2090	7220	451	4850	10	1440	976	e1000
24	1250	0.00	e10300	1030	2150	6250	403	6550	7.6	1560	948	e1230
25	1190	0.00	e8840	1230	2090	5490	e350	8150	6.1	1660	915	1680
26	1130	0.05	e7720	1410	1960	4840	e294	9580	5.8	1750	881	1880
27	1070	67	e6720	1580	1760	4240	e258	10400	8.3	1820	853	2030
28	1000	192	e5720	1710	1590	3680	e237	10500	12	1830	809	2030
29	932	984	e4820	1860	---	3200	e217	10600	10	1780	764	1930
30	869	1580	3850	1970	---	2920	199	9810	8.1	1670	720	1760
31	810	---	3110	2020	---	3290	---	8730	---	1560	680	---
TOTAL	22918.33	6118.19	231780	41581	54580	102685	46228	92615	26410.9	24185.1	27203	22169
MEAN	739.3	203.9	7477	1341	1949	3312	1541	2988	880.4	780.2	877.5	739.0
MAX	1390	1580	22400	2510	2740	7860	4320	10600	7280	1830	1440	2030
MIN	0.00	0.00	2200	797	1180	846	199	192	5.8	9.1	334	91
AC-FT	45460	12140	459700	82480	108300	203700	91690	183700	52390	47970	53960	43970
CFSM	0.94	0.26	9.51	1.71	2.48	4.21	1.96	3.80	1.12	0.99	1.12	0.94
IN.	1.08	0.29	10.97	1.97	2.58	4.86	2.19	4.38	1.25	1.14	1.29	1.05



ST. FRANCIS RIVER BASIN

07047950 L'ANGUILLE RIVER AT PALESTINE--CONTINUED

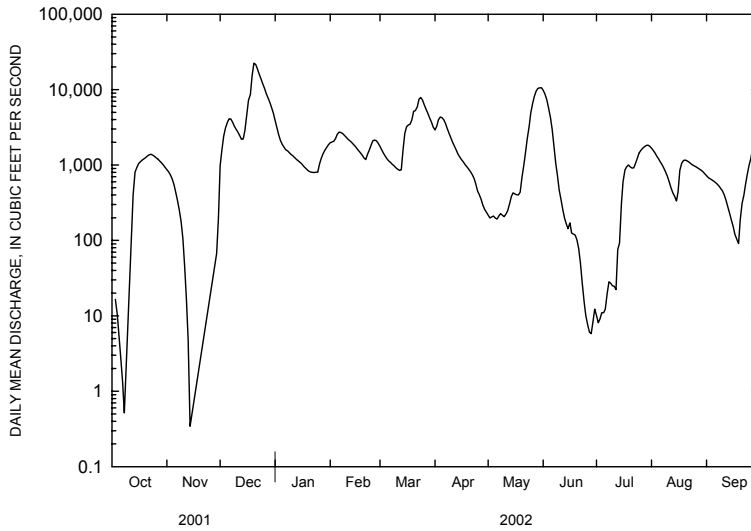
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

MEAN	338.8	640.1	1376	1558	2336	2142	1656	1506	595.1	417.6	432.2	589.6
MAX	1670	5578	7477	6531	7854	5720	4938	6587	3919	1636	1713	2130
(WY)	1950	1958	2002	1950	1950	1975	1973	1953	1974	1967	1966	1950
MIN	1.97	0.000	3.71	34.5	136	631	200	44.9	26.0	0.065	19.0	66.7
(WY)	1964	1955	1966	1963	1963	1972	1967	1959	1952	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	485770.42		698473.52			
ANNUAL MEAN	1331		1914		1126	
HIGHEST ANNUAL MEAN					2592 1950	
LOWEST ANNUAL MEAN					455 1963	
HIGHEST DAILY MEAN	22400	Dec 18	22400	Dec 18	22400	Dec 18 2001
LOWEST DAILY MEAN	0.00	Oct 8	0.00	Oct 8	0.00	Jun 27 1952
ANNUAL SEVEN-DAY MINIMUM	0.00	Nov 13	0.00	Nov 13	0.00	Jul 21 1952
MAXIMUM PEAK FLOW			23000	Dec 19	23000	Dec 19 2001
MAXIMUM PEAK STAGE			27.48	Dec 18	30.92	Feb 3 1950
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	963500		1385000		815900	
ANNUAL RUNOFF (CFSM)	1.69		2.43		1.43	
ANNUAL RUNOFF (INCHES)	22.99		33.06		19.47	
10 PERCENT EXCEEDS	3280		4510		2890	
50 PERCENT EXCEEDS	507		1020		476	
90 PERCENT EXCEEDS	21		12		34	

<sup>1</sup>Backwater from Mississippi River

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07048480 TOWN BRANCH AT B.R. 62 AT FAYETTEVILLE

LOCATION.--Lat 36°03'25", long 94°10'31", in SW<sub>1</sub>/<sub>4</sub>SW<sub>1</sub>/<sub>4</sub> sec.16, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110001, on upstream side of culvert at B.R. U.S. 62 at Fayetteville.

DRAINAGE AREA.--0.86 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder.

REMARKS.--Records fair except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.25	0.09	1.5	0.65	2.3	1.5	0.73	e2.4	e1.1	0.15	0.13	0.16
2	0.32	2.3	0.79	0.65	1.4	3.2	0.70	e2.9	e1.0	0.27	0.10	0.16
3	0.26	9.6	0.70	0.65	1.1	1.4	0.74	e2.2	e1.1	0.29	0.32	0.16
4	0.22	0.94	0.70	0.61	1.0	1.2	0.74	e2.0	e0.92	0.37	0.09	0.16
5	5.5	0.85	0.83	0.66	1.0	1.2	0.74	e1.8	e6.5	0.18	0.07	0.15
6	0.12	0.85	0.77	0.55	1.2	0.89	0.62	e1.9	0.72	0.32	0.05	0.10
7	0.07	0.76	0.71	0.40	1.0	0.79	42	e1.7	0.65	0.28	0.10	0.10
8	0.05	0.90	0.67	0.40	0.84	1.2	14	e1.7	0.54	0.15	0.09	0.10
9	0.06	0.70	0.69	0.40	0.75	1.3	1.7	e5.3	2.2	0.17	0.15	0.10
10	30	0.70	0.80	0.40	0.75	0.80	1.2	e1.6	0.78	0.23	2.5	0.10
11	5.8	0.65	0.82	0.40	0.74	0.82	1.0	e1.6	0.68	0.16	0.13	0.10
12	1.0	0.65	4.3	0.58	0.65	0.78	0.95	e12	7.5	3.0	0.11	0.10
13	6.2	0.65	1.1	0.74	0.65	0.74	0.92	e3.2	3.2	5.1	47	0.14
14	0.72	0.70	1.8	0.59	0.65	0.75	0.85	e1.8	0.61	0.24	21	0.16
15	0.39	0.74	6.8	0.43	0.65	3.1	0.78	e1.9	0.47	0.15	0.78	0.28
16	0.38	0.67	69	0.40	0.65	0.84	2.8	e1.6	0.41	0.15	0.50	0.20
17	0.25	0.65	12	0.40	0.56	0.74	0.91	e17	0.34	0.13	0.33	0.20
18	0.18	0.52	2.1	1.2	0.39	8.4	0.79	e1.6	0.34	0.10	0.33	0.10
19	0.13	e3.8	1.4	0.91	7.4	24	1.3	e1.7	0.26	0.10	0.25	2.9
20	0.06	e0.35	1.1	0.54	0.90	4.5	0.79	e1.6	0.29	0.09	0.28	0.24
21	0.05	e0.42	0.91	0.50	0.70	1.5	0.74	e1.5	0.26	0.09	0.29	0.07
22	0.06	e0.41	0.86	0.31	0.60	1.1	0.74	e1.5	0.30	0.16	0.25	0.03
23	0.13	e1.0	0.85	7.2	0.40	0.87	e26	e1.3	0.32	0.26	0.27	0.07
24	0.15	e0.54	0.85	1.6	0.37	0.93	e3.1	e6.4	0.14	0.25	0.29	0.05
25	0.16	e0.40	0.85	1.2	0.58	20	e2.9	e1.3	2.5	0.37	1.3	0.00
26	0.35	e0.40	0.78	1.00	0.65	1.9	e6.1	e1.2	0.22	0.17	0.31	0.02
27	0.71	e0.52	0.80	0.85	0.65	1.2	e3.2	e1.7	0.24	0.20	0.21	0.04
28	0.74	e2.9	0.76	0.78	0.65	0.89	e2.8	e1.5	0.16	0.08	0.21	0.03
29	0.74	e2.4	0.65	0.80	---	0.85	e2.4	e1.4	0.14	0.50	0.29	0.05
30	0.11	2.7	0.65	5.7	---	0.85	e2.6	e1.2	0.14	0.15	0.23	0.11
31	0.08	---	0.66	27	---	0.85	---	e1.1	---	0.17	0.16	---
TOTAL	55.24	38.76	117.20	58.50	29.18	89.09	124.84	87.6	34.03	14.03	78.12	6.18
MEAN	1.782	1.292	3.781	1.887	1.042	2.874	4.161	2.826	1.134	0.453	2.520	0.206
MAX	30	9.6	69	27	7.4	24	42	17	7.5	5.1	47	2.9
MIN	0.05	0.09	0.65	0.31	0.37	0.74	0.62	1.1	0.14	0.08	0.05	0.00
AC-FT	110	77	232	116	58	177	248	174	67	28	155	12
CFSM	2.07	1.50	4.40	2.19	1.21	3.34	4.84	3.29	1.32	0.53	2.93	0.24
IN.	2.39	1.68	5.07	2.53	1.26	3.85	5.40	3.79	1.47	0.61	3.38	0.27

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

MEAN	1.423	2.083	1.667	1.873	2.088	2.236	1.636	2.102	2.514	0.771	1.027	1.097
MAX	1.86	5.90	3.78	4.84	3.88	3.99	4.16	3.38	6.52	1.15	2.52	2.36
(WY)	1999	1997	2002	1998	2001	1998	2002	1999	2000	2000	2002	2001
MIN	0.51	0.38	1.01	0.18	1.04	0.98	0.50	0.90	0.86	0.45	0.28	0.21
(WY)	2000	2000	1999	1997	2002	2000	2000	1997	1998	2002	1998	2002

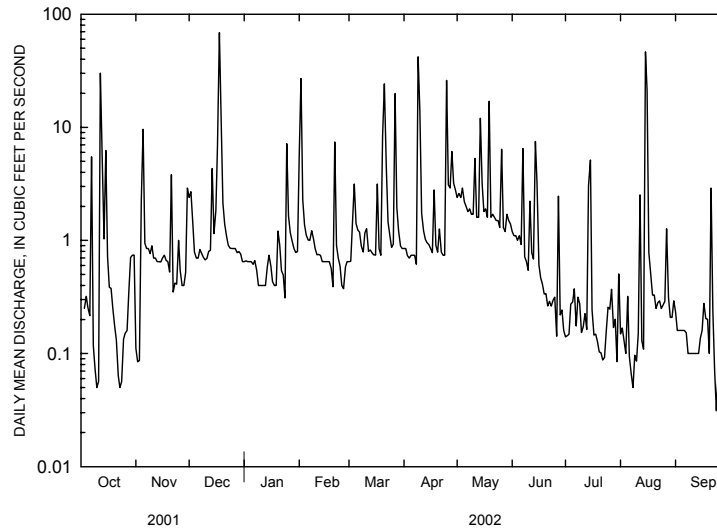
WHITE RIVER BASIN

07048480 TOWN BRANCH AT B.R. 62 AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	692.38		732.77			
ANNUAL MEAN	1.897		2.008		1.705	
HIGHEST ANNUAL MEAN					2.01	2002
LOWEST ANNUAL MEAN					1.48	2000
HIGHEST DAILY MEAN	69	Dec 16	69	Dec 16	77	Sep 26 1996
LOWEST DAILY MEAN	0.05	Jun 23	0.00	Sep 25	0.00	Jan 10 1997
ANNUAL SEVEN-DAY MINIMUM	0.10	Jun 23	0.03	Sep 22	0.00	Jan 10 1997
MAXIMUM PEAK FLOW			577	Aug 13	<sup>1</sup> 1440	Jun 30 1999
MAXIMUM PEAK STAGE			6.02	Aug 13	9.11	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	1370		1450		1240	
ANNUAL RUNOFF (CFSM)	2.21		2.33		1.98	
ANNUAL RUNOFF (INCHES)	29.95		31.70		26.94	
10 PERCENT EXCEEDS	3.1		3.1		3.2	
50 PERCENT EXCEEDS	0.74		0.70		0.65	
90 PERCENT EXCEEDS	0.20		0.11		0.13	

<sup>1</sup>From rating extended above 100 ft<sup>3</sup>/s on basis of culvert Type IV flow computations

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07048490 TOWN BRANCH TRIBUTARY AT HWY 16 AT FAYETTEVILLE

LOCATION.--Lat 36°02'54", long 94°09'44", in SE<sub>1</sub>/<sub>4</sub>NE<sub>1</sub>/<sub>4</sub> sec.21, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110001, on upstream side of culvert at State Highway 16 at Fayetteville.

DRAINAGE AREA.--1.36 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.19	0.11	0.72	2.4	5.7	3.3	2.2	1.9	0.76	0.38	0.05	0.00
2	0.19	4.7	0.17	1.5	3.5	6.1	2.2	2.8	0.74	1.7	0.07	0.00
3	0.21	11	0.00	0.70	2.8	3.8	1.9	1.8	0.70	0.43	0.09	0.00
4	0.28	0.71	0.00	0.71	2.3	3.3	1.8	1.4	0.53	0.38	0.0	0.00
5	9.7	0.28	0.08	0.55	2.1	3.0	1.8	1.2	11	0.28	0.0	0.00
6	0.00	0.17	0.04	0.53	2.7	2.4	1.7	1.3	0.79	0.25	0.07	0.00
7	0.00	0.13	0.00	0.39	2.2	2.2	49	1.2	0.63	0.25	0.09	0.00
8	0.00	0.69	0.00	0.47	1.9	3.0	20	1.1	0.49	0.27	0.05	0.00
9	0.00	0.09	0.00	0.48	1.7	3.6	4.2	7.9	4.2	0.28	0.03	0.00
10	43	0.00	0.00	0.41	1.5	1.9	2.8	1.1	0.93	0.71	2.5	0.13
11	11	0.00	0.04	0.38	1.4	2.2	2.3	1.1	0.53	0.29	0.00	0.00
12	2.4	0.00	5.8	0.38	1.4	1.9	1.9	16	8.8	2.0	0.00	0.00
13	10	0.00	1.0	0.38	1.3	1.7	1.7	3.7	5.4	4.3	51	0.04
14	1.5	0.00	3.4	0.38	1.2	1.7	1.5	1.5	0.89	0.33	22	0.24
15	0.68	0.02	10	0.38	1.1	6.8	1.4	1.7	0.66	0.23	1.0	0.30
16	0.47	0.00	85	0.39	1.1	2.3	3.3	1.1	0.55	0.11	0.49	0.39
17	0.16	0.00	21	0.41	1.0	1.9	1.4	20	0.48	0.24	0.25	0.73
18	0.00	0.00	5.0	2.2	1.0	12	1.2	2.1	0.43	0.26	0.19	0.38
19	0.00	6.5	3.1	0.96	9.0	34	2.3	1.4	0.38	0.23	0.19	7.6
20	0.00	0.00	2.2	0.39	2.4	12	1.1	1.3	0.38	0.22	0.19	0.16
21	0.00	0.00	1.6	0.38	1.8	5.3	1.1	1.1	0.38	0.14	0.35	0.00
22	0.06	0.00	1.5	0.40	1.5	4.0	0.95	1.2	0.38	0.02	0.28	0.00
23	0.19	1.1	1.1	7.5	1.5	3.8	33	1.0	0.38	0.05	0.26	0.00
24	0.19	0.20	0.96	1.3	1.5	3.5	4.1	8.3	0.38	0.06	0.34	0.00
25	0.19	0.00	0.94	0.86	1.4	26	2.6	1.1	4.5	0.04	1.4	0.00
26	0.24	0.00	0.81	0.95	1.5	5.4	8.0	0.92	0.39	0.0	0.28	0.00
27	0.22	0.29	0.76	0.96	1.3	4.1	3.0	2.2	0.38	0.00	0.22	0.00
28	0.19	4.5	0.87	1.1	1.5	3.5	2.3	1.3	0.38	0.00	0.08	0.00
29	0.19	4.2	0.70	1.3	---	3.2	1.9	1.3	0.38	0.50	0.00	0.00
30	0.19	2.4	0.77	11	---	2.6	2.2	0.89	0.38	0.00	0.00	0.00
31	0.20	---	1.8	32	---	2.4	---	0.77	---	0.02	0.05	---
TOTAL	81.64	37.09	149.36	72.14	59.3	172.9	164.85	91.68	47.20	13.97	81.52	9.97
MEAN	2.634	1.236	4.818	2.327	2.118	5.577	5.495	2.957	1.573	0.451	2.630	0.332
MAX	43	11	85	32	9.0	34	49	20	11	4.3	51	7.6
MIN	0.00	0.00	0.00	0.38	1.0	1.7	0.95	0.77	0.38	0.00	0.00	0.00
AC-FT	162	74	296	143	118	343	327	182	94	28	162	20
CFSM	1.94	0.91	3.54	1.71	1.56	4.10	4.04	2.17	1.16	0.33	1.93	0.24
IN.	2.23	1.01	4.09	1.97	1.62	4.73	4.51	2.51	1.29	0.38	2.23	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

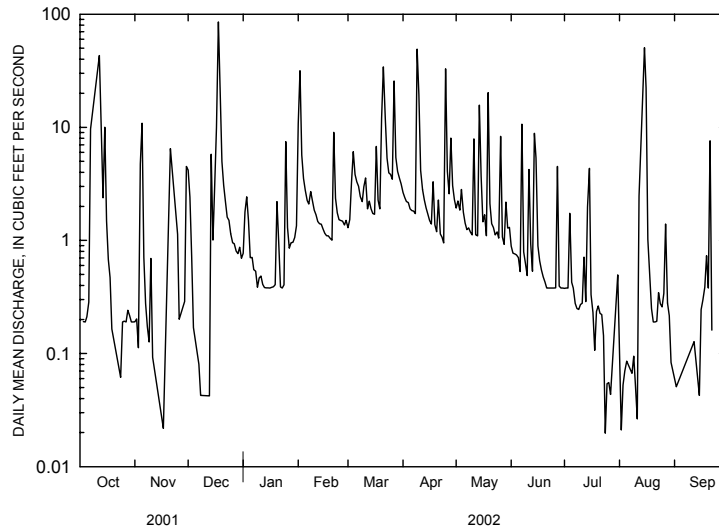
MEAN	1.764	2.689	1.994	2.527	3.054	2.958	2.088	2.605	3.144	1.133	1.328	1.609
MAX	2.52	7.69	4.49	7.60	4.84	5.97	5.24	5.09	7.40	1.75	2.63	2.99
(WY)	2002	1997	2002	1998	2001	1998	2002	1999	2000	1999	2002	2001
MIN	0.69	0.48	1.37	0.68	0.92	0.94	0.86	1.05	0.75	0.45	0.30	0.26
(WY)	2000	2000	1998	2000	2000	2001	2000	1997	1998	2002	2000	2002

WHITE RIVER BASIN

07048490 TOWN BRANCH TRIBUTARY AT HWY 16 AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1997 - 2002
ANNUAL TOTAL	832.23	981.62	
ANNUAL MEAN	2.280	2.689	2.233
HIGHEST ANNUAL MEAN			2.54 2002
LOWEST ANNUAL MEAN			1.57 2000
HIGHEST DAILY MEAN	85 Dec 16	85 Dec 16	85 Dec 16 2001
LOWEST DAILY MEAN	0.00 Oct 6	0.00 Oct 6	0.00 Oct 6 2001
ANNUAL SEVEN-DAY MINIMUM	0.00 Nov 10	0.00 Sep 1	0.00 Sep 1 2002
MAXIMUM PEAK FLOW		702 Oct 10	<sup>1</sup> 1070 Jun 30 1999
MAXIMUM PEAK STAGE		6.67 Oct 10	7.58 Jun 30 1999
INSTANTANEOUS LOW FLOW		0.00 at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	1650	1950	1620
ANNUAL RUNOFF (CFSM)	1.68	1.98	1.64
ANNUAL RUNOFF (INCHES)	22.76	26.85	22.31
10 PERCENT EXCEEDS	4.3	5.3	4.4
50 PERCENT EXCEEDS	0.73	0.76	0.77
90 PERCENT EXCEEDS	0.13	0.00	0.24

<sup>1</sup>From rating extended above 100 ft<sup>3</sup>/s on basis of culvert Type 1 flow computations





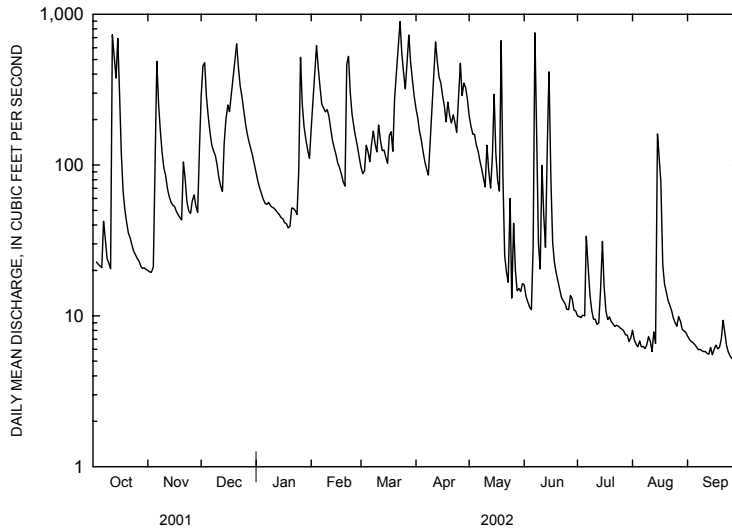
WHITE RIVER BASIN

07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL MEAN	195.1		195.1	
HIGHEST ANNUAL MEAN			195	2002
LOWEST ANNUAL MEAN			195	2002
HIGHEST DAILY MEAN	4260	Apr 8	4260	Apr 8 2002
LOWEST DAILY MEAN	4.6	Sep 28	4.6	Sep 28 2002
ANNUAL SEVEN-DAY MINIMUM	4.9	Sep 24	4.9	Sep 24 2002
MAXIMUM PEAK FLOW	6000	Apr 8	6000	Apr 8 2002
MAXIMUM PEAK STAGE	19.33	Apr 8	19.33	Apr 8 2002
INSTANTANEOUS LOW FLOW	4.4	Sep 28	4.4	<sup>1</sup> Sep 28 2002
10 PERCENT EXCEEDS	424		424	
50 PERCENT EXCEEDS	58		58	
90 PERCENT EXCEEDS	6.8		6.8	

<sup>1</sup>Also September 29, 2002

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to September 1974, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC PER SECOND (00061)	BARO-METRIC PRES-SURE OF (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT											
10...	2245	81213	80513	3800	730	7.5	81	7.5	139	16.8	54
11...	0315	81213	80513	2300	735	8.0	85	7.4	117	16.5	47
11...	1440	81213	80513	1100	732	7.7	83	7.7	148	16.8	59
24...	1230	81213	80513	133	720	6.4	74	7.5	278	19.1	120
DEC											
04...	1200	81213	80513	122	735	9.3	89	8.1	180	11.9	78
17...	0315	81213	80513	9600	735	10.2	94	6.9	65	10.4	26
17...	0645	81213	80513	8000	736	10.7	99	6.9	78	10.4	31
17...	1715	81213	80513	2630	745	9.5	87	6.7	100	10.6	40
MAR											
07...	1100	81213	80513	149	731	11.0	95	8.3	183	7.4	75
APR											
07...	1715	81213	80513	1160	725	13.8	130	8.0	196	10.6	78
08...	0415	81213	80513	--	721	12.0	113	7.8	64	10.2	27
08...	1545	81213	80513	3620	725	12.0	114	7.7	81	10.9	34
MAY											
14...	1430	81213	80513	74	735	7.4	83	7.9	214	19.6	58
JUN											
05...	1100	81213	80513	521	734	7.5	91	8.3	225	23.2	110
05...	1530	81213	80513	1400	731	6.9	83	7.9	197	22.8	88
06...	0800	81213	80513	355	732	7.1	84	8.0	130	21.0	55
JUL											
25...	1000	81213	80513	16	734	5.0	66	7.5	292	27.2	120
AUG											
28...	1000	81213	80513	8.8	734	5.2	66	7.7	343	25.1	140

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT										
10...	18.0	2.30	3.10	.2	2.8	9	2.30	15.0	89	.08
11...	15.0	2.20	2.90	.1	2.2	9	2.10	12.0	84	.04
11...	19.0	2.80	2.50	.2	3.2	10	2.60	17.0	99	.04
24...	39.0	6.00	2.30	.4	9.0	14	5.30	46.0	171	.01
DEC										
04...	25.0	3.70	1.50	.3	5.1	12	4.20	24.0	122	<.01
17...	8.20	1.30	2.00	.1	1.2	8	1.30	5.20	47	.03
17...	9.80	1.50	2.00	.1	1.5	9	1.60	7.00	53	.04
17...	13.0	1.90	1.80	.1	2.1	10	2.20	9.60	70	.05
MAR										
07...	24.0	3.60	1.10	.3	5.3	13	6.50	24.0	107	<.01
APR										
07...	25.0	3.70	1.80	.3	5.2	12	4.50	29.0	120	.09
08...	8.50	1.30	1.60	.1	1.4	10	1.40	5.20	42	.09
08...	11.0	1.60	1.50	.1	1.8	10	1.80	8.10	52	.06
MAY										
14...	19.0	2.50	1.60	.2	3.0	10	2.90	11.0	80	.03
JUN										
05...	35.0	4.60	2.40	.3	6.5	11	5.10	28.0	146	.05
05...	29.0	3.90	2.50	.3	5.5	12	3.60	25.0	129	.02
06...	18.0	2.40	2.00	.2	2.9	10	2.40	10.0	86	.03
JUL										
25...	40.0	5.00	2.70	.3	7.6	12	5.80	29.0	168	.04
AUG										
28...	44.0	6.40	3.20	.4	12.0	16	8.80	55.0	203	.03



WHITE RIVER BASIN

07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT											
10...	<.20	.10	--	--	.40	--	<.010	--	--	.092	.02
11...	<.20	.05	--	--	.37	--	<.010	--	--	.245	.08
11...	<.20	.05	--	--	.50	--	<.010	--	--	.184	.05
24...	<.20	.01	--	--	.72	--	<.010	--	--	.031	<.02
DEC											
04...	<.20	--	--	--	.54	--	<.010	--	--	--	<.02
17...	1.8	.04	--	--	.43	--	<.010	1.8	2.2	.031	<.02
17...	1.0	.05	--	--	.54	--	<.010	.96	1.5	.092	<.02
17...	.70	.06	--	--	.67	--	<.010	.65	1.4	.061	<.02
MAR											
07...	<.20	--	--	--	.37	--	<.010	--	--	--	<.02
APR											
07...	1.3	.12	--	--	.36	--	<.010	1.2	1.7	.123	.02
08...	2.1	.12	--	--	.30	--	<.010	2.0	2.4	.184	.07
08...	.70	.08	--	--	.45	--	<.010	.64	1.1	.092	.03
MAY											
14...	.40	.04	--	--	.29	--	<.010	.37	.69	--	<.02
JUN											
05...	<.20	.06	.28	1.24	.29	.033	.010	--	--	.061	<.02
05...	1.2	.03	.23	1.02	.24	.033	.010	1.2	1.4	.061	<.02
06...	.70	.04	--	--	.36	--	<.010	.67	1.1	.061	<.02
JUL											
25...	<.20	.05	--	--	.15	--	<.010	--	--	--	.02
AUG											
28...	.30	.04	--	--	.48	--	<.010	.27	.78	--	<.02

Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN (.062 MM) (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT								
10...	.03	.65	29000	35000	42000	95	1330	13600
11...	.08	.43	6300	7400	11000	95	596	3700
11...	.06	.16	7500	4700	9100	95	130	386
24...	.01	.03	E17	28	140	96	54	19.4
DEC								
04...	<.01	.03	93	140	160	92	46	15.2
17...	.01	.38	4100	3000	7300	97	494	12800
17...	.03	.23	3700	3900	8400	94	264	5700
17...	.02	.12	560	2100	3800	87	164	1160
MAR								
07...	<.01	<.02	32	26	48	88	37	14.9
APR								
07...	.04	.44	4400	7400	6200	85	368	1150
08...	.06	.38	5600	5400	18800	98	528	--
08...	.03	.18	2800	2300	3900	93	180	1760
MAY								
14...	<.01	.02	120	134	323	93	66	13.2
JUN								
05...	.02	.05	4600	6100	20000	92	141	198
05...	.02	.10	5200	9300	25000	87	262	990
06...	.02	.06	13000	11000	18000	92	83	79.6
JUL								
25...	<.01	.04	56	87	140	90	17	.73
AUG								
28...	<.01	.02	50	110	59	80	14	.33

Remark codes used in this report:  
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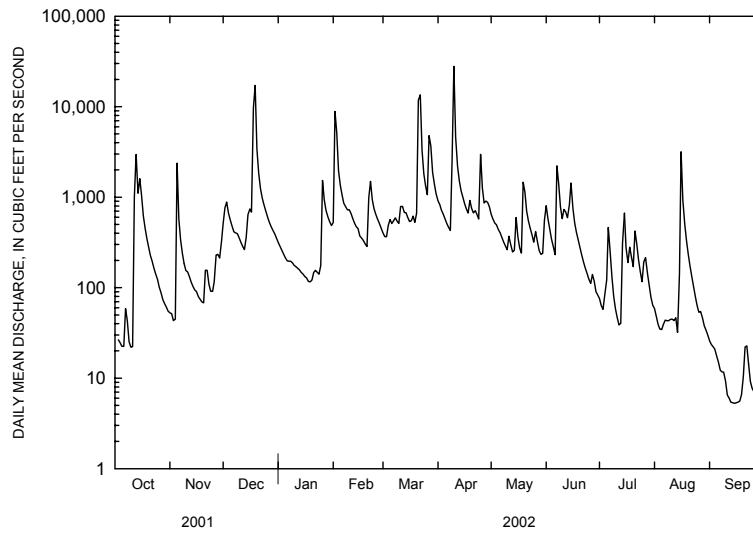
WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964-94,1999-02	
ANNUAL TOTAL	186040		266720.9			
ANNUAL MEAN	509.7		730.7		552.8	
HIGHEST ANNUAL MEAN					1043	1973
LOWEST ANNUAL MEAN					158	1980
HIGHEST DAILY MEAN	17200	Dec 17	28000	Apr 8	48000	Nov 19 1985
LOWEST DAILY MEAN	13	Aug 6	4.9	Sep 29	0.12	Oct 2 1982
ANNUAL SEVEN-DAY MINIMUM	16	Sep 1	5.5	Sep 10	0.28	Oct 18 1989
MAXIMUM PEAK FLOW			49900	Apr 8	<sup>1</sup> 81600	Nov 19 1985
MAXIMUM PEAK STAGE			26.24	Apr 8	30.45	Nov 19 1985
ANNUAL RUNOFF (AC-FT)	369000		529000		400500	
ANNUAL RUNOFF (CFSM)	1.27		1.83		1.38	
ANNUAL RUNOFF (INCHES)	17.30		24.81		18.78	
10 PERCENT EXCEEDS	938		1160		1280	
50 PERCENT EXCEEDS	212		304		171	
90 PERCENT EXCEEDS	23		25		6.4	

<sup>1</sup>From rating curve extended above 35,400 ft<sup>3</sup>/s

<sup>e</sup>Estimated



WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1958 (Aug), October 1975 to September 1981, November 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT										
01...	1250	81213	80513	27	5.4	746	8.6	95	7.6	193
10...	2320	81213	80513	5320	--	730	7.3	79	7.6	137
11...	0355	81213	80513	4240	--	735	8.3	89	7.6	120
11...	1530	81213	80513	2390	--	732	7.9	85	7.7	116
15...	1400	81213	80513	629	24	740	9.4	99	7.6	122
24...	1100	81213	80513	97	--	720	6.8	77	7.7	152
29...	1315	81213	80513	51	3.2	755	11.2	112	7.4	165
NOV										
07...	1530	81213	80513	176	10	752	8.7	91	7.8	235
26...	1345	81213	80513	227	4.0	739	9.6	93	8.0	155
DEC										
04...	1030	81213	80513	485	--	735	10.6	99	8.1	118
10...	1400	81213	80513	282	6.2	748	10.8	97	7.6	119
17...	0415	81213	80513	28800	610	735	9.6	89	6.8	55
17...	0745	81213	80513	24700	--	736	10.8	100	6.8	54
17...	1745	81213	80513	8450	--	745	9.7	89	6.8	62
JAN										
03...	0915	81213	80513	212	6.4	744	11.1	83	6.7	126
14...	1230	81213	80513	110	3.0	746	12.9	104	7.4	134
31...	1245	81213	80513	9380	--	732	6.8	60	8.8	101
FEB										
06...	1215	81213	80513	777	10	750	11.8	95	7.6	90
20...	1145	81213	80513	1430	62	741	10.2	93	7.6	83
MAR										
05...	1400	81213	80513	572	8.6	753	13.8	107	8.1	95
07...	1000	81213	80513	583	--	732	11.9	101	8.3	89
19...	0745	81213	80513	7800	100	745	10.3	94	7.2	94
APR										
02...	1630	81213	80513	633	12	746	8.6	85	7.6	86
07...	2030	81213	80513	7370	--	726	12.3	117	7.9	95
16...	1315	81213	80513	598	13	745	9.1	103	7.7	87
30...	1400	81213	80513	521	12	739	9.2	100	7.5	104
MAY										
13...	1745	81213	80513	489	19	751	8.4	95	7.9	135
15...	1430	81213	80513	241	--	732	7.7	87	8.0	135
17...	1300	81213	80513	2690	--	726	7.4	83	7.6	130
29...	0915	81213	80513	264	8.4	743	6.6	77	7.8	114
JUN										
17...	1815	81213	80513	310	9.8	743	8.7	108	7.6	123
JUL										
08...	1115	81213	80513	35	6.0	750	4.9	64	7.4	154
22...	1600	81213	80513	137	7.9	747	7.2	89	8.2	81
25...	0800	81213	80513	241	--	734	6.4	83	7.1	73
AUG										
21...	1450	81213	80513	106	13	748	7.5	102	7.7	97
28...	1300	81213	80513	33	--	734	6.2	79	7.5	131
SEP										
03...	1430	81213	80513	17	7.3	746	8.2	110	8.1	135

Date	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT					
01...	19.5	80	26.0	3.60	--
10...	17.0	54	18.0	2.30	2.90
11...	17.1	44	14.0	2.10	2.70
11...	17.1	47	15.0	2.20	2.60
15...	16.3	47	15.0	2.40	--
24...	18.6	63	20.0	3.10	1.80
29...	15.1	66	21.0	3.20	--
NOV					
07...	16.6	96	30.0	5.00	--
26...	12.6	62	20.0	3.00	--
DEC					
04...	10.5	49	16.0	2.30	1.40
10...	9.8	47	15.0	2.30	--
17...	10.4	21	6.40	1.10	--
17...	10.4	20	6.10	1.10	2.00
17...	10.6	23	7.10	1.30	1.70
JAN					
03...	2.5	51	16.0	2.60	--
14...	5.4	53	17.0	2.60	--
31...	8.3	40	13.0	1.80	1.80
FEB					
06...	5.5	35	11.0	1.80	--
20...	9.7	32	10.0	1.60	--

WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TEMPER- ATURE WATER (DEG C) (00010)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
MAR																
05...	4.2	32	10.0	1.80	--	--	--	59	3.80	<.1	22.0	107	.05	.30	.06	
07...	6.6	35	11.0	1.80	.90	.2	2.8	9	2.60	--	13.0	85	.07	<.20	.09	
19...	10.2	37	12.0	1.80	--	.2	2.5	10	2.70	--	11.0	78	.05	<.20	.06	
APR																
02...	13.8	34	11.0	1.70	--	--	--	--	3.40	--	12.0	81	<.01	<.20	--	
07...	11.0	41	13.0	2.00	1.30	--	--	37	3.30	<.1	12.0	71	.04	<.20	.05	
16...	20.1	35	11.0	1.80	--	--	--	20	1.30	<.1	4.00	44	.04	1.6	.05	
30...	17.9	43	14.0	1.90	--	.1	1.1	10	1.30	--	4.30	42	.04	1.3	.05	
MAY																
13...	20.8	58	19.0	2.60	--	.1	1.4	11	1.60	--	5.00	46	.04	.60	.05	
15...	19.7	91	30.0	3.90	2.10	--	--	--	3.80	--	23.0	123	.04	.50	.05	
17...	18.4	55	18.0	2.40	2.10	.2	2.8	10	2.60	--	11.0	80	.07	1.3	.09	
29...	21.6	49	16.0	2.20	--	--	--	--	2.60	<.1	10.0	66	.05	.20	.06	
JUN																
17...	24.7	52	17.0	2.30	--	--	--	47	2.80	<.1	12.0	81	.04	.60	.05	
JUL																
08...	28.5	64	21.0	2.70	--	--	--	47	2.80	<.1	12.0	81	.04	.60	.05	
22...	25.2	32	10.0	1.60	--	--	--	38	3.60	<.1	14.0	76	<.01	<.20	--	
25...	26.4	29	9.20	1.50	1.40	.1	1.8	11	1.60	--	4.30	48	.03	<.20	.04	
AUG																
21...	30.5	39	12.3	1.97	--	--	--	30	2.25	.1	10.3	65	.01	.20	.01	
28...	25.7	53	17.0	2.60	1.80	.2	3.9	13	2.80	--	15.0	80	.03	.40	.04	
SEP																
03...	30.0	56	18.0	2.70	--	--	--	54	2.70	<.1	15.0	90	.03	.40	.04	

WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT											
01...	--	--	.44	--	<.010	.25	.74	--	<.02	<.01	<.02
10...	--	--	.33	--	<.010	--	--	.061	.02	.02	.58
11...	--	--	.50	--	<.010	--	--	.245	.06	.08	.18
11...	--	--	.29	--	<.010	--	--	.123	.02	.04	.23
15...	--	--	.96	--	<.010	--	--	.123	<.02	.04	.07
24...	--	--	.97	--	<.010	--	1.2	--	<.02	<.01	.02
29...	--	--	.78	--	<.010	.29	1.1	--	<.02	<.01	<.02
NOV											
07...	--	--	1.00	--	<.010	.36	1.4	.031	<.02	.01	<.02
26...	--	--	.32	--	<.010	--	--	--	<.02	<.01	<.02
DEC											
04...	--	--	.57	--	<.010	--	--	--	<.02	<.01	.03
10...	--	--	.59	--	<.010	--	--	.031	.02	.01	.03
17...	--	--	.57	--	<.010	1.6	2.2	--	<.02	<.01	.42
17...	--	--	.58	--	<.010	1.3	1.9	.092	<.02	.03	.31
17...	--	--	.78	--	<.010	.56	1.4	.061	<.02	.02	.14
JAN											
03...	--	--	1.20	--	<.010	--	--	--	<.02	<.01	<.02
14...	--	--	1.00	--	<.010	--	--	--	<.02	<.01	<.02
31...	--	--	.62	--	<.010	1.2	1.9	.153	.04	.05	.24
FEB											
06...	--	--	.93	--	<.010	--	--	--	<.02	<.01	<.02
20...	--	--	.64	--	<.010	.68	1.3	.061	.02	.02	.07
MAR											
05...	--	--	.57	--	<.010	--	--	.092	<.02	.03	<.02
07...	--	--	.51	--	<.010	--	--	--	<.02	<.01	<.02
19...	--	--	.45	--	<.010	.74	1.2	.153	.04	.05	.18
APR											
02...	--	--	.58	--	<.010	--	--	--	<.02	<.01	<.02
07...	--	--	.48	--	<.010	.94	1.5	.061	.03	.02	.20
16...	--	--	.58	--	<.010	--	--	--	<.02	<.01	<.02
30...	--	--	.30	--	<.010	--	--	--	<.02	<.01	.02
MAY											
13...	--	--	.27	--	<.010	.56	.87	--	<.02	<.01	.04
15...	--	--	.30	--	<.010	.46	.80	--	<.02	<.01	.05
17...	--	--	.25	--	<.010	1.2	1.6	.092	<.02	.03	.12
29...	--	--	.22	--	<.010	.15	.42	.031	<.02	.01	<.02
JUN											
17...	--	--	.17	--	<.010	.38	.57	.061	<.02	.02	.04
JUL											
08...	--	--	.15	--	<.010	.24	.45	.061	.03	.02	.04
22...	--	--	.14	--	<.010	.38	.54	--	.02	<.01	.04
25...	--	--	.05	--	<.010	--	--	--	.02	<.01	.03
AUG											
21...	.34	1.51	.35	.033	.010	.19	.55	--	<.02	<.01	.04
28...	--	--	.17	--	<.010	.37	.57	--	<.02	<.01	.02
SEP											
03...	--	--	.11	--	<.010	.37	.51	--	<.02	<.01	<.02

Date	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	E COLI, WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT											
01...	3.1	3.6	3.6	--	E24	--	361	199	91	32	2.3
10...	--	--	--	8300	36000	14000	--	--	93	950	13600
11...	--	--	--	E4600	21000	9700	--	--	95	276	3160
11...	--	--	--	4100	2800	9700	--	--	94	99	639
15...	1.7	4.3	4.9	--	E460	--	803	124	95	37	62.8
24...	--	--	--	38	80	230	--	--	91	37	9.7
29...	4.0	2.5	2.7	--	E23	--	297	124	98	23	3.2
NOV											
07...	1.8	4.2	5.6	--	270	--	684	154	87	55	26.1
26...	.9	2.9	4.3	--	37	--	455	134	93	26	15.9
DEC											
04...	--	--	--	93	130	190	--	--	91	38	49.8
10...	1.9	1.3	1.4	--	E25	--	538	101	98	24	18.3
17...	5.5	6.8	7.0	3000	3900	7800	10100	891	97	462	35900
17...	--	--	--	3600	2800	8600	--	--	97	349	23300
17...	--	--	--	970	770	5100	--	--	91	130	2970
JAN											
03...	14	3.8	4.0	--	54	--	384	99	94	25	14.3
14...	3.1	1.5	1.8	--	E6	--	323	122	97	16	4.8
31...	--	--	--	4800	7800	7800	--	--	82	306	7750
FEB											
06...	1.4	1.7	1.9	--	35	--	451	51	98	19	39.9
20...	1.5	3.6	4.1	4800	1200	1900	1280	100	96	63	243
MAR											
05...	.4	1.8	2.2	--	<1	--	327	46	91	21	32.4
07...	--	--	--	E11	E13	29	--	--	86	23	36.2
19...	3.5	5.2	5.1	2500	E7500	26000	4470	250	82	179	3770

WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	E COLI, MTEC MF (COL/ 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF WATER (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEd (T/DAY) (80155)
APR											
02...	1.3	.8	--	--	33	--	585	101	100	23	39.3
07...	--	--	--	2400	2900	8200	--	--	74	373	7420
16...	1.1	1.0	1.0	--	63	--	549	111	94	29	46.8
30...	2.0	1.0	1.5	--	94	--	455	113	89	30	42.2
MAY											
13...	1.2	2.6	2.8	--	730	--	673	223	97	40	52.8
15...	--	--	--	520	540	910	--	--	86	29	18.9
17...	--	--	--	18000	14500	38500	--	--	91	206	1500
29...	1.2	1.9	1.6	--	E100	--	404	157	96	26	18.5
JUN											
17...	2.2	2.6	2.3	--	110	--	483	129	88	14	11.7
JUL											
08...	3.6	2.2	2.1	--	21	--	390	179	86	11	1.0
22...	.4	2.8	2.8	--	23	--	554	184	78	22	8.1
25...	--	--	--	22	25	120	--	--	81	15	9.8
AUG											
21...	1.1	2.4	2.1	--	97	--	472	138	89	23	6.6
28...	--	--	--	E17	20	55	--	--	92	8.0	.71
SEP											
03...	.9	2.2	1.9	--	22	--	370	213	75	9.0	.41

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## WHITE RIVER BASIN

## 07048700 WHITE RIVER NEAR GOSHEN

LOCATION.--Lat 36°06'21", long 94°00'41", in NE1/4NW1/4 sec.31, T.17 N., R.28 W., Washington County, Hydrologic Unit 11010001, at bridge on State Highway 45, 0.2 mi upstream from Richland Creek, and 1.2 mi west of Goshen.

DRAINAGE AREA.--412 mi<sup>2</sup>.

PERIOD OF RECORD.--1963, 1969-1995, April 2000 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
01...	1440	80020	80513	6.0	2.90	746	9.8	111	7.7	344	20.6
18...	1052	80513	80513	7.0	.30	743	8.2	80	7.5	147	13.3
18...	1053	80513	80513	7.0	.90	743	8.1	79	7.5	147	13.3
18...	1054	80513	80513	7.0	2.10	743	8.0	78	7.5	147	13.3
18...	1055	80020	80513	7.0	3.00	743	8.1	79	7.5	147	13.3
18...	1056	80513	80513	7.0	4.10	743	8.0	79	7.5	147	13.3
18...	1057	80513	80513	7.0	5.20	743	8.0	78	7.5	147	13.3
18...	1058	80513	80513	7.0	6.10	743	8.0	78	7.4	147	13.3
18...	1059	80513	80513	7.0	6.80	743	8.0	78	7.4	147	13.3
29...	1505	80513	80513	6.4	.30	755	9.1	91	7.5	227	14.7
29...	1506	80020	80513	6.4	3.00	755	9.2	91	7.5	227	14.6
29...	1507	80513	80513	6.4	6.30	755	9.2	91	7.5	227	14.6
NOV											
06...	1418	80513	80513	6.0	.70	752	8.3	87	7.4	231	16.7
06...	1420	80513	80513	6.0	1.10	752	8.2	86	7.4	230	16.7
06...	1421	80513	80513	6.0	2.00	752	8.2	85	7.4	231	16.7
06...	1422	80020	80513	6.0	3.00	752	8.2	86	7.4	231	16.7
06...	1423	80513	80513	6.0	3.90	752	8.2	86	7.4	231	16.7
06...	1424	80513	80513	6.0	5.00	752	8.1	84	7.4	230	16.7
06...	1425	80513	80513	6.0	6.30	752	8.1	85	7.4	231	16.7
26...	1519	80513	80513	6.0	.20	739	10.2	100	7.8	170	12.7
26...	1520	80020	80513	6.0	3.00	739	10.2	99	7.8	170	12.7
26...	1521	80513	80513	6.0	6.30	739	10.1	98	7.8	170	12.7
DEC											
10...	1537	80513	80513	5.0	.70	748	9.8	87	7.7	120	9.0
10...	1539	80020	80513	5.0	3.00	748	9.7	85	7.7	120	9.0
10...	1540	80513	80513	5.0	4.90	748	9.5	84	7.7	120	9.0
JAN											
14...	1434	80513	80513	6.0	.30	747	10.7	87	7.5	163	5.4
14...	1435	80513	80513	6.0	1.00	747	10.6	86	7.5	163	5.4
14...	1436	80513	80513	6.0	1.90	747	10.6	85	7.6	163	5.4
14...	1437	80020	80513	6.0	3.00	747	10.5	85	7.6	163	5.4
14...	1438	80513	80513	6.0	4.00	747	10.5	85	7.6	163	5.4
14...	1439	80513	80513	5.0	5.00	747	10.5	84	7.6	163	5.4
14...	1440	80513	80513	6.0	6.00	747	10.5	85	7.6	163	5.4
FEB											
06...	1107	80513	80513	8.6	.10	750	11.9	95	7.1	87	5.1
06...	1108	80513	80513	8.6	1.00	750	11.8	94	7.1	87	5.1
06...	1109	80513	80513	8.6	2.00	750	11.7	94	7.1	87	5.1
06...	1110	80020	80513	8.6	4.00	750	11.6	93	7.0	97	5.1
06...	1111	80513	80513	8.6	4.10	750	11.6	93	7.0	87	5.1
06...	1112	80513	80513	8.6	6.00	750	11.5	92	7.0	87	5.1
06...	1113	80513	80513	8.6	7.00	750	11.5	92	7.0	87	5.1
06...	1114	80513	80513	8.6	7.00	750	11.5	92	7.0	87	5.1
06...	1115	80513	80513	8.6	8.60	750	11.5	92	7.0	87	5.1
MAR											
05...	1559	80513	80513	8.0	.50	751	13.9	111	7.3	113	5.2
05...	1600	80513	80513	8.0	1.00	751	13.8	110	7.4	113	5.2
05...	1601	80513	80513	8.0	2.00	751	13.8	110	7.4	112	5.2
05...	1602	80513	80513	8.0	2.60	751	13.6	109	7.4	113	5.2
05...	1603	80020	80513	8.0	4.00	751	13.6	108	7.4	113	5.2
05...	1604	80513	80513	8.0	5.50	751	13.5	108	7.4	113	5.2
05...	1605	80513	80513	8.0	6.20	751	13.5	107	7.4	113	5.2
05...	1606	80513	80513	8.0	6.90	751	13.4	107	7.4	112	5.2
05...	1607	80513	80513	8.0	8.10	751	13.3	106	7.5	113	5.2
APR											
15...	1425	80513	80513	15.0	.10	741	8.7	96	7.0	92	18.6
15...	1427	80513	80513	15.0	1.00	741	8.7	96	7.0	92	18.6
15...	1428	80513	80513	15.0	2.00	741	8.7	95	7.0	92	18.4
15...	1429	80020	80513	15.0	3.00	741	8.7	95	7.0	92	18.3
15...	1430	80513	80513	15.0	4.10	741	8.7	96	7.0	92	18.2
15...	1432	80513	80513	15.0	4.90	741	8.8	96	6.9	92	18.2
15...	1433	81213	80513	15.0	6.00	741	8.7	95	6.9	92	18.2
15...	1434	80513	80513	15.0	7.00	741	8.8	96	6.8	92	18.2
15...	1435	80513	80513	15.0	8.00	741	8.8	95	6.8	92	18.1
15...	1436	80513	80513	15.0	9.00	741	8.7	95	6.8	92	18.1
15...	1437	80513	80513	15.0	10.1	741	8.7	95	6.8	92	18.0
15...	1438	80513	80513	15.0	11.0	741	8.7	95	6.8	92	18.0
15...	1439	81213	80513	15.0	12.0	741	8.7	94	6.8	92	18.0
15...	1440	80513	80513	15.0	13.0	741	8.7	94	6.8	92	18.0
15...	1441	80513	80513	15.0	14.0	741	8.6	94	6.8	92	18.0
15...	1442	80513	80513	15.0	15.0	741	8.5	93	6.8	92	18.0
MAY											
14...	1543	80513	80513	15.0	.40	749	8.0	96	--	150	23.3
14...	1545	81213	80513	15.0	3.00	749	7.2	81	--	149	20.0
14...	1546	81213	80513	15.0	6.00	749	7.0	78	--	149	19.8
14...	1547	80513	80513	15.0	9.10	749	6.8	75	--	152	19.3
14...	1548	80513	80513	15.0	10.0	749	7.1	76	--	162	17.8
14...	1549	81213	80513	15.0	12.0	749	7.1	75	--	158	17.1
14...	1550	80513	80513	15.0	15.0	749	7.2	76	--	157	16.8





## WHITE RIVER BASIN

## 07048700 WHITE RIVER NEAR GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAMPLING DEPTH (FEET) (00003)	TRANSPAR-ENCY (SECCHI DISK) (M) (00078)	TURBIDITY (NTU) (00076)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	
Date		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
MAR	05...	1603	4.00	.46	7.4	41	13.0	2.00	7.10	<.1	13.0	66
APR	15...	1429	3.00	.61	14	37	12.0	1.80	2.50	<.1	8.70	60
	15...	1433	6.00	--	13	37	12.0	1.80	2.40	<.1	8.70	55
	15...	1439	12.0	--	14	37	12.0	1.80	2.50	<.1	8.70	63
MAY	14...	1545	3.00	.61	12	61	20.0	2.70	4.00	<.1	15.0	89
	14...	1546	6.00	--	13	64	21.0	2.70	3.80	<.1	15.0	89
	14...	1549	12.0	--	18	70	24.0	2.50	4.20	<.1	12.0	99
JUN	20...	0638	3.00	--	6.7	60	20.0	2.50	5.60	.1	16.0	97
	20...	0641	6.00	--	19	60	20.0	2.50	5.60	.1	16.0	98
	20...	0649	13.0	--	8.7	80	28.0	2.50	4.30	<.1	9.60	106
JUL	10...	0552	3.00	1.10	1.2	72	24.0	2.90	8.00	.2	21.0	120
	10...	0555	6.00	--	2.1	69	23.0	2.90	7.60	.2	20.0	123
	10...	0602	13.0	--	16	110	37.0	3.10	5.00	<.1	11.0	134
	23...	1410	3.00	--	6.9	37	12.0	1.80	2.00	<.1	5.70	58
	23...	1413	9.00	--	12	75	26.0	2.40	3.50	<.1	7.90	101
AUG	22...	1602	6.10	.78	9.7	72	25.0	2.40	4.20	<.1	11.0	98
SEP	04...	0704	3.00	.61	5.6	66	22.0	2.70	8.10	.2	27.0	126
OCT	01...	.04	.60	.05	--	--	2.20	--	<.010	.56	2.8	.031
	18...	.03	.30	.04	--	--	1.30	--	<.010	.27	1.6	.092
	29...	<.01	<.20	--	--	--	1.60	--	<.010	--	--	--
NOV	06...	.03	.40	.04	--	--	1.30	--	<.010	.37	1.7	.061
	26...	<.01	.20	--	--	--	.58	--	<.010	--	.78	--
DEC	10...	.02	<.20	.03	--	--	.60	--	<.010	--	--	--
JAN	14...	<.01	<.20	--	--	--	1.30	--	<.010	--	--	--
FEB	06...	.02	.30	.03	--	--	1.00	--	<.010	.28	1.3	--
MAR	05...	.01	<.20	.01	--	--	.70	--	<.010	--	--	.061
APR	15...	.02	<.20	.03	--	--	.70	--	<.010	--	--	.031
	15...	.03	<.20	.04	--	--	.71	--	<.010	--	--	--
	15...	.04	<.20	.05	--	--	.71	--	<.010	--	--	--
MAY	14...	.04	.50	.05	--	--	.45	--	<.010	.46	.95	--
	14...	.04	.40	.05	--	--	.46	--	<.010	.36	.86	--
	14...	.05	.50	.06	--	--	.68	--	<.010	.45	1.2	.031
JUN	20...	<.01	.30	--	--	--	.51	--	<.010	--	.81	--
	20...	<.01	.40	--	--	--	.51	--	<.010	--	.91	--
	20...	.05	.50	.06	--	--	.90	--	<.010	.45	1.4	.031
JUL	10...	.02	.40	.03	--	3.41	.79	.066	.020	.38	1.2	--
	10...	.02	.60	.03	--	3.05	.71	.066	.020	.58	1.3	--
	10...	<.01	.80	.67	--	1.15	.27	.033	.010	.28	1.1	--
	23...	--	.50	--	--	--	.14	--	<.010	--	.64	--
	23...	.06	.40	.08	--	2.74	.63	.033	.010	.34	1.0	--
AUG	22...	<.01	<.20	--	.84	3.72	.85	.033	.010	--	--	--
SEP	04...	.01	.40	.01	.56	2.48	.57	.033	.010	.39	.97	--

WHITE RIVER BASIN

07048700 WHITE RIVER NEAR GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLOR-A PHYTO-PLANKTON CHROMOFLUOROM (UG/L) (70953)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)
OCT									
01...	<.02	.01	.04	4.7	4.6	E31	3.1	472	115
18...	<.02	.03	.03	3.6	3.6	E27	2.9	619	97
29...	<.02	<.01	<.02	8.2	3.3	21	2.4	259	66
NOV									
06...	<.02	.02	.02	5.8	6.5	E190	4.3	750	96
26...	<.02	<.01	<.02	4.5	4.7	73	11.0	416	90
DEC									
10...	.02	<.01	.03	1.4	1.4	42	1.4	508	70
JAN									
14...	<.02	<.01	<.02	3.0	3.7	E4	<.1	287	84
FEB									
06...	<.02	<.01	<.02	1.8	1.9	66	<.1	422	44
MAR									
05...	<.02	.02	<.02	2.0	2.1	13	<.1	329	44
APR									
15...	<.02	.01	.03	.9	1.1	46	<.1	516	70
15...	.04	<.01	.03	1.0	1.1	--	--	525	70
15...	<.02	<.01	.02	1.0	1.0	--	--	544	71
MAY									
14...	<.02	<.01	.04	2.9	3.4	E174	14.0	421	112
14...	<.02	<.01	.03	2.9	2.9	--	--	452	111
14...	<.02	.01	.03	3.1	3.2	--	--	449	74
JUN									
20...	<.02	<.01	.04	2.7	2.6	28	11.0	294	94
20...	.02	<.01	.04	2.5	2.6	--	--	295	94
20...	<.02	.01	.03	1.7	1.6	--	--	330	188
JUL									
10...	.41	<.01	.40	3.2	3.6	E2	11.0	51	46
10...	.04	<.01	.27	3.6	3.7	--	--	70	59
10...	.02	<.01	.04	2.8	2.8	--	--	290	3120
23...	.02	<.01	.04	2.8	2.9	E14	28.0	386	130
23...	.02	<.01	.03	2.5	2.6	--	--	417	179
20...									
AUG									
22...	<.02	<.01	.02	2.0	--	77	10.0	350	105
SEP									
04...	<.02	<.01	.03	2.4	2.4	E3	10.0	136	88

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## WHITE RIVER BASIN

## 07048800 RICHLAND CREEK AT GOSHEN

**LOCATION.**--Lat 36°06'15", long 94°00'28", in NW<sub>1</sub>/<sub>4</sub>NW<sub>1</sub>/<sub>4</sub> sec.31, T.17 N., R.28 W., Washington County, Hydrologic Unit 11110001, on upstream left end of bridge on Ark. Hwy. 45, 0.9 mi west of Goshen, 0.2 mi upstream from Mill Branch, 0.5 mi upstream from White River.

**DRAINAGE AREA.**--138 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1998 to current year. Occasional low-flow measurements water years 1954, 1956-63 and 1987-89.

**GAGE.**--Water-stage recorder.

**REMARKS.**--Records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	14	100	55	1390	86	e185	e158	e162	e46	e25	e14
2	7.8	15	94	51	613	102	e169	e145	e131	e45	e21	e13
3	7.1	38	71	47	455	111	e151	e129	e110	e43	e19	e12
4	6.7	18	63	43	356	94	e135	e116	e249	e49	e17	e12
5	9.5	15	56	40	287	111	e125	e105	e865	e77	e16	e11
6	e10	15	51	40	261	144	e142	e96	e496	e60	e15	e11
7	e10	14	50	40	243	124	e1980	e87	e209	e43	e15	e13
8	e9.8	15	50	39	265	105	e7960	e83	e181	e35	e14	e19
9	e27	15	47	37	239	133	e910	e96	e210	e28	e15	e18
10	e121	14	43	36	197	141	e654	e101	e263	e24	e22	e12
11	179	14	38	35	164	115	e524	e82	e213	e22	e24	e11
12	131	13	48	33	150	115	e438	e98	e311	e27	e25	e11
13	226	12	72	32	135	99	e368	e192	e477	e63	e92	e11
14	177	12	117	30	120	83	e335	e166	e292	e72	e258	e10
15	94	11	133	29	110	74	e298	e116	e195	e47	e118	e11
16	64	12	2720	27	99	133	e260	e254	e159	e45	e83	e10
17	51	12	4240	25	89	97	e240	e908	e121	e60	e72	e10
18	44	11	286	25	83	125	e209	e678	e94	e75	e56	e11
19	38	14	126	27	254	3320	e203	e240	e70	e136	e49	e15
20	33	15	122	32	390	e4300	e194	e201	e54	e99	e42	e24
21	28	13	164	35	248	e330	e194	e167	e49	e69	e37	e15
22	26	14	220	33	190	e420	e237	e140	e49	e53	e33	e12
23	24	14	187	34	162	e335	e606	e120	e46	e41	e28	e11
24	22	19	152	457	146	e368	e496	e115	e45	e32	e28	e11
25	21	19	132	245	131	e751	e242	e113	e48	e25	e25	e10
26	19	17	112	173	116	e756	e254	e99	e49	e22	e23	e10
27	18	17	97	142	100	e375	e302	e118	e53	e23	e21	e9.5
28	16	22	86	120	90	e310	e245	e191	e63	e26	e20	e9.4
29	15	34	77	101	---	e262	e200	e503	e96	e24	e19	e8.9
30	15	66	67	96	---	e226	e174	e420	e55	e23	e17	e8.5
31	14	---	60	2640	---	e205	---	e208	---	e25	e16	---
TOTAL	1473.3	534	9881	4799	7083	13950	18430	6245	5415	1459	1265	364.3
MEAN	47.53	17.80	318.7	154.8	253.0	450.0	614.3	201.5	180.5	47.06	40.81	12.14
MAX	226	66	4240	2640	1390	4300	7960	908	865	136	258	24
MIN	6.7	11	38	25	83	74	125	82	45	22	14	8.5
AC-FT	2920	1060	19600	9520	14050	27670	36560	12390	10740	2890	2510	723
CFSM	0.34	0.13	2.31	1.12	1.83	3.26	4.45	1.46	1.31	0.34	0.30	0.09
IN.	0.40	0.14	2.66	1.29	1.91	3.76	4.97	1.68	1.46	0.39	0.34	0.10

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	26.80	43.12	151.9	115.1	286.3	238.2	293.7	250.0	301.1	64.98	11.86	11.80
MAX	52.2	112	319	155	539	450	614	566	728	114	40.8	32.3
(WY)	1999	2001	2002	2002	2001	2002	2002	1999	2000	1999	2002	2001
MIN	1.35	1.19	63.4	18.8	22.8	86.8	31.9	39.8	48.4	21.2	1.17	1.35
(WY)	2000	2000	2000	2000	2000	2000	2001	2001	2001	2001	2001	2000

WHITE RIVER BASIN

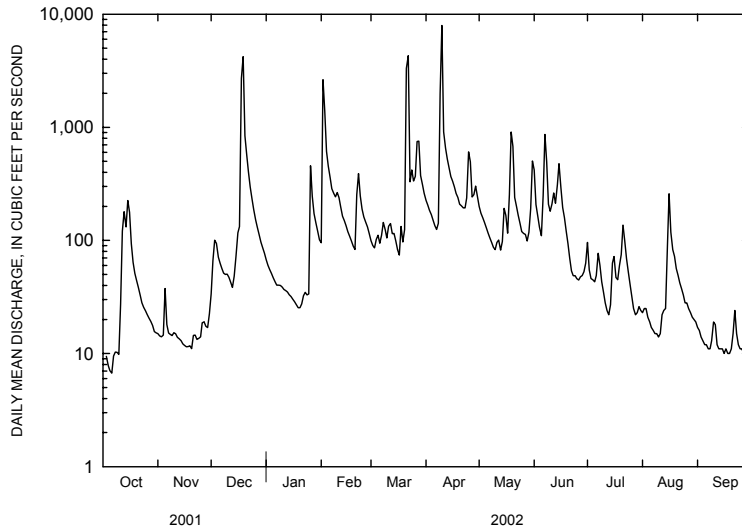
07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	39837.35		70898.6			
ANNUAL MEAN	109.1		194.2		148.4	
HIGHEST ANNUAL MEAN					203	1999
LOWEST ANNUAL MEAN					93.1	2001
HIGHEST DAILY MEAN	4240	Dec 17	7960	Apr 8	7960	Apr 8 2002
LOWEST DAILY MEAN	0.43	Sep 7	6.7	Oct 4	0.43	Sep 7 2001
ANNUAL SEVEN-DAY MINIMUM	0.48	Sep 1	8.6	Oct 1	0.48	Sep 1 2001
MAXIMUM PEAK FLOW					1,2	
MAXIMUM PEAK STAGE			19.33	Apr 8	19.33	Apr 8 2002
INSTANTANEOUS LOW FLOW			6.1	Oct 4	0.36	Sep 8 2001
ANNUAL RUNOFF (AC-FT)	79020		140600		107500	
ANNUAL RUNOFF (CFSM)	0.79		1.41		1.08	
ANNUAL RUNOFF (INCHES)	10.74		19.11		14.61	
10 PERCENT EXCEEDS	212		310		322	
50 PERCENT EXCEEDS	32		71		41	
90 PERCENT EXCEEDS	2.2		13		1.4	

<sup>1</sup>Undetermined

<sup>e</sup>Estimated

<sup>2</sup>Peak stage affected by backwater



WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1980, 1984-85, April 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
01...	1400	81213	80513	13	1.5	746	10.6	121	7.8	219	20.8	97
15...	1500	81213	80513	94	8.1	741	9.7	102	7.4	193	16.4	81
29...	1430	81213	80513	16	.85	756	14.6	149	7.9	234	16.1	110
NOV												
06...	1330	81213	80513	14	.69	752	12.1	134	8.6	254	19.7	120
26...	1510	81213	80513	12	.66	739	14.1	141	8.3	293	14.2	130
DEC												
10...	1500	81213	80513	14	2.4	748	13.1	119	7.6	187	10.2	78
18...	0930	81213	80513	870	24	737	10.3	92	7.7	117	8.9	48
JAN												
03...	1105	81213	80513	36	1.8	745	10.0	78	8.2	183	4.2	80
14...	1400	81213	80513	25	.59	745	8.5	82	7.9	193	12.5	83
FEB												
06...	1030	81213	80513	266	4.5	750	11.4	93	7.4	128	6.1	53
20...	1300	81213	80513	367	28	740	10.0	92	7.5	107	10.3	42
MAR												
05...	1510	81213	80513	124	3.5	751	11.4	101	8.0	145	9.2	59
18...	1630	81213	80513	--	6.1	747	6.7	62	7.6	112	11.1	44
APR												
02...	1515	81213	80513	--	3.9	735	8.8	88	7.3	125	13.7	52
15...	1615	81213	80513	--	8.9	741	9.6	106	7.7	124	18.9	52
30...	1245	81213	80513	--	4.6	739	9.5	102	7.4	115	17.0	47
MAY												
13...	1630	81213	80513	--	20	751	6.8	74	8.0	167	18.8	73
29...	0815	81213	80513	--	11	744	6.3	69	7.7	177	18.3	81
JUN												
17...	1645	81213	80513	--	4.7	743	10.9	129	7.3	168	22.4	79
JUL												
08...	1230	81213	80513	--	3.0	749	6.6	88	8.0	227	29.3	99
22...	1500	81213	80513	--	5.2	747	7.3	91	7.2	133	24.9	59
AUG												
20...	1440	81213	80513	--	6.4	749	6.5	88	7.3	180	30.1	77
SEP												
03...	1330	81213	80513	--	9.7	747	8.5	108	8.9	196	26.0	84

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	ANC WATER UNFLTRD FET FIELD CACO3 AS CL) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
OCT											
01...	34.0	3.00	79	5.20	<.1	12.0	120	.03	<.20	.04	--
15...	28.0	2.70	62	5.30	<.1	13.0	115	.04	<.20	.05	--
29...	37.0	3.10	91	6.10	<.1	13.0	138	.01	<.20	.01	--
NOV											
06...	41.0	3.50	96	6.70	<.1	17.0	141	.04	<.20	.05	--
26...	46.0	4.10	103	7.60	<.1	26.0	167	<.01	<.20	--	--
DEC											
10...	27.0	2.60	62	5.80	<.1	14.0	107	.02	<.20	.03	--
18...	16.0	1.90	35	3.50	<.1	7.0	80	.02	.30	.03	--
JAN											
03...	28.0	2.40	66	5.20	<.1	11.0	104	.02	<.20	.03	--
14...	29.0	2.60	63	5.60	<.1	13.0	107	<.01	<.20	--	--
FEB											
06...	18.0	2.00	45	4.00	<.1	8.40	76	<.01	<.20	--	--
20...	14.0	1.80	--	3.90	<.1	9.90	60	<.01	.40	--	--
MAR											
05...	20.0	2.20	45	5.30	<.1	14.0	84	<.01	<.20	--	--
18...	15.0	1.70	35	3.80	<.1	9.80	68	.04	<.20	.05	--
APR											
02...	18.0	1.80	41	3.70	<.1	8.00	76	.01	.20	.01	--
15...	18.0	1.80	41	3.30	<.1	7.40	79	.03	<.20	.04	--
30...	16.0	1.70	40	3.10	<.1	7.70	67	<.01	<.20	--	--
MAY											
13...	25.0	2.50	57	4.20	<.1	13.0	102	.02	.60	.03	--
29...	28.0	2.60	61	4.40	<.1	11.0	100	.05	<.20	.06	--
JUN											
17...	28.0	2.30	69	4.30	<.1	8.40	103	.02	<.20	.03	--
JUL											
08...	35.0	2.80	81	5.30	<.1	13.0	132	.03	.40	.04	.78
22...	20.0	2.20	49	2.90	<.1	6.70	81	<.01	.30	--	.34
AUG											
20...	27.0	2.30	67	3.80	<.1	8.60	104	<.01	.30	--	.84
SEP											
03...	29.0	2.70	94	6.10	.1	16.0	129	.01	.60	.01	--

WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT										
01...	--	1.20	--	<.010	--	--	--	<.02	<.01	<.02
15...	--	2.00	--	<.010	--	--	.061	<.02	.02	<.02
29...	--	1.60	--	<.010	--	--	--	<.02	<.01	<.02
NOV										
06...	--	1.20	--	<.010	--	--	--	<.02	<.01	<.02
26...	--	1.00	--	<.010	--	--	--	<.02	<.01	<.02
DEC										
10...	--	1.10	--	<.010	--	--	--	.02	<.01	.02
18...	--	2.20	--	<.010	.28	2.5	--	.02	<.01	.06
JAN										
03...	--	2.20	--	<.010	--	--	--	<.02	<.01	<.02
14...	--	1.90	--	<.010	--	--	--	<.02	<.01	<.02
FEB										
06...	--	1.70	--	<.010	--	--	--	<.02	<.01	<.02
20...	--	.91	--	<.010	--	1.3	.061	<.02	.02	.04
MAR										
05...	--	.97	--	<.010	--	--	.061	<.02	.02	<.02
18...	--	.69	--	<.010	--	--	.031	<.02	.01	<.02
APR										
02...	--	1.10	--	<.010	.19	1.3	--	<.02	<.01	<.02
15...	--	1.20	--	<.010	--	--	--	<.02	<.01	<.02
30...	--	.68	--	<.010	--	--	.061	<.02	.02	<.02
MAY										
13...	--	.85	--	<.010	.58	1.4	.061	<.02	.02	.06
29...	--	.87	--	<.010	--	--	.061	<.02	.02	<.02
JUN										
17...	--	1.00	--	<.010	--	--	.061	<.02	.02	.02
JUL										
08...	3.45	.79	.033	.010	.37	1.2	.031	.02	.01	.03
22...	1.51	.35	.033	.010	--	.65	--	.02	<.01	.03
AUG										
20...	3.72	.85	.033	.010	--	1.1	--	<.02	<.01	.03
SEP										
03...	--	.42	--	<.010	.59	1.0	--	<.02	<.01	<.02

Date	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN (.062 MM 70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT									
01...	2.3	1.6	1.7	30	89	21	96	31	1.1
15...	4.7	2.8	2.8	E409	263	26	97	29	7.4
29...	2.3	2.3	2.1	48	66	22	95	25	1.1
NOV									
06...	.5	2.5	3.0	110	78	21	96	30	1.1
26...	.9	3.7	3.8	32	55	11	96	30	.94
DEC									
10...	3.1	1.1	1.3	E24	116	19	93	30	1.1
18...	1.3	3.5	3.8	400	1620	111	47	102	240
JAN									
03...	.8	3.6	3.8	E32	124	31	94	28	2.7
14...	1.6	2.1	2.5	E9	50	14	96	20	1.4
FEB									
06...	3.3	1.9	2.0	38	202	13	93	16	11.5
20...	--	2.8	2.8	>600	618	28	90	37	36.7
MAR									
05...	.8	1.7	2.0	<1	135	8	93	20	6.7
18...	1.7	1.3	1.3	110	369	15	90	7.0	--
APR									
02...	3.6	.8	2.0	57	192	15	100	15	--
15...	1.5	1.0	1.2	E20	330	33	89	15	--
30...	3.4	.9	1.2	E190	180	21	82	9.0	--
MAY									
13...	1.2	4.1	4.5	E2300	435	34	95	20	--
29...	2.5	2.0	1.9	1600	17	64	99	12	--
JUN									
17...	6.0	1.4	1.3	>660	157	35	85	7.0	--
JUL									
08...	1.6	1.9	2.2	37	117	69	74	5.0	--
22...	5.6	2.5	2.3	34	224	76	82	7.0	--
AUG									
20...	6.5	1.8	1.8	60	243	92	79	8.0	--
SEP									
03...	.2	2.3	1.9	27	289	170	72	11	--

Remark codes used in this report:  
 < -- Less than  
 > -- Greater than  
 E -- Estimated value









WHITE RIVER BASIN

07048910 BEAVER LAKE AT HIGHWAY 412 BRIDGE NEAR SONORA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + DIS-SOLVED TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
OCT											
02...	.04	.60	.05	--	--	.22	--	<.010	.56	.82	--
02...	.05	.60	.06	--	--	.21	--	<.010	.55	.81	--
02...	.16	.60	.21	--	--	.38	--	<.010	.44	.98	--
18...	.07	.50	.09	--	--	1.10	--	<.010	.43	1.6	.153
18...	.06	.60	.08	--	--	1.10	--	<.010	.54	1.7	.123
18...	.06	.50	.08	--	--	1.10	--	<.010	.44	1.6	.123
30...	.08	--	--	1.20	--	<.010	.44	1.7	--	--	--
30...	.05	.40	.06	1.18	5.22	1.20	.066	.020	.35	1.6	--
30...	.07	.50	.09	1.18	5.22	1.20	.066	.020	.43	1.7	--
NOV											
08...	.09	.80	.12	--	--	.54	--	<.010	.71	1.3	.061
08...	.09	1.0	.12	--	--	.50	--	<.010	.91	1.5	.061
08...	.11	.90	.14	--	--	.54	--	<.010	.79	1.4	.061
28...	.11	.30	.14	.98	4.34	1.00	.066	.020	.19	1.3	--
28...	.10	.30	.13	1.08	4.78	1.10	.066	.020	.20	1.4	--
28...	.10	.30	.13	1.08	4.78	1.10	.066	.020	.20	1.4	--
DEC											
12...	.08	.30	.10	--	--	.85	--	<.010	.22	1.1	.061
12...	.13	.30	.17	--	--	.78	--	<.010	.17	1.1	.031
12...	.04	.30	.05	--	--	.76	--	<.010	.26	1.1	--
JAN											
16...	.02	<.20	.03	1.69	7.48	1.70	.033	.010	--	--	--
16...	.03	<.20	.04	1.69	7.48	1.70	.033	.010	--	--	--
16...	.02	<.20	.03	1.69	7.48	1.70	.033	.010	--	--	--
FEB											
05...	.01	.30	.01	--	--	1.10	--	<.010	.29	1.4	--
05...	.01	.20	.01	--	--	1.20	--	<.010	.19	1.4	.031
05...	.02	.30	.03	--	--	1.20	--	<.010	.28	1.5	.031
MAR											
06...	<.01	<.20	--	--	--	.93	--	<.010	--	--	.061
06...	<.01	<.20	--	--	--	.94	--	<.010	--	--	.061
06...	<.01	<.20	--	--	--	.93	--	<.010	--	--	.061
APR											
16...	.05	<.20	.06	--	--	1.00	--	<.010	--	--	.031
16...	.04	<.20	.05	--	--	.97	--	<.010	--	--	.061
16...	.15	.70	.19	--	--	.56	--	<.010	.55	1.3	.092
MAY											
14...	.06	.50	.08	.50	2.21	.51	.033	.010	.44	1.0	--
14...	.08	.40	.10	.50	2.21	.51	.033	.010	.32	.91	--
14...	.27	.70	.35	.70	3.10	.71	.033	.010	.43	1.4	--
JUN											
19...	.02	.40	.03	.25	1.11	.26	.033	.010	.38	.66	--
19...	.08	.30	.10	.41	1.81	.44	.099	.030	.22	.74	--
19...	.46	.70	.59	.52	2.30	.55	.099	.030	.24	1.2	--
JUL											
09...	<.01	.40	--	--	--	<.02	--	<.010	--	--	--
09...	.02	.40	.03	--	--	<.02	--	<.010	.38	--	--
09...	.79	1.3	1.02	.06	.266	.07	.033	.010	.51	1.4	--
23...	<.01	.40	--	--	--	<.02	--	<.010	--	--	--
23...	<.01	.40	--	.04	.177	.05	.033	.010	--	.45	--
23...	1.10	1.7	1.42	--	--	<.02	--	<.010	.60	--	.061
AUG											
22...	<.01	.50	--	--	--	<.02	--	<.010	--	--	--
22...	<.01	.30	--	--	--	<.02	--	<.010	--	--	--
22...	1.40	2.0	1.80	--	--	<.02	--	<.010	.60	--	--
SEP											
05...	<.01	.50	--	--	--	<.02	--	<.010	--	--	--
05...	<.01	.40	--	--	--	<.02	--	<.010	--	--	--
05...	.45	.80	.58	--	--	.16	--	<.010	.35	.96	--

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT									
02...	<.02	<.01	<.02	3.3	3.4	E5	20.0	215	75
02...	<.02	<.01	<.02	3.1	3.3	--	--	241	79
02...	<.02	<.01	.04	3.4	3.5	--	--	735	262
18...	.02	.05	.06	5.3	5.2	93	<.1	704	96
18...	<.02	.04	.06	4.9	5.0	--	--	715	96
18...	.02	.04	.06	5.2	5.2	--	--	772	111
30...	<.02	<.01	.02	3.2	3.4	E15	15.0	357	81
30...	.05	<.01	<.02	3.2	3.3	--	--	417	91
30...	<.02	<.01	<.02	3.2	3.2	--	--	660	140
NOV									
08...	<.02	.02	.06	7.4	7.6	E190	1.7	2340	100
08...	<.02	.02	.12	7.6	8.6	--	--	2460	106
08...	<.02	.02	.13	6.3	6.8	--	--	2890	211
28...	<.02	<.01	.02	4.0	4.6	E12	13.0	370	188
28...	<.02	<.01	<.02	4.2	4.3	--	--	364	187
28...	<.02	<.01	<.02	3.6	4.6	--	--	504	196

## WHITE RIVER BASIN

## 07048910 BEAVER LAKE AT HIGHWAY 412 BRIDGE NEAR SONORA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
DEC									
12...	.03	.02	.04	1.9	2.1	E17	4.8	629	183
12...	.02	.01	.04	15.0	2.0	--	--	627	170
12...	<.02	<.01	.04	2.2	2.4	--	--	875	228
JAN									
16...	<.02	<.01	<.02	2.2	2.5	<1	4.8	265	82
16...	<.02	<.01	<.02	1.4	1.5	--	--	263	81
16...	<.02	<.01	<.02	.5	.9	--	--	269	80
FEB									
05...	<.02	<.01	.04	1.8	1.9	200	<.1	749	52
05...	<.02	.01	.04	1.8	1.9	--	--	751	53
05...	<.02	.01	.04	1.8	1.9	--	--	808	56
MAR									
06...	<.02	.02	<.02	2.0	2.8	E2	<.1	321	54
06...	<.02	.02	<.02	1.8	2.0	--	--	325	55
06...	<.02	.02	<.02	2.2	3.0	--	--	324	53
APR									
16...	.03	.01	.02	1.5	1.4	27	2.8	735	71
16...	<.02	.02	<.02	1.4	--	--	--	784	72
16...	<.02	.03	.14	3.2	3.4	--	--	3750	231
MAY									
14...	<.02	<.01	<.02	2.8	3.0	E2	7.2	221	62
14...	<.02	<.01	<.02	2.8	3.4	--	--	254	75
14...	<.02	<.01	.06	3.1	3.4	--	--	1110	473
JUN									
19...	<.02	<.01	.03	3.6	4.1	E4	18.0	188	34
19...	<.02	<.01	.02	3.2	3.2	--	--	272	99
19...	<.02	<.01	.03	3.0	3.5	--	--	369	3040
JUL									
09...	.03	<.01	.03	3.7	3.9	E1	13.0	41	21
09...	.02	<.01	.04	3.6	4.1	--	--	126	95
09...	.02	<.01	.06	3.5	3.8	--	--	1840	4300
23...	.02	<.01	.03	3.4	3.6	E1	11.0	49	24
23...	.02	<.01	.02	2.8	3.4	--	--	97	50
23...	.03	.02	.08	4.7	--	--	--	3750	5930
AUG									
22...	<.02	<.01	.03	3.1	3.5	E2	<.1	97	40
22...	.02	<.01	<.02	3.0	3.3	--	--	102	73
22...	.02	<.01	.06	4.3	4.1	--	--	2230	7340
SEP									
05...	<.02	<.01	<.02	2.7	2.8	E1	14.0	51	27
05...	<.02	<.01	.02	2.8	2.8	--	--	93	58
05...	<.02	<.01	.04	3.2	3.0	--	--	842	1510

Remark codes used in this report:

< -- Less than  
E -- Estimated value

WHITE RIVER BASIN

115

07049000 WAR EAGLE CREEK NEAR HINDSVILLE

LOCATION.--Lat 36°12'00", long 93°51'18", in SE1/4NE1/4 sec.28, T.18 N., R.27 W., Madison County, Hydrologic Unit 11010001, on left bank about 800 ft above bridge on State Highway 45, 3.9 mi north of Hindsville, and at mile 22.4.

DRAINAGE AREA.--263 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1952 to September 1970, October 1998 to current year. Annual maximum, water years 1971-77 and 1985-98.

GAGE.--Water-stage recorder. Datum of gage is 1,168.06 ft above NGVD of 1929. Prior to Oct. 1, 1964, at datum 200 ft higher. Prior to Jan. 1, 1965, at same site on right bank.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 10, 1943, reached a stage of 30.1 ft, present datum, from information by local resident (discharge, about 50,000 ft<sup>3</sup>/s).

DISCHARGE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	18	365	88	4880	157	446	364	412	95	55	24
2	9.3	19	303	78	1380	195	397	328	306	89	46	21
3	9.3	19	204	67	e841	296	347	287	244	85	42	19
4	9.5	17	153	60	e590	263	302	253	201	83	39	17
5	13	16	123	57	477	273	274	224	1940	145	36	16
6	13	19	106	58	418	331	252	200	1550	126	34	16
7	13	19	133	58	384	332	536	176	668	93	32	16
8	12	18	123	53	396	301	16900	157	445	76	29	30
9	12	18	103	51	400	702	3670	182	456	64	28	34
10	39	18	90	50	364	668	1680	208	646	57	40	20
11	235	17	80	47	305	474	1090	167	539	51	51	16
12	401	17	84	43	272	447	807	147	464	47	42	16
13	275	17	236	39	246	396	653	413	1220	114	90	16
14	347	16	357	37	218	344	556	402	844	145	571	15
15	243	16	313	33	200	307	480	270	531	100	469	15
16	156	16	2900	30	183	456	421	215	390	84	246	15
17	109	15	10200	28	164	380	684	1910	313	111	170	15
18	84	15	2390	27	149	331	537	2010	256	118	131	15
19	67	19	1090	34	176	5790	436	817	213	281	105	21
20	56	20	680	40	621	9720	430	540	179	224	89	47
21	47	19	502	45	443	2460	397	410	154	149	75	33
22	43	18	403	46	347	1340	343	326	134	110	62	23
23	40	17	335	48	295	941	1340	267	118	86	53	18
24	37	20	275	1730	264	747	1440	242	106	69	50	16
25	32	20	234	698	235	1720	714	244	98	57	47	16
26	28	47	201	456	210	2120	605	196	90	49	43	16
27	24	68	175	352	182	1160	759	240	95	49	38	15
28	22	69	155	290	163	854	643	249	98	56	36	15
29	21	79	137	248	---	693	507	1150	197	54	33	15
30	19	157	118	221	---	575	420	1210	120	50	31	14
31	19	---	101	3800	---	506	---	618	---	52	27	---
TOTAL	2444.6	863	22669	8912	14803	35279	38066	14422	13027	2969	2840	585
MEAN	78.86	28.77	731.3	287.5	528.7	1138	1269	465.2	434.2	95.77	91.61	19.50
MAX	401	157	10200	3800	4880	9720	16900	2010	1940	281	571	47
MIN	9.3	15	80	27	149	157	252	147	90	47	27	14
AC-FT	4850	1710	44960	17680	29360	69980	75500	28610	25840	5890	5630	1160

WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

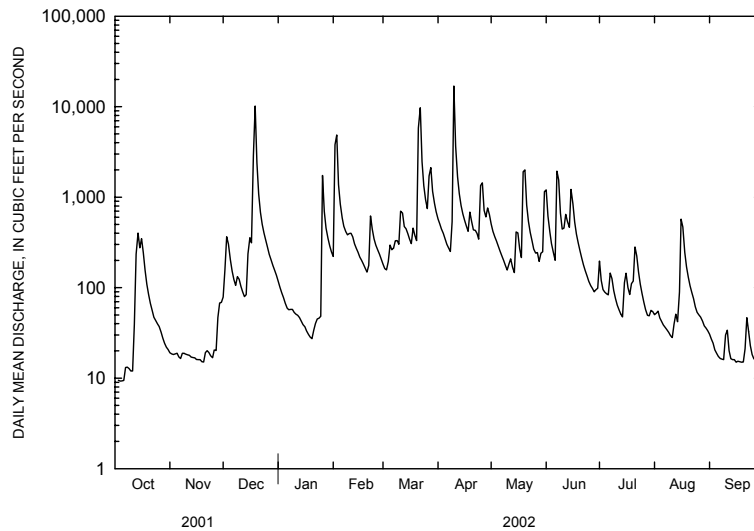
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-1970, 1999-02, BY WATER YEAR (WY)

MEAN	116.5	167.0	254.6	215.3	379.2	504.5	632.9	648.4	243.0	135.5	65.97	49.96
MAX	849	820	1026	640	1208	1228	2254	2582	1274	795	524	344
(WY)	1968	1969	1969	1969	2001	1968	1957	1957	2000	1960	1958	1970
MIN	3.72	7.21	8.03	7.81	15.9	62.0	92.4	75.5	23.3	2.63	1.49	2.29
(WY)	1957	1964	1964	1964	1964	1967	2001	2001	1954	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952-70, 1999-02	
ANNUAL TOTAL	86853.6		156879.6			
ANNUAL MEAN	238.0		429.8		284.2	
HIGHEST ANNUAL MEAN					641 1957	
LOWEST ANNUAL MEAN					47.7 1954	
HIGHEST DAILY MEAN	10200	Dec 17	16900	Apr 8	19000	May 23 1957
LOWEST DAILY MEAN	9.3	Oct 2	9.3	Oct 2	0.20	Aug 18 1954
ANNUAL SEVEN-DAY MINIMUM	11	Oct 1	11	Oct 1	0.33	Aug 13 1954
MAXIMUM PEAK FLOW			27300	Apr 8	49000	Nov 19 1985
MAXIMUM PEAK STAGE			22.43	Apr 8	28.49	Nov 19 1985
INSTANTANEOUS LOW FLOW			9.0	Oct 2	0.20	<sup>1</sup> Aug 18 1954
ANNUAL RUNOFF (AC-FT)	172300		311200		205900	
10 PERCENT EXCEEDS	421		727		595	
50 PERCENT EXCEEDS	71		149		76	
90 PERCENT EXCEEDS	17		17		9.6	

<sup>1</sup>Also August 19, 1954

<sup>e</sup>Estimated



WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-55, 1994-95, and April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT											
04...	0800	81213	80513	18	2.3	740	8.6	90	8.3	303	16.5
16...	1530	81213	80513	120	6.0	748	9.3	92	7.9	196	13.9
NOV											
01...	0730	81213	80513	22	.83	744	9.6	93	7.8	278	12.9
06...	1215	81213	80513	23	1.5	752	8.8	90	7.8	290	16.1
26...	1645	81213	80513	55	1.1	740	11.4	108	8.0	314	11.7
DEC											
13...	0715	81213	80513	105	3.1	746	11.4	100	8.2	195	8.7
18...	0815	81213	80513	2720	42	736	10.6	97	7.6	107	9.8
JAN											
03...	1315	81213	80513	83	2.1	743	12.2	89	8.1	198	1.4
16...	1530	81213	80513	57	.99	745	12.1	98	7.8	221	5.5
FEB											
06...	0930	81213	80513	427	5.5	750	11.1	90	7.4	141	5.7
20...	1545	81213	80513	565	17	739	10.4	97	7.5	128	10.6
MAR											
07...	1530	81213	80513	314	5.2	744	13.7	120	7.8	136	8.5
18...	1530	81213	80513	304	8.4	747	10.6	97	8.3	123	10.5
APR											
02...	1400	81213	80513	357	5.2	744	8.7	86	9.0	144	14.0
16...	1100	81213	80513	377	5.7	745	8.9	95	7.9	145	17.6
30...	1145	81213	80513	375	5.3	738	9.0	98	7.8	136	17.7
MAY											
13...	1500	81213	80513	451	7.9	753	9.4	105	8.3	193	19.7
29...	0715	81213	80513	342	7.1	742	7.5	82	7.8	196	17.9
JUN											
17...	1530	81213	80513	290	4.2	743	9.5	112	8.2	179	22.3
JUL											
08...	1345	81213	80513	74	1.9	749	8.5	106	7.7	240	25.7
22...	1330	81213	80513	115	4.9	747	7.0	104	8.0	195	35.5
AUG											
20...	1615	81213	80513	100	8.4	749	7.0	87	7.2	227	25.9
SEP											
03...	1230	81213	80513	24	4.4	747	12.1	150	8.6	238	25.1

Date	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)	ANC WATER UNFLTRD FET FIELD (MG/L AS CaCO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
04...	120	46.0	2.20	99	17.0	<.1	7.20	170	.03	<.20
16...	81	29.0	2.00	70	7.40	<.1	8.00	121	.02	<.20
NOV										
01...	110	41.0	2.20	101	15.0	<.1	7.00	149	.03	<.20
06...	120	45.0	2.30	105	17.0	<.1	6.90	161	.02	.30
26...	130	47.0	2.30	102	20.0	<.1	6.80	179	<.01	<.20
DEC										
13...	80	29.0	1.90	67	9.60	<.1	7.40	114	<.01	<.20
18...	43	15.0	1.40	37	3.40	<.1	5.10	76	.02	.50
JAN										
03...	86	31.0	2.00	75	7.00	<.1	7.00	114	.03	<.20
16...	94	34.0	2.10	74	10.0	<.1	7.60	134	.06	<.20
FEB										
06...	59	21.0	1.60	47	5.30	<.1	6.10	85	.01	<.20
20...	52	18.0	1.70	41	5.10	<.1	6.80	83	<.01	.30
MAR										
07...	53	19.0	1.40	47	6.00	<.1	6.80	77	<.01	<.20
18...	51	18.0	1.40	43	5.60	<.1	5.60	70	.02	.20
APR										
02...	61	22.0	1.50	50	5.20	<.1	5.60	85	<.01	<.20
16...	67	24.0	1.60	53	5.10	<.1	5.60	94	.50	<.20
30...	56	20.0	1.50	50	5.10	<.1	5.20	81	<.01	<.20
MAY										
13...	86	31.0	2.00	73	7.00	<.1	7.00	107	<.01	1.4
29...	90	33.0	1.80	71	5.50	<.1	5.50	108	.03	<.20
JUN										
17...	77	28.0	1.80	61	5.90	<.1	5.20	102	.02	<.20
JUL										
08...	97	36.0	1.80	88	8.20	<.1	5.80	139	.02	<.20
22...	86	31.0	2.00	72	6.70	<.1	5.10	118	.02	.20
AUG										
20...	98	36.0	1.90	80	8.80	<.1	5.10	136	<.01	<.20
SEP										
03...	120	43.0	2.00	105	14.0	<.1	4.50	161	.01	.30

WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 04...	.04	--	--	1.20	--	<.010	--	--	.123	.04
OCT 16...	1.03	--	--	.86	--	<.010	--	--	.153	.03
NOV 01...	.04	--	--	1.20	--	<.010	--	--	.061	.03
NOV 06...	.03	--	--	1.30	--	<.010	.28	1.6	.092	.04
NOV 26...	--	--	--	1.20	--	<.010	--	--	.184	.06
DEC 13...	--	--	--	1.00	--	<.010	--	--	.215	.06
DEC 18...	.03	--	--	1.90	--	<.010	.48	2.4	.061	.03
JAN 03...	.04	--	--	2.20	--	<.010	--	--	.123	.03
JAN 16...	.08	--	--	2.10	--	<.010	--	--	.245	.06
FEB 06...	.01	--	--	1.70	--	<.010	--	--	.031	<.02
FEB 20...	--	--	--	1.00	--	<.010	--	1.3	.061	<.02
MAR 07...	--	--	--	.87	--	<.010	--	--	.123	<.02
MAR 18...	.03	--	--	.80	--	<.010	.18	1.0	--	<.02
APR 02...	--	--	--	1.30	--	<.010	--	--	--	<.02
APR 16...	.64	--	--	1.40	--	<.010	--	--	.061	<.02
APR 30...	--	--	--	.71	--	<.010	--	--	.061	.02
MAY 13...	--	--	--	1.10	--	<.010	--	2.5	.123	.04
MAY 29...	.04	--	--	1.40	--	<.010	--	--	.092	<.02
JUN 17...	.03	--	--	1.40	--	<.010	--	--	.061	<.02
JUL 08...	.03	--	--	1.40	--	<.010	--	--	.092	.03
JUL 22...	.03	--	--	1.40	--	<.010	.18	1.6	.215	.05
AUG 20...	--	1.89	8.37	1.90	.033	.010	--	--	.092	.04
SEP 03...	.01	--	--	1.40	--	<.010	.29	1.7	--	<.02

Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN ,062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 04...	.04	.05	1.0	1.6	1.5	45	108	36	96	36	1.7
OCT 16...	.05	.05	1.8	3.0	2.9	E68	244	32	97	26	8.4
NOV 01...	.02	.03	3.2	1.7	1.7	38	110	37	99	23	1.4
NOV 06...	.03	.04	3.0	5.3	5.4	E60	126	49	93	34	2.1
NOV 26...	.06	.07	1.8	3.5	3.8	110	116	33	97	39	5.8
DEC 13...	.07	.07	.9	1.9	1.9	180	245	31	97	30	8.5
DEC 18...	.02	.08	1.7	4.4	6.7	500	1500	152	84	95	698
JAN 03...	.04	.05	1.1	3.7	3.8	E26	181	30	99	26	5.8
JAN 16...	.08	.08	2.3	.7	.6	26	128	19	96	24	3.7
FEB 06...	.01	.02	3.6	1.8	1.9	130	272	23	97	20	23.1
FEB 20...	.02	.05	2.5	1.7	2.1	520	598	45	82	46	70.2
MAR 07...	.04	.03	1.5	2.4	--	47	301	20	95	23	19.5
MAR 18...	<.01	<.02	.4	1.6	1.6	97	532	25	82	32	26.3
APR 02...	<.01	.02	.1	.9	1.8	28	271	27	91	26	25.1
APR 16...	.02	.02	1.4	1.2	1.2	E29	281	27	86	11	11.2
APR 30...	.02	.03	1.4	1.2	1.3	E250	241	26	78	10	10.1
MAY 13...	.04	.06	.8	2.0	2.1	590	305	40	86	16	19.5
MAY 29...	.03	<.02	2.0	1.5	1.4	338	310	42	92	15	13.9
JUN 17...	.02	.02	.8	1.3	1.4	280	212	28	77	12	9.4
JUL 08...	.03	.04	3.3	1.6	1.7	55	107	30	82	7.0	1.4
JUL 22...	.07	.06	1.5	2.1	1.3	110	204	41	93	8.0	2.5
AUG 20...	.03	.06	11	2.3	2.3	120	254	54	89	11	3.0
SEP 03...	<.01	<.02	.5	1.4	1.1	35	180	68	74	12	.78

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value







WHITE RIVER BASIN

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07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COLLECTING SAMPLE (CODE NUMBER)	RESER-VOIR DEPTH (FEET)	SAM-PLING DEPTH (FEET)	BARO-METRIC PRES-SURE (MM HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	PH WATER WHOLE FIELD (STAND-ARDS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
		(00028)	(00027)	(72025)	(00003)	(00025)	(00300)	(00301)	(00400)	(00095)	(00010)
JUN											
19...	0754	80513	80513	83.0	.10	749	9.7	121	8.7	126	25.6
19...	0755	81213	80513	83.0	6.20	749	9.2	115	8.7	129	26.2
19...	0756	80513	80513	83.0	10.1	749	8.9	112	8.6	130	26.1
19...	0757	80513	80513	83.0	12.1	749	7.9	99	8.3	131	25.8
19...	0758	80513	80513	83.0	14.0	749	5.1	63	7.8	134	24.7
19...	0759	80513	80513	83.0	15.1	749	4.3	53	7.6	136	24.4
19...	0800	80513	80513	83.0	17.1	749	2.4	28	7.4	137	23.4
19...	0801	80513	80513	83.0	18.0	749	1.4	17	7.3	138	22.6
19...	0802	80513	80513	83.0	20.0	749	.9	11	7.2	139	22.0
19...	0803	80513	80513	83.0	22.1	749	.8	9	7.2	141	21.0
19...	0804	81213	80513	83.0	23.9	749	.6	7	7.1	142	20.6
19...	0805	80513	80513	83.0	27.0	749	.5	6	7.1	148	19.5
19...	0806	80513	80513	83.0	30.1	749	.3	3	7.1	150	18.6
19...	0807	80513	80513	83.0	35.1	749	.2	2	7.1	150	17.6
19...	0808	80513	80513	83.0	38.1	749	.1	2	7.1	144	16.8
19...	0809	80513	80513	83.0	40.2	749	.1	2	7.0	140	16.3
19...	0810	80513	80513	83.0	42.0	749	.1	1	7.0	137	15.5
19...	0811	80513	80513	83.0	44.1	749	.1	1	7.0	124	14.4
19...	0812	80513	80513	83.0	47.0	749	.2	2	7.0	118	13.4
19...	0813	80513	80513	83.0	48.1	749	.5	5	7.0	110	12.7
19...	0814	80513	80513	83.0	50.1	749	.8	8	7.0	108	12.1
19...	0815	80513	80513	83.0	54.8	749	1.6	15	7.0	106	11.1
19...	0816	80513	80513	83.0	60.1	749	1.8	17	7.0	107	10.7
19...	0817	80513	80513	83.0	70.0	749	2.4	22	7.0	113	10.0
19...	0819	81213	80513	83.0	77.0	749	2.4	21	6.9	116	9.8
19...	0820	80513	80513	83.0	80.0	749	2.3	21	6.9	117	9.7
19...	0821	80513	80513	83.0	82.7	749	2.0	18	6.9	118	9.8
JUL											
10...	1309	80513	80513	87.0	.30	748	7.3	102	8.6	120	31.9
10...	1310	80020	80513	87.0	6.10	748	8.4	114	8.8	118	30.3
10...	1311	80513	80513	87.0	9.90	748	8.7	116	8.9	121	29.2
10...	1312	80513	80513	87.0	12.1	748	5.9	77	8.1	127	27.8
10...	1314	80513	80513	87.0	14.1	748	3.4	44	7.3	132	26.8
10...	1315	80513	80513	87.0	16.0	748	1.5	19	7.1	139	26.1
10...	1316	80513	80513	87.0	18.0	748	.7	9	7.0	144	25.2
10...	1317	80513	80513	87.0	20.0	748	.3	4	6.9	147	24.2
10...	1318	80513	80513	87.0	22.0	748	.2	3	6.8	154	23.0
10...	1319	80513	80513	87.0	23.0	748	.2	2	6.8	155	22.4
10...	1320	81213	80513	87.0	24.0	748	.1	2	6.8	158	21.9
10...	1321	80513	80513	87.0	26.1	748	.1	1	6.8	158	20.4
10...	1322	80513	80513	87.0	30.1	748	.1	1	6.8	158	18.9
10...	1323	80513	80513	87.0	34.0	748	.1	1	6.7	157	17.8
10...	1324	80513	80513	87.0	37.1	748	.1	0	6.8	155	16.9
10...	1325	80513	80513	87.0	40.1	748	.1	0	6.7	152	15.9
10...	1326	80513	80513	87.0	42.0	748	.1	0	6.7	147	15.2
10...	1327	80513	80513	87.0	44.9	748	.1	0	6.7	136	14.2
10...	1328	80513	80513	87.0	47.0	748	.1	0	6.7	125	13.2
10...	1329	80513	80513	87.0	50.0	748	.1	0	6.6	117	12.2
10...	1330	80513	80513	87.0	55.1	748	.1	0	6.6	114	11.2
10...	1331	80513	80513	87.0	60.1	748	.1	1	6.6	113	10.4
10...	1332	80513	80513	87.0	70.2	748	.5	4	6.6	117	6.7
10...	1333	80513	80513	87.0	80.0	748	.1	0	6.6	125	9.3
10...	1334	81213	80513	87.0	82.0	748	.1	0	6.6	126	9.3
10...	1335	80513	80513	87.0	87.2	748	.0	0	6.6	132	9.3
24...	1040	80513	80513	85.0	.80	750	7.8	104	8.6	125	29.6
24...	1041	80020	80513	85.0	6.00	750	7.8	104	8.6	124	29.2
24...	1042	80513	80513	85.0	10.0	750	7.8	104	8.6	124	29.2
24...	1043	80513	80513	85.0	16.0	750	4.8	63	7.5	136	27.6
24...	1044	80513	80513	85.0	18.0	750	2.0	26	7.2	144	26.9
24...	1045	80513	80513	85.0	20.0	750	.4	5	7.0	155	25.3
24...	1046	80513	80513	85.0	22.0	750	.3	4	7.0	157	24.7
24...	1047	81213	80513	85.0	24.0	750	.3	3	6.9	161	23.1
24...	1048	80513	80513	85.0	26.0	750	.3	3	6.9	157	21.9
24...	1049	80513	80513	85.0	28.0	750	.3	3	6.9	153	20.6
24...	1050	80513	80513	85.0	30.0	750	.3	3	6.9	152	19.6
24...	1051	80513	80513	85.0	32.0	750	.3	3	6.9	150	18.6
24...	1052	80513	80513	85.0	35.0	750	.3	3	6.8	151	17.7
24...	1053	80513	80513	85.0	40.0	750	.3	3	6.8	153	16.5
24...	1054	80513	80513	85.0	45.0	750	.2	2	6.8	143	14.8
24...	1055	80513	80513	85.0	50.0	750	.2	2	6.7	129	13.0
24...	1056	80513	80513	85.0	55.0	750	.2	2	6.6	121	11.6
24...	1059	80513	80513	85.0	60.0	750	.2	2	6.6	119	10.9
24...	1100	80513	80513	85.0	70.0	750	.2	2	6.6	119	10.0
24...	1101	81213	80513	85.0	80.0	750	.2	2	6.6	125	9.5
24...	1102	80513	80513	85.0	85.0	750	.2	2	6.7	127	9.4

## WHITE RIVER BASIN

## 07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-PLING DEPTH (FEET) (00003)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	PH WATER FIELD (STAND-ARD) UNITS (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
AUG											
06...	1600	80513	80513	--	6.00	751	7.3	104	8.3	136	33.4
21...	0821	80513	80513	85.0	.00	748	7.8	104	8.2	143	29.2
21...	0822	81213	80513	85.0	6.00	748	7.7	103	8.2	143	29.2
21...	0823	80513	80513	85.0	10.1	748	6.6	86	7.6	139	27.9
21...	0826	80513	80513	85.0	17.0	748	4.0	51	7.2	142	27.3
21...	0827	80513	80513	85.0	20.1	748	1.9	24	6.9	145	26.5
21...	0829	80513	80513	85.0	21.1	748	.6	7	6.8	149	26.2
21...	0830	80513	80513	85.0	22.1	748	.2	3	6.8	163	25.3
21...	0831	80513	80513	85.0	23.2	748	.2	3	6.7	174	24.6
21...	0832	81213	80513	85.0	24.0	748	.2	2	6.7	174	23.8
21...	0833	80513	80513	85.0	25.0	748	.2	2	6.7	182	23.2
21...	0835	80513	80513	85.0	27.3	748	.2	2	6.7	187	22.3
21...	0837	80513	80513	85.0	29.0	748	.2	2	6.7	185	21.8
21...	0838	80513	80513	85.0	31.0	748	.2	3	6.7	169	21.0
21...	0839	80513	80513	85.0	31.0	748	.2	2	6.7	168	20.4
21...	0840	80513	80513	85.0	32.0	748	.2	2	6.7	166	19.7
21...	0841	80513	80513	85.0	34.2	748	.2	2	6.7	164	18.8
21...	0842	80513	80513	85.0	37.1	748	.2	2	6.7	162	17.9
21...	0843	80513	80513	85.0	40.1	748	.2	3	6.7	160	20.0
21...	0844	80513	80513	85.0	43.1	748	.2	2	6.7	157	16.1
21...	0845	80513	80513	85.0	46.2	748	.2	2	6.7	149	15.0
21...	0846	80513	80513	85.0	49.4	748	.2	2	6.6	142	13.8
21...	0847	80513	80513	85.0	50.1	748	.2	2	6.6	138	13.2
21...	0848	80513	80513	85.0	54.1	748	.2	2	6.6	132	12.1
21...	0849	80513	80513	85.0	60.1	748	.2	2	6.6	129	11.2
21...	0851	80513	80513	85.0	70.1	748	.2	2	6.6	127	10.2
21...	0852	80513	80513	85.0	80.1	748	.2	2	6.6	129	9.8
21...	0857	81213	80513	85.0	79.0	748	.2	2	6.6	129	9.8
21...	0858	80513	80513	85.0	80.2	748	.2	2	6.6	129	9.7
21...	0859	80513	80513	85.0	84.7	748	.2	2	6.6	129	9.7
SEP											
04...	1022	80513	80513	84.0	.80	750	7.7	101	8.6	139	28.9
04...	1024	81213	80513	84.0	6.00	750	7.7	101	8.7	139	28.8
04...	1025	80513	80513	84.0	10.0	750	7.3	96	8.5	139	28.6
04...	1026	80513	80513	84.0	20.0	750	.9	12	7.0	158	26.8
04...	1028	80513	80513	84.0	23.0	750	.3	4	7.0	165	25.7
04...	1029	81213	80513	84.0	24.0	750	.3	3	6.9	166	25.4
04...	1031	80513	80513	84.0	25.0	750	.2	3	6.9	166	24.8
04...	1032	80513	80513	84.0	27.0	750	.2	2	6.8	164	23.4
04...	1033	80513	80513	84.0	30.0	750	.2	2	6.9	176	22.0
04...	1034	80513	80513	84.0	31.2	750	.2	2	6.9	191	20.6
04...	1035	80513	80513	84.0	34.1	750	.1	2	6.9	181	19.1
04...	1036	80513	80513	84.0	36.0	750	.1	2	6.9	172	18.0
04...	1037	80513	80513	84.0	38.0	750	.1	1	6.8	169	17.1
04...	1038	80513	80513	84.0	40.1	750	.1	2	6.8	164	16.5
04...	1039	80513	80513	84.0	43.1	750	.1	1	6.8	156	15.3
04...	1040	80513	80513	84.0	46.0	750	.1	1	6.8	148	14.2
04...	1041	80513	80513	84.0	50.0	750	.1	1	6.8	142	13.2
04...	1042	80513	80513	84.0	53.0	750	.1	1	6.8	139	12.5
04...	1043	80513	80513	84.0	55.0	750	.1	1	6.8	134	11.8
04...	1044	80513	80513	84.0	60.0	750	.1	1	6.7	133	10.9
04...	1045	80513	80513	84.0	70.0	750	.1	0	6.7	133	10.1
04...	1046	80513	80513	84.0	80.0	750	.1	0	6.7	134	9.8
04...	1047	80513	80513	84.0	84.1	750	.1	0	6.8	137	9.7
04...	1052	81213	80513	84.0	78.0	750	.1	0	6.8	134	9.8
04...	1053	80513	80513	84.0	80.0	750	.1	0	6.8	134	9.7
04...	1054	80513	80513	84.0	84.2	750	.1	0	6.8	137	9.7
24...	1245	80513	80513	--	6.00	746	5.5	69	7.4	156	25.2
OCT											
02...	0855	6.10	1.80	1.8	71	25.0	2.10	5.60	<.1	9.60	94
02...	0901	24.0	--	2.0	71	25.0	2.10	5.70	<.1	9.70	95
02...	0925	65.0	--	62	76	27.0	2.20	5.00	<.1	5.90	112
17...	1522	6.00	.94	3.2	71	25.0	2.20	5.70	<.1	11.0	100
17...	1526	24.0	--	3.4	71	25.0	2.20	5.80	<.1	11.0	105
17...	1539	66.0	--	60	76	27.0	2.20	4.90	<.1	4.90	114
30...	1007	6.00	1.90	1.4	74	26.0	2.20	5.90	<.1	11.0	98
30...	1012	24.0	--	1.9	76	27.0	2.20	5.90	<.1	10.0	99
30...	1023	66.0	--	67	79	28.0	2.30	5.10	<.1	5.20	117

SOLIDS,  
RESIDUE  
AT 180  
DIS-  
SOLVED  
(MG/L)  
(70300)

TRANS-  
PAR-  
ENCY  
(SECCHI  
DISK)  
(M)  
(00078)

TUR-  
BID-  
ITY  
(NTU)  
(00076)

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)

CHLO-  
RIDE,  
DIS-  
SOLVED  
(MG/L  
AS CL)  
(00940)

FLUO-  
RIDE,  
DIS-  
SOLVED  
(MG/L  
AS F)  
(00950)

SULFATE  
DIS-  
SOLVED  
(MG/L  
AS SO4)  
(00945)

WHITE RIVER BASIN

07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT										
02...	.07	.30	.09	--	--	.07	--	<.010	.23	.37
02...	.08	.40	.10	--	--	.07	--	<.010	.32	.47
02...	1.10	1.5	1.42	--	--	<.02	--	<.010	.40	--
17...	.08	.30	.10	--	--	.18	--	<.010	.22	.48
17...	.08	.30	.10	--	--	.17	--	<.010	.22	.47
17...	1.20	1.8	1.55	--	--	<.02	--	<.010	.60	--
30...	.04	<.20	.05	.27	1.20	.28	.033	.010	--	--
30...	.02	<.20	.03	.27	1.20	.28	.033	.010	--	--
30...	1.50	1.7	1.93	--	--	<.02	--	<.010	.20	--

Date	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	CHLOR-A, PHYTO-TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT										
02...	--	<.02	<.01	<.02	2.3	2.6	E2	6.9	61	37
02...	--	<.02	<.01	<.02	18.0	2.5	--	--	77	41
02...	.429	.14	.14	.28	3.4	3.3	--	--	5190	3090
17...	.031	<.02	.01	<.02	2.9	2.8	E4	3.3	143	82
17...	.031	<.02	.01	<.02	3.0	2.9	--	--	197	122
17...	.399	.12	.13	.12	3.5	4.0	--	--	5180	3810
30...	--	<.02	<.01	<.02	2.3	2.8	<1	9.3	134	56
30...	--	<.02	<.01	<.02	3.3	3.4	--	--	135	57
30...	.092	.04	.03	.16	2.6	3.4	--	--	4390	5030

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TUR-BID-ITY (NTU) (00076)	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)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV											
07...	0751	6.00	2.20	1.1	74	26.0	2.20	5.80	<.1	10.0	95
07...	0756	24.0	--	.94	74	26.0	2.30	5.90	<.1	11.0	98
07...	0805	65.0	--	36	77	27.0	2.40	6.00	<.1	10.0	106
28...	0950	6.00	1.10	5.5	74	26.0	2.30	5.70	<.1	11.0	102
28...	0953	24.0	--	5.1	74	26.0	2.30	5.80	<.1	11.0	102
28...	0958	64.0	--	8.7	74	26.0	2.30	5.80	<.1	11.0	103
DEC											
11...	1451	6.00	1.50	2.4	77	27.0	2.30	5.70	<.1	11.0	106
11...	1454	24.0	--	2.4	77	27.0	2.30	5.70	<.1	11.0	108
11...	1501	64.3	--	15	89	31.0	2.90	7.30	<.1	18.0	125
JAN											
16...	0754	6.00	.30	42	38	13.0	1.40	2.80	<.1	6.20	54
16...	0757	24.0	--	42	38	13.0	1.40	2.80	<.1	6.10	66
16...	0802	70.0	--	44	38	13.0	1.40	2.80	<.1	6.20	62
FEB											
05...	1108	6.00	.30	52	52	18.0	1.80	4.40	<.1	8.90	81
05...	1111	24.0	--	51	55	19.0	1.80	4.40	<.1	8.80	78
05...	1118	75.0	--	19	59	20.0	2.10	4.40	<.1	11.0	92

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
NOV										
07...	.03	.30	.04	--	--	.26	--	<.010	.27	.56
07...	.05	.30	.06	--	--	.30	--	<.010	.25	.60
07...	.46	.80	.59	.32	1.42	.34	.066	.020	.34	1.1
28...	.04	.20	.05	.40	1.77	.42	.066	.020	.16	.62
28...	.04	.20	.05	.40	1.77	.41	.033	.010	.16	.61
28...	.07	.30	.09	.38	1.68	.40	.066	.020	.23	.70
DEC										
11...	.02	.30	.03	--	--	.46	--	<.010	.28	.76
11...	.04	<.20	.05	--	--	.47	--	<.010	--	--
11...	.16	.70	.21	.59	2.61	.61	.066	.020	.54	1.3
JAN										
16...	.11	.40	.14	1.08	4.78	1.10	.066	.020	.29	1.5
16...	.12	.50	.15	1.08	4.78	1.10	.066	.020	.38	1.6
16...	.13	.40	.17	1.08	4.78	1.10	.066	.020	.27	1.5
FEB										
05...	.05	.40	.06	1.19	5.27	1.20	.033	.010	.35	1.6
05...	.04	.50	.05	1.19	5.27	1.20	.033	.010	.46	1.7
05...	.05	.30	.06	1.58	6.99	1.60	.066	.020	.25	1.9

## WHITE RIVER BASIN

## 07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04) (00660)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC, TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	CHLOR-A, PHYTO-PLANKTON, CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL, RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL, RECOV-ERABLE (UG/L AS MN) (01055)	
NOV											
07...	--	<.02	<.01	<.02	3.2	3.2	<1	6.6	42	29	
07...	--	<.02	<.01	<.02	3.3	4.0	--	--	73	49	
07...	--	.02	<.01	.06	4.2	4.7	--	--	1320	1780	
28...	--	<.02	<.01	<.02	3.4	3.9	<1	4.2	232	154	
28...	--	<.02	<.01	<.02	4.2	4.2	--	--	249	161	
28...	--	<.02	<.01	<.02	3.6	4.0	--	--	385	323	
DEC											
11...	--	.02	<.01	.02	2.3	2.8	E2	10.0	103	50	
11...	--	.02	<.01	.02	2.3	2.8	--	--	110	58	
11...	--	.02	<.01	.03	2.5	2.5	--	--	640	267	
JAN											
16...	.031	.02	.01	.07	4.5	5.1	E6	<.1	991	86	
16...	.031	<.02	.01	.05	4.5	4.6	--	--	954	87	
16...	.031	<.02	.01	.06	4.3	4.6	--	--	1030	102	
FEB											
05...	.061	<.02	.02	.07	3.0	3.2	125	4.6	1120	79	
05...	.061	<.02	.02	.07	2.8	3.2	--	--	1080	79	
05...	--	<.02	<.01	.02	1.9	2.2	--	--	529	76	
Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TUR-BID-ITY (NTU) (00076)	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)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE, DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
MAR											
06...	0815	6.00	.61	32	44	15.0	1.50	3.30	<.1	7.30	65
06...	0818	24.0	--	31	44	15.0	1.50	3.40	<.1	7.50	63
06...	0825	73.0	--	48	44	15.0	1.50	3.30	<.1	7.30	68
APR											
17...	0755	6.00	.30	69	32	11.0	1.20	2.10	<.1	5.00	48
17...	0759	24.0	--	81	35	12.0	1.20	2.40	<.1	4.70	54
17...	0807	82.0	--	20	47	16.0	1.60	3.40	<.1	7.60	72
MAY											
14...	0841	6.00	1.50	2.5	46	16.0	1.40	2.70	<.1	5.90	58
14...	0844	24.0	--	7.6	48	17.0	1.40	2.70	<.1	5.80	64
14...	0901	82.0	--	25	49	17.0	1.60	3.30	<.1	7.40	73
Date		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA, SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE, SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE, SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3, SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE, SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE, SOLVED (MG/L AS N) (00613)	NITRO-GEN, TOTAL, (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAR											
06...	.03	.40	.04	1.09	4.82	1.10	.033	.010	.37	1.5	
06...	.03	.30	.04	1.19	5.27	1.20	.033	.010	.27	1.5	
06...	.03	.40	.04	1.19	5.27	1.20	.033	.010	.37	1.6	
APR											
17...	.05	.40	.06	--	--	.84	--	<.010	.35	1.2	
17...	.15	.40	.19	--	--	.80	--	<.010	.25	1.2	
17...	.07	<.20	.09	--	--	.97	--	<.010	--	--	
MAY											
14...	.02	.50	.03	.65	2.88	.66	.033	.010	.48	1.2	
14...	.04	.50	.05	.83	3.67	.84	.033	.010	.46	1.3	
14...	.02	.40	.03	--	--	1.00	--	<.010	.38	1.4	
Date	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04) (00660)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC, TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	CHLOR-A, PHYTO-PLANKTON, CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL, RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL, RECOV-ERABLE (UG/L AS MN) (01055)	
MAR											
06...	.061	<.02	.02	.06	3.9	4.4	E4	<.1	688	72	
06...	.061	<.02	.02	.05	3.9	4.1	--	--	682	74	
06...	.061	<.02	.02	.12	4.4	4.6	--	--	789	84	
APR											
17...	.061	<.02	.02	.06	3.0	3.0	20	6.1	1410	70	
17...	.092	<.02	.03	.07	3.6	3.5	--	--	1530	77	
17...	.061	<.02	.02	.02	2.4	2.5	--	--	485	50	
MAY											
14...	--	<.02	<.01	<.02	2.9	3.1	E5	8.3	106	15	
14...	--	<.02	<.01	<.02	2.9	2.8	--	--	207	20	
14...	.061	<.02	.02	.03	2.9	3.0	--	--	557	111	

WHITE RIVER BASIN

07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TUR- BID- ITY (NTU) (00076)	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
JUN											
19...	0755	6.20	1.50	1.1	54	19.0	1.70	3.40	<.1	7.20	78
19...	0804	23.9	--	3.3	64	23.0	1.70	3.80	<.1	6.50	87
19...	0819	77.0	--	16	52	18.0	1.70	3.50	<.1	7.50	88
JUL											
10...	1310	6.10	2.90	.48	52	18.0	1.60	3.10	<.1	6.20	70
10...	1320	24.0	--	8.6	68	24.0	2.00	3.90	<.1	7.20	92
10...	1334	82.0	--	13	55	19.0	1.80	3.60	<.1	7.50	79
24...	1041	6.00	2.40	.74	57	20.0	1.70	3.30	<.1	6.40	70
24...	1047	24.0	--	4.8	73	26.0	2.00	4.30	<.1	6.80	93
24...	1101	80.0	--	10	55	19.0	1.80	3.50	<.1	7.10	77
AUG											
21...	0822	6.00	2.90	1.4	63	22.0	2.00	4.00	<.1	6.80	83
21...	0832	24.0	--	10	79	28.0	2.20	4.60	<.1	7.00	104
21...	0857	79.0	--	15	56	19.3	1.86	3.36	.1	6.15	83
SEP											
04...	1024	6.00	2.10	1.8	62	22.0	1.80	3.70	<.1	6.50	80
04...	1029	24.0	--	7.0	71	25.0	2.00	4.60	<.1	7.20	93
04...	1052	78.0	--	23	57	20.0	1.80	3.30	<.1	5.80	86

Date	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
JUN										
19...	<.01	.40	--	.15	.664	.16	.033	.010	--	.56
19...	.01	<.20	.01	--	--	.68	--	<.010	--	--
19...	.01	<.20	.01	--	--	.97	--	<.010	--	--
JUL										
10...	.01	.40	.01	--	--	<.02	--	<.010	.39	--
10...	.05	<.20	.06	.32	1.42	.35	.099	.030	--	--
10...	.04	<.20	.05	--	--	.86	--	<.010	--	--
24...	<.01	.30	--	--	--	<.02	--	<.010	--	--
24...	<.01	.30	--	--	--	<.02	--	<.010	--	--
24...	.11	.40	.14	.71	3.14	.73	.066	.020	.29	1.1
AUG										
21...	<.01	.30	--	--	--	<.02	--	<.010	--	--
21...	<.01	.40	--	--	--	<.02	--	<.010	--	--
21...	.30	.70	.39	.28	1.24	.32	.131	.040	.40	1.0
SEP										
04...	<.01	.30	--	<.02	--	<.02	--	<.010	--	--
04...	.01	.30	.01	--	--	<.02	--	<.010	.29	--
04...	.44	.80	.57	.04	.177	.06	.066	.020	.36	.86

Date	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
JUN										
19...	.031	.02	.01	<.02	3.0	3.1	E3	12.0	46	25
19...	.031	<.02	.01	<.02	2.9	2.8	--	--	131	38
19...	.061	<.02	.02	<.02	2.6	2.7	--	--	328	194
JUL										
10...	--	.02	<.01	.02	3.8	5.8	E4	3.4	17	15
10...	--	<.02	<.01	.03	3.5	3.0	--	--	266	468
10...	--	.02	<.01	.03	3.0	3.4	--	--	280	502
24...	--	.02	<.01	.02	2.9	3.3	E2	7.7	17	16
24...	--	.02	<.01	.03	2.8	2.9	--	--	43	577
24...	--	.02	<.01	.03	2.6	2.7	--	--	300	1240
AUG										
21...	--	<.02	<.01	<.02	3.3	3.0	<1	5.8	20	18
21...	--	<.02	<.01	.02	2.6	2.8	--	--	47	1750
21...	--	.02	<.01	.04	3.5	3.2	--	--	961	1760
SEP										
04...	--	<.02	<.01	<.02	2.4	2.6	<1	5.4	24	12
04...	--	<.02	<.01	<.02	2.6	2.6	--	--	57	531
04...	--	<.02	<.01	.05	3.1	3.4	--	--	1530	1950

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

WHITE RIVER BASIN

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS

LOCATION.--Lat 36°19'56", long 94°01'08", in SE1/4NW1/4 sec.12, T.19 N., R.29 W., Benton County, Hydrologic Unit 11010001, at bridge on State Highway 12, 5.1 mi east of Rogers.

DRAINAGE AREA.--1,020 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1950, 1952, 1954, 1959-60, 1963, December 1975 to August 1995, April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-FLING DEPTH (FEET) (00003)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT											
03...	1323	80513	80513	101	.20	743	8.6	103	8.0	157	22.9
03...	1324	80020	80513	101	6.00	743	8.7	103	8.0	157	22.6
03...	1329	80513	80513	101	9.90	743	8.6	102	7.8	157	22.6
03...	1330	80513	80513	101	20.0	743	8.4	100	7.7	157	22.6
03...	1331	81213	80513	101	30.0	743	8.3	99	7.7	157	22.5
03...	1332	80513	80513	101	40.1	743	3.2	37	7.2	161	21.5
03...	1337	80513	80513	101	41.1	743	.1	1	7.0	167	19.8
03...	1338	80513	80513	101	42.1	743	.1	1	7.0	160	17.9
03...	1339	80513	80513	101	43.0	743	.1	1	7.0	158	17.1
03...	1340	80513	80513	101	44.1	743	.1	1	7.0	156	16.6
03...	1341	80513	80513	101	45.9	743	.1	1	7.0	156	16.0
03...	1342	80513	80513	101	47.0	743	.1	0	7.0	155	15.2
03...	1343	80513	80513	101	48.9	743	.1	0	7.0	152	14.2
03...	1344	80513	80513	101	50.1	743	.1	0	7.0	150	13.8
03...	1345	80513	80513	101	52.0	743	.1	0	7.0	151	13.1
03...	1346	80513	80513	101	55.0	743	.1	0	7.0	151	12.3
03...	1347	80513	80513	101	58.0	743	.1	0	7.0	153	11.2
03...	1348	80513	80513	101	60.2	743	.1	0	7.0	153	10.9
03...	1349	80513	80513	101	65.0	743	.1	0	7.0	156	10.0
03...	1351	80513	80513	101	69.9	743	.1	0	6.9	157	9.5
03...	1352	80513	80513	101	80.1	743	.1	0	6.9	160	8.8
03...	1353	80513	80513	101	90.1	743	.1	0	6.9	160	8.7
03...	1355	81213	80513	101	95.2	743	.1	0	8.0	162	8.6
03...	1356	80513	80513	101	101	743	.1	0	6.8	164	8.7
16...	1246	80513	80513	102	.70	752	7.4	81	8.0	155	18.9
16...	1247	80020	80513	102	6.00	752	7.4	81	8.0	155	18.9
16...	1248	80513	80513	102	10.1	752	7.3	80	8.0	155	18.9
16...	1250	81213	80513	102	30.0	752	7.4	81	7.5	153	18.8
16...	1251	80513	80513	102	40.0	752	7.4	80	7.8	153	18.7
16...	1252	80513	80513	102	47.0	752	6.7	72	7.6	153	18.3
16...	1254	80513	80513	102	48.9	752	6.3	68	7.4	152	17.9
16...	1255	80513	80513	102	50.1	752	.9	9	6.7	158	13.4
16...	1256	80513	80513	102	52.8	752	.4	4	6.7	158	12.4
16...	1257	80513	80513	102	60.1	752	.2	2	7.0	158	11.5
16...	1258	80513	80513	102	70.0	752	.2	1	7.0	161	9.7
16...	1300	80513	80513	102	90.0	752	.1	0	7.0	164	8.5
16...	1301	81213	80513	102	96.0	752	.1	0	8.0	165	8.5
16...	1302	80513	80513	102	100	752	.0	0	7.0	165	8.5
16...	1303	80513	80513	102	102	752	.0	0	7.1	166	8.5
31...	1243	80513	80513	102	.00	747	8.2	87	7.8	158	17.3
31...	1244	80020	80513	102	6.00	747	8.0	85	7.8	159	17.3
31...	1245	80513	80513	102	10.0	747	7.8	83	7.7	158	17.2
31...	1246	80513	80513	102	20.0	747	7.7	82	7.6	157	17.2
31...	1247	81213	80513	102	30.0	747	7.7	81	7.4	157	17.2
31...	1248	80513	80513	102	40.0	747	7.3	77	7.3	158	17.1
31...	1252	80513	80513	102	53.0	747	.2	3	6.9	165	15.9
31...	1253	80513	80513	102	55.0	747	.0	0	6.9	171	15.0
31...	1254	80513	80513	102	56.0	747	.0	0	6.9	165	13.3
31...	1255	80513	80513	102	58.0	747	.0	0	6.9	165	12.6
31...	1256	80513	80513	102	60.0	747	.0	0	6.8	165	12.0
31...	1257	80513	80513	102	64.0	747	.0	0	6.8	165	11.0
31...	1258	80513	80513	102	70.0	747	.0	0	6.9	167	10.0
31...	1300	80513	80513	102	80.0	747	.0	0	6.9	168	9.2
31...	1301	81213	80513	102	96.0	747	.0	0	6.9	170	8.7
31...	1302	80513	80513	102	102	747	.0	0	6.9	172	8.7
NOV											
07...	0946	80513	80513	103	1.10	752	8.7	92	8.1	154	17.2
07...	0948	80020	80513	103	6.00	752	8.8	93	8.1	154	17.2
07...	0949	80513	80513	103	10.0	752	8.7	91	8.1	153	17.2
07...	0950	80513	80513	103	20.0	752	8.6	90	8.0	153	17.1
07...	0951	81213	80513	103	30.0	752	8.5	89	8.0	153	17.1
07...	0952	80513	80513	103	40.0	752	7.4	78	7.6	157	16.9
07...	0953	80513	80513	103	50.0	752	5.7	59	6.4	163	16.6
07...	0955	80513	80513	103	56.0	752	.6	6	7.0	165	15.2
07...	0956	80513	80513	103	58.0	752	.1	0	7.0	172	13.7
07...	0957	80513	80513	103	60.0	752	.0	0	7.0	173	12.6
07...	0958	80513	80513	103	64.2	752	.0	0	6.9	167	11.3
07...	0959	80513	80513	103	68.0	752	.0	0	6.9	168	10.4
07...	1000	80513	80513	103	70.1	752	.0	0	6.9	168	10.2
07...	1001	80513	80513	103	74.1	752	.0	0	6.9	168	9.8
07...	1002	80513	80513	103	80.0	752	.0	0	6.9	169	9.4
07...	1003	80513	80513	103	90.0	752	.0	0	6.9	170	8.8
07...	1004	81213	80513	103	97.0	752	.0	0	6.9	170	8.7
07...	1005	80513	80513	103	100	752	.0	0	6.9	170	8.7
07...	1006	80513	80513	103	103	752	.0	0	7.0	172	8.7



WHITE RIVER BASIN

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07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	RESERVOIR DEPTH (FEET) (72025)	SAMPLING DEPTH (FEET) (00003)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (PER-CENT) (00301)	PH WATER FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV											
27...	1257	80513	80513	100	.60	751	6.4	63	7.7	161	14.2
27...	1258	80020	80513	100	6.00	751	6.4	63	7.6	161	14.2
27...	1259	80513	80513	100	10.0	751	6.3	62	7.7	161	14.2
27...	1300	80513	80513	100	20.1	751	6.3	62	7.6	161	14.2
27...	1301	81213	80513	100	30.0	751	6.2	61	7.5	161	14.2
27...	1302	80513	80513	100	40.0	751	6.3	62	4.3	161	14.1
27...	1303	80513	80513	100	50.1	751	6.0	60	7.0	161	14.1
27...	1304	80513	80513	100	60.1	751	5.0	50	7.4	162	13.8
27...	1305	80513	80513	100	62.0	751	2.2	21	7.1	165	12.7
27...	1306	80513	80513	100	63.1	751	.1	0	7.0	170	11.5
27...	1307	80513	80513	100	64.0	751	.0	0	7.0	169	10.9
27...	1308	80513	80513	100	70.0	751	.0	0	7.0	170	9.7
27...	1309	80513	80513	100	80.0	751	.0	0	7.0	172	9.1
27...	1311	80513	80513	100	90.1	751	.0	0	7.0	174	8.8
27...	1312	81213	80513	100	100	751	.0	0	7.0	176	8.8
DEC											
12...	0910	80513	80513	102	.00	745	8.1	77	7.5	159	12.0
12...	0912	80020	80513	102	6.00	745	7.8	74	7.5	158	12.0
12...	0913	80513	80513	102	10.0	745	7.7	73	7.5	158	12.0
12...	0914	80513	80513	102	20.1	745	7.6	73	7.5	158	12.0
12...	0915	81213	80513	102	30.0	745	7.5	71	7.3	159	12.0
12...	0916	80513	80513	102	40.1	745	7.4	70	4.3	159	12.0
12...	0917	80513	80513	102	50.2	745	7.3	69	6.0	160	12.0
12...	0918	80513	80513	102	60.1	745	7.2	68	7.4	160	11.9
12...	0919	80513	80513	102	70.1	745	6.1	58	7.2	161	11.9
12...	0921	80513	80513	102	76.1	745	.1	1	7.0	175	10.9
12...	0922	80513	80513	102	80.1	745	.0	0	7.0	182	10.1
12...	0923	80513	80513	102	90.1	745	.0	0	7.0	179	9.4
12...	0926	81213	80513	102	96.0	745	.0	0	7.0	178	9.1
12...	0927	80513	80513	102	100	745	.0	0	7.0	180	9.1
12...	0929	80513	80513	102	102	745	.0	0	7.0	181	9.1
JAN											
15...	1421	80513	80513	106	.60	752	10.2	86	7.6	164	7.4
15...	1424	80020	80513	106	6.00	752	10.1	85	7.7	165	7.1
15...	1425	80513	80513	106	10.0	752	10.2	85	7.6	165	6.9
15...	1426	80513	80513	106	20.0	752	10.0	83	7.5	162	6.7
15...	1427	81213	80513	106	30.0	752	9.9	82	7.4	162	6.7
15...	1428	80513	80513	106	40.0	752	9.9	82	5.5	162	6.7
15...	1430	80513	80513	106	50.0	752	9.8	81	7.6	163	6.7
15...	1431	80513	80513	106	60.0	752	9.8	81	7.6	163	6.7
15...	1432	80513	80513	106	70.0	752	9.8	81	7.6	163	6.7
15...	1433	80513	80513	106	80.0	752	9.8	81	7.6	163	6.7
15...	1434	80513	80513	106	90.0	752	9.8	81	7.6	164	6.6
15...	1435	81213	80513	106	100	752	9.9	82	7.6	164	6.6
15...	1436	80513	80513	106	106	752	9.8	81	7.6	164	6.6
FEB											
05...	0821	80513	80513	109	.40	758	9.9	80	7.1	133	6.3
05...	0822	80020	80513	109	6.00	758	9.6	78	7.1	133	6.3
05...	0823	80513	80513	109	10.0	758	9.6	78	7.1	132	6.3
05...	0824	80513	80513	109	20.0	758	9.5	77	7.0	132	6.3
05...	0825	81213	80513	109	30.0	758	9.9	80	7.6	164	6.3
05...	0826	80513	80513	109	40.0	758	9.4	76	5.3	129	6.3
05...	0827	80513	80513	109	50.0	758	9.4	76	5.9	128	6.3
05...	0828	80513	80513	109	60.0	758	9.3	76	7.0	130	6.3
05...	0829	80513	80513	109	70.0	758	9.4	76	7.1	130	6.3
05...	0830	80513	80513	109	80.0	758	9.3	76	7.1	130	6.3
05...	0831	80513	80513	109	90.0	758	9.6	78	7.2	144	6.4
05...	0832	80513	80513	109	100	758	9.5	77	7.2	143	6.4
05...	0833	81213	80513	109	103	758	9.3	76	7.1	135	6.3
05...	0834	80513	80513	109	109	758	9.1	74	7.1	134	6.3
MAR											
07...	1122	80513	80513	110	.30	748	9.2	76	7.3	119	6.3
07...	1123	80020	80513	110	6.00	748	9.0	74	7.3	119	6.2
07...	1124	80513	80513	110	10.0	748	8.9	73	7.2	119	6.2
07...	1125	80513	80513	110	20.1	748	8.8	72	7.1	122	5.9
07...	1126	81213	80513	110	30.0	748	8.8	72	7.1	131	5.9
07...	1127	80513	80513	110	40.0	748	8.9	72	5.5	126	5.9
07...	1128	80513	80513	110	50.0	748	8.8	72	7.4	130	5.8
07...	1129	80513	80513	110	59.9	748	8.8	72	7.4	130	5.8
07...	1130	80513	80513	110	70.1	748	8.8	72	7.4	130	5.8
07...	1131	80513	80513	110	80.1	748	8.8	71	7.4	131	5.7
07...	1132	80513	80513	110	90.1	748	8.7	71	7.4	132	5.6
07...	1133	80513	80513	110	100	748	8.7	70	7.3	132	5.6
07...	1135	81213	80513	110	104	748	8.7	70	7.3	134	5.6
07...	1136	80513	80513	110	110	748	8.5	69	7.3	131	5.6
APR											
17...	1513	80513	80513	120	.10	748	9.6	99	7.3	99	15.9
17...	1514	80020	80513	120	6.00	748	9.2	91	6.8	98	14.2
17...	1515	80513	80513	120	10.0	748	9.1	91	6.1	97	14.2
17...	1516	80513	80513	120	19.9	748	9.0	89	5.6	97	13.7
17...	1517	81213	80513	120	30.0	748	9.0	84	4.5	101	11.5
17...	1518	80513	80513	120	40.0	748	9.1	82	4.4	110	9.9
17...	1520	80513	80513	120	49.9	748	9.2	82	7.0	112	9.6
17...	1521	80513	80513	120	59.9	748	9.2	82	7.0	116	9.2
17...	1522	80513	80513	120	70.1	748	9.3	81	7.0	126	8.4
17...	1523	80513	80513	120	80.1	748	9.4	81	7.0	131	7.9
17...	1524	80513	80513	120	89.9	748	9.3	79	7.0	133	7.6
17...	1525	80513	80513	120	100	748	9.2	78	7.0	134	7.4
17...	1527	80513	80513	120	110	748	9.0	76	7.0	135	7.3
17...	1528	81213	80513	120	114	748	9.0	76	7.0	136	7.3
17...	1529	80513	80513	120	120	748	8.8	75	7.0	136	7.3

## WHITE RIVER BASIN

## 07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
MAY											
15...	1151	80513	80513	120	.20	750	9.8	108	--	103	19.4
15...	1152	81213	80513	120	6.00	750	9.7	107	--	103	19.4
15...	1153	80513	80513	120	10.0	750	9.6	105	--	104	19.3
15...	1154	80513	80513	120	20.1	750	8.6	93	--	106	18.7
15...	1155	80513	80513	120	24.9	750	7.4	79	--	110	17.9
15...	1156	80513	80513	120	27.1	750	7.1	75	--	110	17.6
15...	1157	80513	80513	120	28.0	750	6.8	72	--	109	17.2
15...	1158	80513	80513	120	29.0	750	6.0	62	--	103	15.8
15...	1159	81213	80513	120	30.0	750	5.8	58	--	102	14.9
15...	1200	80513	80513	120	33.1	750	5.8	58	--	108	14.3
15...	1201	80513	80513	120	35.9	750	5.8	57	--	107	13.9
15...	1202	80513	80513	120	36.9	750	5.3	51	--	98	12.9
15...	1203	80513	80513	120	38.0	750	5.3	51	--	96	12.6
15...	1204	80513	80513	120	40.0	750	5.6	52	--	94	11.4
15...	1205	80513	80513	120	45.0	750	6.1	55	--	98	10.6
15...	1206	80513	80513	120	50.0	750	6.4	58	--	99	10.3
15...	1207	80513	80513	120	60.1	750	7.0	63	--	106	10.0
15...	1208	80513	80513	120	70.1	750	7.5	66	--	117	9.1
15...	1209	80513	80513	120	79.9	750	7.5	66	--	122	8.6
15...	1210	80513	80513	120	90.0	750	7.4	64	--	127	8.2
15...	1211	80513	80513	120	100	750	7.2	62	--	129	8.0
15...	1212	80513	80513	120	110	750	7.0	60	--	131	7.9
15...	1215	81213	80513	120	114	750	6.8	59	--	131	7.9
15...	1216	80513	80513	120	120	750	6.7	57	--	132	7.9
JUN											
18...	1433	80513	80513	119	.10	745	10.0	128	9.2	114	26.8
18...	1434	81213	80513	119	6.00	745	9.9	126	9.1	114	26.7
18...	1435	80513	80513	119	10.0	745	9.2	116	9.1	113	26.0
18...	1436	80513	80513	119	12.2	745	8.2	102	8.8	113	25.2
18...	1437	80513	80513	119	12.9	745	7.9	97	8.7	115	24.8
18...	1439	80513	80513	119	18.0	745	7.0	85	8.2	119	24.2
18...	1440	80513	80513	119	18.7	745	5.9	71	7.8	118	23.4
18...	1441	80513	80513	119	20.3	745	4.3	51	7.6	117	22.8
18...	1442	80513	80513	119	21.2	745	3.2	37	7.5	115	21.3
18...	1443	80513	80513	119	22.9	745	1.9	21	7.3	119	20.5
18...	1444	80513	80513	119	25.9	745	1.8	20	7.3	115	19.7
18...	1445	80513	80513	119	26.8	745	1.5	17	7.2	117	19.2
18...	1446	81213	80513	119	30.0	745	1.3	14	7.2	117	18.3
18...	1447	80513	80513	119	34.1	745	.8	8	7.1	120	17.4
18...	1448	80513	80513	119	37.6	745	.6	6	7.1	120	16.6
18...	1449	80513	80513	119	40.2	745	.9	9	7.1	113	15.7
18...	1450	80513	80513	119	43.1	745	1.3	13	7.1	108	14.7
18...	1451	80513	80513	119	45.1	745	1.4	14	7.0	104	13.9
18...	1452	80513	80513	119	47.0	745	1.9	19	7.0	97	12.9
18...	1453	80513	80513	119	50.3	745	2.6	25	7.0	96	12.2
18...	1454	80513	80513	119	54.8	745	3.5	33	7.0	98	11.3
18...	1455	80513	80513	119	60.0	745	4.5	41	7.0	103	10.6
18...	1456	80513	80513	119	70.4	745	5.4	48	7.0	114	9.8
18...	1457	80513	80513	119	79.9	745	5.5	50	7.0	120	9.4
18...	1458	80513	80513	119	89.7	745	5.2	46	6.9	125	9.1
18...	1459	80513	80513	119	100	745	4.6	40	6.9	129	8.8
18...	1502	80513	80513	119	110	745	3.8	33	6.8	132	8.7
18...	1503	81213	80513	119	113	745	3.6	32	6.9	132	8.6
18...	1504	80513	80513	119	119	745	3.6	31	6.8	132	8.7
JUL											
10...	1106	80513	80513	118	.80	749	7.7	105	8.8	120	31.0
10...	1107	80020	80513	118	6.00	749	7.7	105	8.9	120	30.5
10...	1108	80513	80513	118	9.90	749	8.4	114	9.0	119	30.0
10...	1109	80513	80513	118	12.0	749	9.0	119	9.1	118	29.2
10...	1110	80513	80513	118	14.0	749	7.7	101	8.9	118	28.3
10...	1111	80513	80513	118	16.0	749	5.0	61	7.8	122	24.0
10...	1112	80513	80513	118	17.9	749	2.5	31	7.2	128	25.6
10...	1113	80513	80513	118	19.9	749	.6	8	6.9	135	24.1
10...	1114	80513	80513	118	21.0	749	.6	7	6.8	137	23.3
10...	1115	80513	80513	118	21.0	749	.5	5	6.8	136	23.3
10...	1116	80513	80513	118	23.0	749	.2	3	6.8	138	22.3
10...	1117	80513	80513	118	24.9	749	.2	3	6.7	143	21.4
10...	1118	80513	80513	118	26.9	749	.2	2	6.7	140	20.3
10...	1119	81213	80513	118	30.0	749	.2	2	6.7	133	19.0
10...	1120	80513	80513	118	31.9	749	.2	2	6.7	130	18.3
10...	1121	80513	80513	118	36.0	749	.1	2	6.7	132	17.1
10...	1122	80513	80513	118	40.0	749	.1	2	6.7	126	15.8
10...	1123	80513	80513	118	43.0	749	.1	1	6.6	117	14.9
10...	1124	80513	80513	118	45.8	749	.1	1	6.6	108	13.8
10...	1125	80513	80513	118	46.0	749	.3	3	6.6	106	13.4
10...	1126	80513	80513	118	50.0	749	1.1	11	6.6	102	12.1
10...	1127	80513	80513	118	54.9	749	2.3	21	6.6	100	11.1
10...	1128	80513	80513	118	60.2	749	3.0	27	6.6	104	10.4
10...	1130	80513	80513	118	70.0	749	4.2	37	6.7	112	9.6
10...	1131	80513	80513	118	80.0	749	4.5	40	6.7	119	9.2
10...	1132	80513	80513	118	89.9	749	4.0	35	6.7	126	8.8
10...	1133	80513	80513	118	100	749	3.5	30	6.7	129	8.6
10...	1134	80513	80513	118	110	749	2.2	19	6.6	133	8.4
10...	1136	81213	80513	118	112	749	1.6	14	6.6	133	8.4
10...	1137	80513	80513	118	118	749	1.6	14	6.6	133	8.4

WHITE RIVER BASIN

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
JUL											
24...	1234	80513	80513	116	.80	750	8.1	110	8.8	122	30.2
24...	1235	80020	80513	116	6.00	750	8.3	111	8.8	121	29.4
24...	1236	80513	80513	116	10.0	750	7.9	105	8.8	122	29.1
24...	1237	80513	80513	116	16.0	750	6.6	86	8.3	124	28.1
24...	1238	80513	80513	116	18.0	750	4.9	63	7.6	127	26.9
24...	1239	80513	80513	116	20.0	750	4.2	52	7.3	129	25.9
24...	1240	80513	80513	116	22.0	750	1.6	19	7.1	131	24.0
24...	1241	80513	80513	116	24.0	750	.4	5	6.9	134	22.9
24...	1242	80513	80513	116	26.0	750	.3	4	6.9	134	21.9
24...	1243	80513	80513	116	28.0	750	.3	3	6.8	133	21.1
24...	1244	81213	80513	116	30.0	750	.3	3	6.8	128	20.2
24...	1245	80513	80513	116	32.0	750	.3	3	6.8	123	19.0
24...	1246	80513	80513	116	34.0	750	.2	3	6.7	120	18.3
24...	1247	80513	80513	116	40.0	750	.2	3	6.7	122	16.7
24...	1248	80513	80513	116	45.0	750	.2	2	6.7	113	14.5
24...	1249	80513	80513	116	50.0	750	.2	2	6.6	105	12.9
24...	1250	80513	80513	116	60.0	750	1.8	16	6.6	102	10.8
24...	1251	80513	80513	116	70.0	750	3.1	28	6.6	108	9.8
24...	1252	80513	80513	116	80.0	750	3.7	33	6.7	115	9.2
24...	1253	80513	80513	116	90.0	750	3.0	26	6.6	121	8.8
24...	1254	80513	80513	116	100	750	1.8	16	6.6	126	8.6
24...	1255	81213	80513	116	110	750	.8	7	6.6	129	8.5
24...	1256	80513	80513	116	116	750	.5	5	6.7	132	8.5
AUG											
21...	1046	80513	80513	117	.10	747	8.0	106	8.3	131	28.9
21...	1047	81213	80513	117	6.30	747	7.8	104	8.3	130	28.8
21...	1048	80513	80513	117	10.2	747	8.0	105	8.4	129	28.3
21...	1049	80513	80513	117	20.2	747	7.3	95	8.2	128	27.5
21...	1051	80513	80513	117	22.3	747	6.3	82	7.8	130	27.4
21...	1052	80513	80513	117	23.1	747	5.2	66	7.4	130	26.7
21...	1053	80513	80513	117	25.1	747	3.5	44	7.1	129	25.7
21...	1054	80513	80513	117	26.3	747	1.6	20	6.8	129	24.8
21...	1055	80513	80513	117	27.9	747	.4	5	6.7	128	23.4
21...	1056	80513	80513	117	28.4	747	.3	3	6.7	128	22.2
21...	1057	80513	80513	117	29.0	747	.3	3	6.6	130	21.2
21...	1058	81213	80513	117	30.2	747	.2	3	6.6	131	20.9
21...	1059	80513	80513	117	32.1	747	.2	2	6.6	130	19.7
21...	1100	80513	80513	117	34.3	747	.2	2	6.6	129	18.9
21...	1101	80513	80513	117	37.2	747	.2	2	6.6	128	17.9
21...	1102	80513	80513	117	40.0	747	.2	2	6.6	132	17.1
21...	1103	80513	80513	117	44.0	747	.2	2	6.6	129	15.9
21...	1106	80513	80513	117	49.0	747	.2	2	6.5	120	13.9
21...	1107	80513	80513	117	50.1	747	.2	2	6.5	114	13.6
21...	1108	80513	80513	117	53.2	747	.2	2	6.5	109	12.5
21...	1109	80513	80513	117	57.0	747	.2	2	6.4	106	11.4
21...	1110	80513	80513	117	60.1	747	.3	2	6.4	106	10.9
21...	1111	80513	80513	117	70.3	747	1.0	9	6.5	110	9.8
21...	1112	80513	80513	117	80.1	747	1.2	10	6.5	116	9.3
21...	1113	80513	80513	117	90.3	747	.6	5	6.5	122	9.0
21...	1114	80513	80513	117	100	747	.2	2	6.5	128	8.8
21...	1115	80513	80513	117	110	747	.2	2	6.6	134	8.7
21...	1116	81213	80513	117	111	747	.2	1	6.6	134	8.7
21...	1117	80513	80513	117	117	747	.2	2	6.6	135	8.7
SEP											
04...	1231	80513	80513	112	.70	750	7.1	95	8.3	134	29.8
04...	1232	81213	80513	112	6.00	750	7.2	95	8.4	134	28.9
04...	1233	80513	80513	112	10.0	750	7.2	95	8.4	133	28.8
04...	1234	80513	80513	112	20.0	750	5.8	75	7.8	135	28.0
04...	1236	80513	80513	112	22.0	750	3.1	40	7.2	137	27.2
04...	1237	80513	80513	112	24.0	750	.9	12	7.0	142	25.8
04...	1238	80513	80513	112	26.0	750	.3	4	6.8	169	24.1
04...	1239	80513	80513	112	28.0	750	.3	3	6.8	172	22.8
04...	1240	81213	80513	112	30.0	750	.2	3	6.8	148	21.2
04...	1241	80513	80513	112	33.0	750	.2	2	6.7	132	19.9
04...	1242	80513	80513	112	35.2	750	.2	2	6.7	131	19.1
04...	1243	80513	80513	112	37.1	750	.1	2	6.7	135	17.9
04...	1244	80513	80513	112	40.2	750	.2	2	6.7	131	16.8
04...	1245	80513	80513	112	43.0	750	.1	1	6.7	127	15.6
04...	1246	80513	80513	112	46.0	750	.1	1	6.6	122	14.6
04...	1247	80513	80513	112	50.1	750	.1	1	6.6	114	13.4
04...	1248	80513	80513	112	55.1	750	.1	1	6.5	110	12.2
04...	1249	80513	80513	112	60.0	750	.1	1	6.5	109	11.2
04...	1250	80513	80513	112	65.0	750	.2	2	6.5	109	10.4
04...	1251	80513	80513	112	69.9	750	.6	5	6.5	112	9.9
04...	1252	80513	80513	112	79.9	750	.4	3	6.5	117	9.4
04...	1253	80513	80513	112	90.0	750	.1	0	6.6	124	9.1
04...	1254	80513	80513	112	100	750	.1	0	6.6	131	8.9
04...	1256	81213	80513	112	106	750	.1	0	6.7	135	8.8
04...	1257	80513	80513	112	110	750	.1	0	6.7	138	8.8
04...	1258	80513	80513	112	112	750	.1	0	6.8	140	8.8

## WHITE RIVER BASIN

## 07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TUR- BID- ITY (NTU) (00076)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, SOLVED (MG/L AS MG) (00925)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT											
03...	1324	6.00	2.10	1.0	68	24.0	2.00	5.00	<.1	8.80	84
03...	1331	30.0	--	.74	68	24.0	2.00	4.70	<.1	8.70	84
03...	1355	95.2	--	10	69	24.0	2.10	4.70	<.1	8.40	95
16...	1247	6.00	2.00	1.4	68	24.0	2.00	4.70	<.1	8.50	87
16...	1250	30.0	--	1.6	65	23.0	1.90	4.60	<.1	8.50	87
16...	1301	96.0	--	15	69	24.0	2.10	4.70	<.1	8.10	100
31...	1244	6.00	2.60	.93	71	25.0	2.10	5.10	<.1	8.60	90
31...	1247	30.0	--	.56	71	25.0	2.10	5.10	<.1	8.70	91
31...	1301	96.0	--	24	69	24.0	2.10	4.60	<.1	8.00	101
NOV											
07...	0948	6.00	3.00	.29	71	25.0	2.00	5.00	<.1	8.60	83
07...	0951	30.0	--	.33	69	24.0	2.10	4.60	<.1	8.60	86
07...	1004	97.0	--	26	69	24.0	2.20	4.60	<.1	7.90	100
27...	1258	6.00	2.20	1.6	71	25.0	2.10	5.10	<.1	9.10	87
27...	1301	30.0	--	1.1	71	25.0	2.10	5.20	<.1	9.10	82
27...	1312	100	--	20	69	24.0	2.10	4.70	<.1	7.70	95
DEC											
12...	0912	6.00	1.80	1.2	71	25.0	2.10	5.10	<.1	9.00	97
12...	0915	30.0	--	1.5	71	25.0	2.10	5.20	<.1	9.10	102
12...	0926	96.0	--	16	71	25.0	2.10	4.60	<.1	7.60	116
JAN											
15...	1424	6.00	1.90	2.6	71	25.0	2.20	5.20	<.1	11.0	96
15...	1427	30.0	--	2.5	71	25.0	2.20	5.30	<.1	11.0	94
15...	1435	100	--	3.0	71	25.0	2.20	5.30	<.1	11.0	97
FEB											
05...	0822	6.00	.70	17	57	20.0	1.80	4.20	<.1	9.10	90
05...	0825	30.0	--	17	57	20.0	1.80	4.20	<.1	9.10	87
05...	0833	103	--	15	58	20.0	1.90	4.30	<.1	9.20	90
MAR											
07...	1123	6.00	.91	14	52	18.0	1.70	3.90	<.1	8.90	80
07...	1126	30.0	--	12	55	19.0	1.80	4.00	<.1	9.10	82
07...	1135	104	--	11	57	20.0	1.80	4.20	<.1	9.30	86
APR											
17...	1514	6.00	.49	27	43	15.0	1.40	2.90	<.1	6.30	64
17...	1517	30.0	--	18	44	15.0	1.50	3.10	<.1	7.10	66
17...	1528	114	--	6.2	60	21.0	1.90	4.20	<.1	9.30	93
MAY											
15...	1152	6.00	1.70	1.7	46	16.0	1.40	2.90	<.1	6.40	60
15...	1159	30.0	--	5.3	49	17.0	1.50	3.20	<.1	7.00	79
15...	1215	114	--	4.8	60	21.0	1.80	4.10	<.1	9.10	79
JUN											
18...	1434	6.00	1.50	1.5	49	17.0	1.50	3.00	<.1	6.20	63
18...	1446	30.0	--	1.8	51	18.0	1.50	3.00	<.1	6.10	68
18...	1503	113	--	4.5	60	21.0	1.90	4.10	<.1	8.70	85
JUL											
10...	1107	6.00	3.70	.43	52	18.0	1.70	3.20	<.1	6.50	71
10...	1119	30.0	--	2.8	62	22.0	1.70	3.50	<.1	6.40	82
10...	1136	112	--	3.2	58	20.0	2.00	4.10	<.1	8.40	85
24...	1235	6.00	2.70	.79	54	19.0	1.70	3.30	<.1	6.40	68
24...	1244	30.0	--	1.2	59	21.0	1.70	3.40	<.1	6.30	79
24...	1255	110	--	3.3	58	20.0	1.90	4.00	<.1	8.20	78
AUG											
21...	1047	6.30	7.80	1.2	60	21.0	1.80	3.50	<.1	6.40	99
21...	1058	30.2	--	4.5	59	21.0	1.70	3.40	<.1	6.10	77
21...	1116	111	--	3.2	57	19.9	1.91	3.88	.1	7.68	82
SEP											
04...	1232	6.00	2.40	1.3	60	21.0	1.80	3.40	<.1	6.50	75
04...	1240	30.0	--	8.1	68	24.0	1.90	3.80	<.1	6.60	98
04...	1256	106	--	3.8	57	20.0	1.80	3.70	<.1	7.40	88

Date	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + DIS- TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
OCT											
03...	.02	.20	.03	--	--	.17	--	<.010	.18	.37	--
03...	.02	.30	.03	--	--	.18	--	<.010	.28	.48	--
03...	.46	.60	.59	.40	1.77	.44	.131	.040	.14	1.0	--
16...	.05	.30	.06	--	--	.15	--	<.010	.25	.45	--
16...	.04	.30	.05	--	--	.17	--	<.010	.26	.47	.031
16...	.49	.70	.63	.29	1.28	.32	.099	.030	.21	1.0	.031
31...	.04	<.20	.05	--	--	.18	--	<.010	--	--	--
31...	.04	<.20	.05	--	--	.18	--	<.010	--	--	--
31...	.66	.70	.85	.16	.708	.20	.131	.040	.04	.90	--
NOV											
07...	.02	.20	.03	--	--	.18	--	<.010	.18	.38	--
07...	.02	.30	.03	--	--	.16	--	<.010	.28	.46	.031
07...	.70	.90	.90	.11	.487	.15	.131	.040	.20	1.1	.031
27...	.05	.30	.06	.24	1.06	.25	.033	.010	.25	.55	--
27...	.05	.20	.06	.23	1.02	.24	.033	.010	.15	.44	--
27...	.70	1.0	.90	.04	.177	.07	.099	.030	.30	1.1	.031

WHITE RIVER BASIN

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + DIS-SOLVED TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
DEC											
12...	<.01	.20	--	--	--	.30	--	<.010	--	.50	--
12...	<.01	<.20	--	--	--	.31	--	<.010	--	--	--
12...	.66	1.0	.85	--	--	<.02	--	<.010	.34	--	--
JAN											
15...	<.01	<.20	--	--	--	.48	--	<.010	--	--	--
15...	<.01	<.20	--	--	--	.46	--	<.010	--	--	--
15...	<.01	<.20	--	--	--	.48	--	<.010	--	--	--
FEB											
05...	<.01	.30	--	--	--	.87	--	<.010	--	1.2	.03
05...	<.01	.30	--	--	--	.87	--	<.010	--	1.2	.03
05...	<.01	.30	--	--	--	.83	--	<.010	--	1.1	.02
MAR											
07...	<.01	<.20	--	1.20	<.010	--	--	.123	<.02	.04	<.02
07...	.01	<.20	.01	1.10	<.010	--	--	.123	<.02	.04	.04
07...	.02	<.20	.03	.97	<.010	--	--	.123	<.02	.04	.03
APR											
17...	.03	.30	.04	.91	<.010	.27	1.2	.061	<.02	.02	.03
17...	.03	<.20	.04	.89	<.010	--	--	.061	<.02	.02	.02
17...	.02	<.20	.03	.97	<.010	--	--	.031	<.02	.01	<.02
MAY											
15...	<.01	.50	--	--	--	.62	--	<.010	--	1.1	--
15...	.02	.40	.03	.84	3.72	.85	.033	.010	.38	1.2	--
15...	.01	.40	.01	--	--	.97	--	<.010	.39	1.4	--
JUN											
18...	<.01	.40	--	.14	.620	.15	.033	.010	--	.55	.031
18...	.02	.20	.03	.71	3.14	.72	.033	.010	.18	.92	.031
18...	.04	<.20	.05	.94	4.16	.95	.033	.010	--	--	.061
JUL											
10...	.01	.20	.01	--	--	.04	--	<.010	.19	.24	--
10...	.03	.20	.04	.34	1.51	.46	.394	.120	.17	.66	--
10...	<.01	.20	--	--	--	.94	--	<.010	--	1.1	--
24...	<.01	.20	--	--	--	<.02	--	<.010	--	--	--
24...	.05	.20	.06	.21	.930	.27	.197	.060	.15	.47	--
24...	.02	<.20	.03	.89	3.94	.90	.033	.010	--	--	--
AUG											
21...	<.01	<.20	--	--	--	<.02	--	<.010	--	--	--
21...	.07	<.20	.09	--	--	<.02	--	<.010	--	--	--
21...	.18	.40	.23	.74	3.28	.76	.066	.020	.22	1.2	--
SEP											
04...	<.01	.30	--	--	--	<.02	--	<.010	--	--	--
04...	.01	.40	.01	--	--	<.02	--	<.010	.39	--	--
04...	.18	.40	.23	.66	2.92	.69	.099	.030	.22	1.1	--

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0, 7 (COLS./100 ML) (31625)	CHLOR-A PHYTO-PLANKTON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT									
03...	<.02	<.01	<.02	2.1	2.3	<1	6.8	20	23
03...	<.02	<.01	<.02	2.3	2.3	--	--	20	26
03...	<.02	<.01	.02	2.6	2.7	--	--	519	2670
16...	<.02	<.01	<.02	2.9	3.2	E2	7.5	32	42
16...	<.02	.01	<.02	2.5	2.7	--	--	44	49
16...	<.02	.01	<.02	3.2	3.2	--	--	619	3240
31...	<.02	<.01	<.02	2.4	3.8	<1	6.6	23	29
31...	<.02	<.01	<.02	2.2	3.0	--	--	26	33
31...	<.02	<.01	.02	2.4	3.2	--	--	918	4320
NOV									
07...	<.02	<.01	<.02	3.3	3.6	<1	7.3	19	16
07...	<.02	.01	<.02	3.4	3.7	--	--	31	37
07...	<.02	.01	.03	3.6	3.7	--	--	921	4320
27...	<.02	<.01	<.02	2.9	3.2	<1	3.7	49	192
27...	<.02	<.01	<.02	3.1	3.1	--	--	54	192
27...	<.02	.01	.03	3.0	3.2	--	--	895	5260
DEC									
12...	<.02	<.01	<.02	2.8	2.2	<1	6.8	51	113
12...	<.02	<.01	<.02	17.0	2.6	--	--	60	147
12...	<.02	<.01	.03	3.2	2.6	--	--	741	6040
JAN									
15...	<.02	<.01	<.02	3.0	3.7	E1	2.0	107	43
15...	<.02	<.01	<.02	3.1	3.3	--	--	83	42
15...	<.02	<.01	<.02	2.5	3.9	--	--	106	52
FEB									
05...	<.02	.02	.03	2.7	3.4	<2	1.4	465	56
05...	<.02	.01	.03	2.6	2.9	--	--	482	57
05...	<.02	.01	.02	2.6	2.7	--	--	438	61
MAR									
07...	<.02	.04	<.02	4.0	4.2	<1	2.4	399	36
07...	<.02	.04	.04	4.2	4.5	--	--	355	38
07...	<.02	.04	.03	4.7	4.7	--	--	325	65

## WHITE RIVER BASIN

## 07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (006666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0, 7 UM-MF (COLS./ 100 ML) (31625)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
APR									
17...	<.02	.02	.03	2.6	2.6	E21	10.0	562	29
17...	<.02	.02	.02	2.2	2.1	--	--	406	25
17...	<.02	.01	<.02	2.3	2.2	--	--	196	74
MAY									
15...	<.02	<.01	<.02	3.0	3.1	E5	9.6	49	7
15...	<.02	<.01	<.02	2.9	3.2	--	--	<2	<1
15...	<.02	<.01	<.02	2.8	2.8	--	--	128	128
JUN									
18...	<.02	.01	<.02	2.9	3.0	E13	17.0	15	10
18...	<.02	.01	<.02	2.6	2.6	--	--	65	25
18...	<.02	.02	.02	2.4	2.4	--	--	73	211
JUL									
10...	<.02	<.01	.02	3.0	3.2	E3	2.4	11	13
10...	<.02	<.01	.02	2.6	2.7	--	--	37	186
10...	<.02	<.01	.02	5.8	6.9	--	--	63	163
24...	.02	<.01	.02	2.1	2.9	E7	5.4	15	12
24...	.02	<.01	.02	3.0	2.9	--	--	28	108
24...	.02	<.01	.03	2.8	2.7	--	--	55	181
AUG									
21...	<.02	<.01	<.02	2.6	2.8	<1	6.2	10	18
21...	<.02	<.01	<.02	2.5	2.6	--	--	15	390
21...	<.02	<.01	<.02	2.3	2.1	--	--	67	1530
SEP									
04...	<.02	<.01	<.02	2.3	2.2	E2	3.0	14	22
04...	<.02	<.01	<.02	2.5	2.3	--	--	61	1250
04...	<.02	<.01	<.02	2.4	2.4	--	--	157	1600

Remark codes used in this report:

< -- Less than  
E -- Estimated value

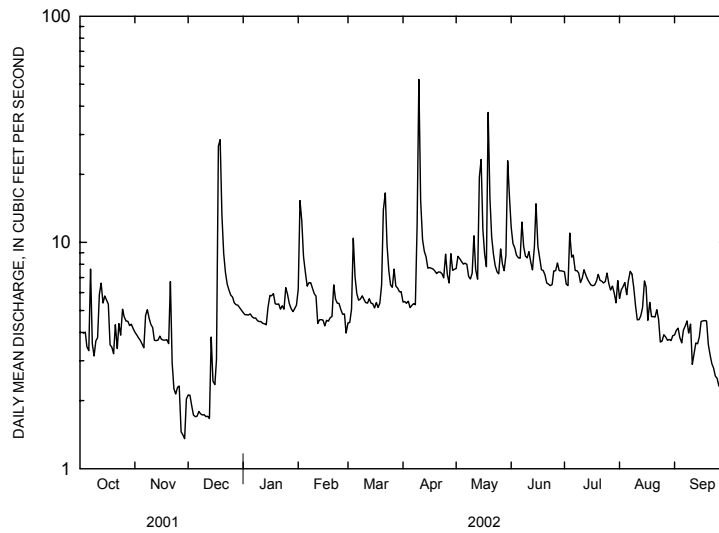


WHITE RIVER BASIN

07049563 PRAIRIE CREEK NORTHEAST OF ROGERS--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	1664.4		2298.8			
ANNUAL MEAN	4.560		6.298		5.375	
HIGHEST ANNUAL MEAN					6.30	2002
LOWEST ANNUAL MEAN					4.45	2001
HIGHEST DAILY MEAN	66	Feb 24	52	Apr 8	81	Jun 21 2000
LOWEST DAILY MEAN	1.4	Nov 26	1.4	Nov 26	0.84	Jun 5 2000
ANNUAL SEVEN-DAY MINIMUM	1.7	Dec 2	1.7	Dec 2	1.7	Dec 2 2001
MAXIMUM PEAK FLOW			112	Apr 8	243	May 23 2000
MAXIMUM PEAK STAGE			2.03	Apr 8	2.25	May 23 2000
INSTANTANEOUS LOW FLOW			0.40	Dec 5	0.00	<sup>1</sup> Dec 18 2000
ANNUAL RUNOFF (AC-FT)	3300		4560		3890	
10 PERCENT EXCEEDS	7.4		8.9		8.6	
50 PERCENT EXCEEDS	3.7		5.4		4.5	
90 PERCENT EXCEEDS	2.3		3.2		2.5	

<sup>1</sup>Also December 20, 2000  
<sup>e</sup>Estimated





WHITE RIVER BASIN

135

07049690 BEAVER LAKE NEAR EUREKA SPRINGS

LOCATION.--Lat 36°25'15", long 93°50'50", in NW1/4NW1/4 sec.10, T.20 N., R.27 W., Carroll County, Hydrologic Unit 11010001, at dam on White River, 6.0 mi west of Eureka Springs, and at mile 609.0.

PERIOD RECORD.--December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-PLING DEPTH (FEET) (00003)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT											
02...	1109	80513	80513	179	.20	753	8.2	96	8.2	180	22.5
02...	1110	80513	80513	179	10.1	753	8.2	96	8.2	182	22.4
02...	1111	80513	80513	179	20.0	753	8.2	96	8.2	181	22.4
02...	1112	80513	80513	179	30.0	753	8.0	94	8.2	182	22.4
02...	1113	80513	80513	179	40.0	753	8.0	93	8.2	182	22.4
02...	1114	80513	80513	179	43.0	753	7.8	91	8.2	193	22.0
02...	1116	80513	80513	179	44.0	753	7.8	89	7.9	214	21.0
02...	1117	80513	80513	179	45.0	753	8.0	88	7.7	258	19.1
02...	1118	80513	80513	179	46.0	753	8.1	87	7.6	290	17.9
02...	1119	80513	80513	179	46.9	753	8.2	86	7.6	312	17.0
02...	1120	80513	80513	179	48.1	753	8.0	82	7.5	342	16.0
02...	1121	80513	80513	179	49.0	753	8.1	82	7.5	354	15.5
02...	1122	80513	80513	179	50.1	753	8.0	81	7.5	358	15.1
02...	1123	80513	80513	179	52.0	753	7.8	77	7.4	250	14.1
02...	1124	80513	80513	179	54.9	753	7.8	75	7.3	171	13.2
02...	1126	80513	80513	179	60.2	753	7.3	69	7.2	132	12.0
02...	1127	80513	80513	179	65.1	753	6.8	63	7.2	132	11.0
02...	1128	80513	80513	179	69.9	753	6.4	57	7.1	132	10.1
02...	1129	80513	80513	179	80.0	753	5.9	52	7.0	131	9.1
02...	1130	80513	80513	179	90.1	753	5.7	49	7.0	132	8.4
02...	1131	80513	80513	179	100	753	5.7	49	7.0	131	8.0
02...	1132	80513	80513	179	110	753	5.6	47	7.0	132	7.7
02...	1133	80513	80513	179	120	753	5.4	45	6.9	131	7.5
02...	1134	80513	80513	179	130	753	5.1	43	6.9	132	7.2
02...	1135	80513	80513	179	140	753	4.8	40	6.9	132	7.2
02...	1136	80513	80513	179	150	753	4.5	38	6.9	132	7.0
02...	1137	80513	80513	179	160	753	4.5	37	6.9	131	7.0
02...	1138	80513	80513	179	170	753	3.8	32	6.8	132	7.0
02...	1140	80513	80513	179	179	753	3.4	28	6.8	132	7.1
03...	0904	80513	80513	172	.40	743	9.5	112	8.1	152	22.2
03...	0905	80020	80513	172	6.10	743	9.5	112	8.1	151	22.2
03...	0906	80513	80513	172	10.0	743	9.4	112	8.1	152	22.2
03...	0908	80513	80513	172	20.2	743	9.4	111	8.1	151	22.3
03...	0909	81213	80513	172	30.0	743	9.4	111	8.1	152	22.3
03...	0911	80513	80513	172	40.1	743	9.4	111	8.1	151	22.3
03...	0912	80513	80513	172	43.1	743	9.4	111	8.1	151	22.3
03...	0914	80513	80513	172	44.1	743	9.2	108	8.0	150	21.9
03...	0915	80513	80513	172	45.0	743	9.4	105	7.5	151	19.3
03...	0916	80513	80513	172	45.9	743	9.4	102	7.5	149	17.7
03...	0917	80513	80513	172	47.0	743	9.3	99	7.5	148	17.0
03...	0918	80513	80513	172	48.1	743	9.3	98	7.5	148	16.4
03...	0919	80513	80513	172	49.1	743	9.3	97	7.5	149	15.8
03...	0920	80513	80513	172	50.1	743	9.3	95	7.5	148	15.2
03...	0921	80513	80513	172	52.2	743	9.0	90	7.5	147	14.3
03...	0922	80513	80513	172	53.9	743	8.7	86	7.4	147	13.5
03...	0923	80513	80513	172	57.0	743	8.5	82	7.4	146	12.6
03...	0924	80513	80513	172	60.2	743	8.1	77	7.4	146	11.8
03...	0926	80513	80513	172	64.5	743	7.4	68	7.3	145	10.7
03...	0927	80513	80513	172	69.9	743	6.9	63	7.3	145	9.9
03...	0928	80513	80513	172	75.1	743	6.6	59	7.3	145	9.3
03...	0929	80513	80513	172	80.0	743	6.5	58	7.2	145	9.0
03...	0930	80513	80513	172	90.1	743	6.3	55	7.2	145	8.4
03...	0931	80513	80513	172	100	743	6.3	55	7.2	145	7.9
03...	0933	80513	80513	172	110	743	6.0	52	7.1	146	7.6
03...	0934	80513	80513	172	120	743	5.8	50	7.0	145	7.4
03...	0935	80513	80513	172	130	743	5.7	48	7.0	145	7.3
03...	0936	80513	80513	172	140	743	5.2	44	7.0	146	7.1
03...	0937	80513	80513	172	150	743	5.1	43	6.9	146	7.1
03...	0938	80513	80513	172	160	743	4.8	40	6.9	146	7.1
03...	0939	80513	80513	172	165	743	4.4	37	6.8	146	7.0
03...	0941	81213	80513	172	166	743	4.1	34	6.8	146	7.0
03...	0942	80513	80513	172	170	743	4.0	34	6.7	146	7.0
03...	0943	80513	80513	172	172	743	3.9	33	6.7	146	7.0
16...	0832	80513	80513	174	.90	752	8.1	88	8.5	148	19.1
16...	0834	80020	80513	174	6.00	752	8.0	88	8.5	148	19.2
16...	0839	80513	80513	174	10.2	752	8.1	89	8.4	148	19.2
16...	0840	80513	80513	174	20.1	752	8.0	88	8.4	148	19.2
16...	0842	81213	80513	174	30.0	752	8.0	88	8.0	148	19.2
16...	0843	80513	80513	174	39.9	752	8.0	88	8.1	148	19.2
16...	0845	80513	80513	174	50.1	752	7.9	86	8.3	148	18.8
16...	0846	80513	80513	174	51.1	752	7.6	81	7.8	148	18.0
16...	0847	80513	80513	174	52.2	752	7.2	72	7.2	147	15.0
16...	0848	80513	80513	174	52.9	752	7.1	70	7.3	146	14.2
16...	0849	80513	80513	174	56.0	752	7.1	69	7.4	146	13.2
16...	0850	80513	80513	174	60.2	752	6.9	65	7.4	146	12.3
16...	0851	80513	80513	174	65.1	752	5.7	52	7.2	146	10.9
16...	0852	80513	80513	174	70.0	752	5.3	48	7.2	146	10.2
16...	0853	80513	80513	174	75.1	752	5.0	44	7.2	146	9.5
16...	0854	80513	80513	174	80.1	752	4.8	42	7.1	146	9.1
16...	0855	80513	80513	174	90.1	752	4.8	42	7.1	146	8.5
16...	0856	80513	80513	174	100	752	4.7	40	7.1	147	8.0
16...	0857	80513	80513	174	110	752	4.7	40	7.1	146	7.5
16...	0858	80513	80513	174	120	752	4.5	38	7.1	146	7.1
16...	0859	80513	80513	174	130	752	4.2	35	7.1	146	7.0

## WHITE RIVER BASIN

## 07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
16...	0900	80513	80513	174	140	752	3.9	32	7.1	146	6.8
16...	0901	80513	80513	174	150	752	3.5	29	7.0	147	6.8
16...	0902	80513	80513	174	160	752	3.3	28	7.0	146	6.7
16...	0903	81213	80513	174	168	752	3.2	27	7.0	147	6.7
16...	0904	80513	80513	174	170	752	3.2	26	7.0	147	6.7
16...	0905	80513	80513	174	174	752	2.8	23	7.0	147	6.7
31...	0850	80513	80513	176	10.1	750	9.2	98	8.2	148	17.6
31...	0852	80020	80513	176	6.00	750	9.0	96	8.2	149	17.6
31...	0853	80513	80513	176	10.1	750	8.8	94	8.2	149	17.6
31...	0857	80513	80513	176	20.2	750	8.8	94	8.2	149	17.6
31...	0858	81213	80513	176	30.0	750	8.8	93	8.1	149	17.6
31...	0859	80513	80513	176	40.0	750	8.8	93	5.7	149	17.6
31...	0900	80513	80513	176	49.8	750	8.7	93	5.0	149	17.5
31...	0901	80513	80513	176	52.2	750	8.1	86	7.8	148	17.1
31...	0902	80513	80513	176	54.0	750	7.6	78	7.6	149	16.4
31...	0903	80513	80513	176	54.9	750	6.5	66	7.3	149	15.0
31...	0904	80513	80513	176	55.9	750	6.2	62	7.2	148	14.4
31...	0905	80513	80513	176	57.0	750	6.2	60	7.2	148	13.3
31...	0906	80513	80513	176	58.2	750	6.0	58	7.1	148	12.5
31...	0907	80513	80513	176	60.4	750	5.6	53	7.1	147	11.9
31...	0908	80513	80513	176	63.2	750	5.5	51	7.0	148	11.1
31...	0909	80513	80513	176	66.9	750	5.1	46	7.0	148	10.3
31...	0910	80513	80513	176	70.4	750	4.8	43	7.0	148	9.8
31...	0912	80513	80513	176	80.1	750	4.3	38	6.9	148	8.9
31...	0913	80513	80513	176	90.5	750	4.4	38	6.9	148	8.4
31...	0914	80513	80513	176	99.1	750	4.3	37	6.9	148	8.0
31...	0915	80513	80513	176	110	750	4.3	36	6.9	148	7.5
31...	0916	80513	80513	176	120	750	4.0	33	6.9	148	7.2
31...	0917	80513	80513	176	130	750	3.6	30	6.9	148	7.0
31...	0918	80513	80513	176	140	750	3.5	29	6.8	148	6.9
31...	0921	80513	80513	176	150	750	3.3	28	6.8	149	6.9
31...	0925	80513	80513	176	160	750	2.9	24	6.9	149	6.8
31...	0927	81213	80513	176	170	750	2.3	19	6.8	149	6.8
31...	0928	80513	80513	176	176	750	1.9	16	6.8	149	6.8
NOV											
06...	1035	80513	80513	185	10.20	755	9.1	--	7.6	--	17.2
06...	1036	80513	80513	185	10.0	755	9.1	--	7.7	--	17.2
06...	1037	80513	80513	185	20.0	755	8.9	--	7.7	--	17.2
06...	1038	80513	80513	185	30.2	755	8.9	--	7.8	--	17.2
06...	1040	80513	80513	185	40.2	755	8.8	--	7.8	--	17.2
06...	1041	80513	80513	185	50.0	755	8.7	--	7.8	--	17.2
06...	1044	80513	80513	185	55.0	755	7.5	--	7.4	--	16.4
06...	1045	80513	80513	185	57.0	755	6.8	--	7.2	--	15.7
06...	1046	80513	80513	185	58.0	755	5.9	--	7.1	--	14.8
06...	1047	80513	80513	185	59.0	755	5.7	--	7.0	--	13.6
06...	1048	80513	80513	185	60.1	755	5.5	--	6.9	--	13.1
06...	1049	80513	80513	185	62.0	755	5.3	--	6.9	--	11.8
06...	1050	80513	80513	185	65.0	755	5.1	--	6.8	--	11.1
06...	1051	80513	80513	185	70.0	755	4.8	--	6.8	--	10.4
06...	1052	80513	80513	185	80.0	755	4.5	--	6.8	--	9.6
06...	1053	80513	80513	185	90.1	755	4.4	--	6.7	--	9.0
06...	1054	80513	80513	185	100	755	4.4	--	6.7	--	8.4
06...	1055	80513	80513	185	110	755	4.4	--	6.7	--	8.2
06...	1056	80513	80513	185	120	755	4.3	--	6.7	--	7.9
06...	1057	80513	80513	185	130	755	4.1	--	6.7	--	7.7
06...	1058	80513	80513	185	140	755	3.7	--	6.7	--	7.4
06...	1059	80513	80513	185	150	755	3.5	--	6.6	--	7.4
06...	1100	80513	80513	185	160	755	3.2	--	6.6	--	7.3
06...	1101	80513	80513	185	170	755	2.9	--	6.6	--	7.2
06...	1102	80513	80513	185	180	755	1.8	--	6.6	--	7.2
06...	1104	80513	80513	185	185	755	1.5	--	6.6	--	7.2
08...	0852	80513	80513	180	10.90	756	8.8	93	8.3	148	17.3
08...	0854	80020	80513	180	6.00	756	8.8	93	8.3	149	17.4
08...	0855	80513	80513	180	10.1	756	8.8	93	8.3	149	17.4
08...	0856	80513	80513	180	20.2	756	8.8	92	8.3	150	17.4
08...	0857	81213	80513	180	30.0	756	8.8	92	8.3	150	17.4
08...	0858	80513	80513	180	40.1	756	8.5	90	7.1	150	17.2
08...	0900	80513	80513	180	46.1	756	8.2	86	7.0	150	17.1
08...	0901	80513	80513	180	50.1	756	8.0	84	6.8	150	17.0
08...	0902	80513	80513	180	55.2	756	7.2	74	7.6	151	16.1
08...	0903	80513	80513	180	57.1	756	5.7	57	7.2	150	14.7
08...	0904	80513	80513	180	58.0	756	5.4	52	7.2	149	13.5
08...	0905	80513	80513	180	61.2	756	5.3	50	7.1	149	12.3
08...	0906	80513	80513	180	60.1	756	4.7	43	7.1	149	11.8
08...	0907	80513	80513	180	60.1	756	4.7	43	7.1	149	11.8
08...	0908	80513	80513	180	66.9	756	4.6	41	7.0	148	10.2
08...	0910	80513	80513	180	70.2	756	4.4	39	7.0	148	10.0
08...	0911	80513	80513	180	80.0	756	3.7	33	7.0	149	9.3
08...	0912	80513	80513	180	90.0	756	4.0	35	7.0	148	8.4
08...	0913	80513	80513	180	100	756	4.0	34	7.0	149	7.9
08...	0914	80513	80513	180	110	756	4.0	34	7.0	148	7.7
08...	0915	80513	80513	180	120	756	3.8	32	6.9	148	7.3
08...	0916	80513	80513	180	130	756	3.8	32	6.9	148	7.2
08...	0917	80513	80513	180	140	756	3.1	26	6.9	149	7.0
08...	0918	80513	80513	180	150	756	2.8	23	6.9	149	6.8
08...	0919	80513	80513	180	160	756	2.1	18	6.9	149	6.8
08...	0921	80513	80513	180	170	756	1.4	11	6.8	150	6.8
08...	0922	81213	80513	180	174	756	1.1	9	6.8	150	6.8
08...	0923	80513	80513	180	180	756	1.1	9	6.9	151	6.8

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COLLECTING SAMPLE NUMBER (00027)	RESERVOIR DEPTH (FEET) (72025)	SAMPLING DEPTH (FEET) (00003)	BAROMETRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV											
27...	0856	80513	80513	174	.60	745	7.8	79	8.0	148	14.5
27...	0858	80020	80513	174	6.00	745	7.7	77	8.0	149	14.6
27...	0859	80513	80513	174	10.0	745	7.6	76	8.0	148	14.6
27...	0900	80513	80513	174	20.0	745	7.5	76	8.0	149	14.5
27...	0901	81213	80513	174	30.0	745	7.6	76	8.1	149	14.5
27...	0902	80513	80513	174	40.0	745	7.5	75	8.1	149	14.6
27...	0903	80513	80513	174	49.9	745	7.5	75	7.8	149	14.6
27...	0904	80513	80513	174	59.9	745	7.5	75	8.0	149	14.6
27...	0905	80513	80513	174	69.9	745	7.5	75	8.0	149	14.5
27...	0906	80513	80513	174	71.0	745	7.0	70	7.9	149	14.5
27...	0907	80513	80513	174	71.8	745	5.2	52	7.5	149	13.8
27...	0908	80513	80513	174	73.1	745	3.0	27	7.0	148	10.4
27...	0909	80513	80513	174	74.1	745	2.7	24	7.0	149	9.9
27...	0910	80513	80513	174	76.1	745	2.6	23	6.9	149	9.6
27...	0911	80513	80513	174	80.5	745	2.6	23	6.9	149	9.4
27...	0912	80513	80513	174	90.0	745	2.5	22	6.9	149	8.8
27...	0913	80513	80513	174	100	745	2.6	23	6.9	149	8.2
27...	0914	80513	80513	174	110	745	2.7	23	6.9	149	7.8
27...	0915	80513	80513	174	120	745	2.4	20	6.8	149	7.4
27...	0916	80513	80513	174	130	745	2.1	18	6.8	149	7.3
27...	0917	80513	80513	174	140	745	1.9	16	6.8	150	7.1
27...	0918	80513	80513	174	150	745	1.6	14	6.8	149	7.0
27...	0919	80513	80513	174	160	745	1.4	12	6.8	149	6.9
27...	0920	81213	80513	174	170	745	1.1	9	6.8	150	6.9
27...	0921	80513	80513	174	174	745	.7	6	6.8	150	6.9
DEC											
11...	0939	80513	80513	175	.40	753	8.8	84	7.8	147	12.4
11...	0940	80020	80513	175	6.00	753	8.6	82	7.9	147	12.5
11...	0941	80513	80513	175	10.1	753	8.6	81	7.9	147	12.5
11...	0942	80513	80513	175	20.5	753	8.4	80	7.8	147	12.5
11...	0943	81213	80513	175	30.1	753	8.4	80	7.7	147	12.5
11...	0944	80513	80513	175	40.0	753	8.3	79	4.8	147	12.5
11...	0945	80513	80513	175	49.9	753	8.3	79	7.9	147	12.5
11...	0946	80513	80513	175	60.1	753	8.3	79	7.9	147	12.5
11...	0948	80513	80513	175	70.1	753	8.2	77	7.8	147	12.4
11...	0950	80513	80513	175	80.1	753	2.4	21	7.0	148	9.5
11...	0951	80513	80513	175	90.0	753	2.4	21	7.0	148	8.7
11...	0952	80513	80513	175	100	753	2.5	21	7.0	148	8.2
11...	0953	80513	80513	175	110	753	2.6	22	7.0	148	7.9
11...	0958	81213	80513	175	170	753	2.5	21	8.0	148	8.2
17...	1403	80513	80513	183	.20	747	9.7	--	7.7	--	12.2
17...	1404	80513	80513	183	9.90	747	9.6	--	7.6	--	12.2
17...	1405	80513	80513	183	20.0	747	9.6	--	7.6	--	12.2
17...	1406	80513	80513	183	30.1	747	9.5	--	7.6	--	12.2
17...	1407	80513	80513	183	40.0	747	9.4	--	7.5	--	12.1
17...	1408	80513	80513	183	50.1	747	9.4	--	7.5	--	12.1
17...	1409	80513	80513	183	60.2	747	9.2	--	7.5	--	12.1
17...	1410	80513	80513	183	70.2	747	9.3	--	7.5	--	12.1
17...	1411	80513	80513	183	79.8	747	6.8	--	7.1	--	11.7
17...	1412	80513	80513	183	82.1	747	4.0	--	7.0	--	10.4
17...	1413	80513	80513	183	85.2	747	2.6	--	6.8	--	9.7
17...	1414	80513	80513	183	90.4	747	2.8	--	6.7	--	9.3
17...	1415	80513	80513	183	100	747	2.7	--	6.7	--	8.8
17...	1416	80513	80513	183	111	747	2.9	--	6.7	--	8.4
17...	1417	80513	80513	183	120	747	2.8	--	6.6	--	8.1
17...	1418	80513	80513	183	130	747	2.2	--	6.6	--	7.9
17...	1419	80513	80513	183	140	747	1.8	--	6.6	--	7.8
17...	1420	80513	80513	183	150	747	1.7	--	6.5	--	7.6
17...	1421	80513	80513	183	160	747	1.6	--	6.5	--	7.5
17...	1422	80513	80513	183	170	747	1.1	--	6.5	--	.0
17...	1423	80513	80513	183	180	747	.8	--	6.5	--	7.3
17...	1424	80513	80513	183	183	747	.6	--	6.5	--	7.4
JAN											
15...	0903	80513	80513	187	.20	756	9.0	76	7.4	149	7.7
15...	0908	80020	80513	187	6.00	756	8.8	74	7.5	149	7.8
15...	0909	80513	80513	187	10.0	756	8.8	74	7.5	149	7.8
15...	0911	80513	80513	187	20.0	756	8.8	74	7.5	149	7.8
15...	0913	81213	80513	187	30.0	756	8.7	74	7.5	149	7.8
15...	0915	80513	80513	187	40.0	756	8.7	74	5.6	149	7.8
15...	0916	80513	80513	187	50.0	756	8.7	74	7.5	149	7.8
15...	0917	80513	80513	187	60.0	756	8.7	74	7.6	149	7.8
15...	0918	80513	80513	187	70.0	756	8.7	74	7.5	149	7.8
15...	0919	80513	80513	187	80.0	756	8.7	74	7.5	149	7.8
15...	0920	80513	80513	187	90.0	756	8.7	74	7.5	149	7.8
15...	0921	80513	80513	187	100	756	8.7	74	7.5	149	7.8
15...	0922	80513	80513	187	110	756	8.7	74	7.5	149	7.8
15...	0923	80513	80513	187	120	756	6.5	55	7.2	150	7.7
15...	0924	80513	80513	187	130	756	3.4	28	7.0	151	7.5
15...	0925	80513	80513	187	140	756	1.3	11	6.9	151	7.4
15...	0926	80513	80513	187	150	756	1.0	8	6.9	151	7.4
15...	0927	80513	80513	187	160	756	.4	4	6.9	151	7.3
15...	0928	80513	80513	187	170	756	.1	0	6.8	152	7.2
15...	0929	81213	80513	187	180	756	.0	0	6.9	152	7.2
15...	0930	80513	80513	187	187	756	.0	0	6.9	152	7.2
FEB											
04...	1531	80513	80513	186	.40	757	9.8	82	7.5	152	7.5
04...	1533	80020	80513	186	6.00	757	9.8	82	7.5	152	7.5
04...	1535	80513	80513	186	10.0	757	9.7	82	7.5	152	7.5
04...	1536	80513	80513	186	20.0	757	9.6	81	7.5	152	7.4
04...	1537	81213	80513	186	30.0	757	9.6	81	7.4	152	7.5

## WHITE RIVER BASIN

## 07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
FEB											
04...	1538	80513	80513	186	40.0	757	9.4	79	5.8	152	7.4
04...	1539	80513	80513	186	50.0	757	9.2	77	7.4	152	7.4
04...	1540	80513	80513	186	60.0	757	9.2	77	7.4	152	7.3
04...	1541	80513	80513	186	70.0	757	9.0	75	7.4	152	7.3
04...	1542	80513	80513	186	80.0	757	8.9	75	7.4	152	7.3
04...	1543	80513	80513	186	90.0	757	8.9	74	7.4	152	7.3
04...	1544	80513	80513	186	100	757	8.8	74	7.4	152	7.3
04...	1545	80513	80513	186	110	757	8.3	69	7.3	152	7.3
04...	1546	80513	80513	186	120	757	8.0	67	7.3	152	7.3
04...	1547	80513	80513	186	130	757	7.7	64	7.3	152	7.2
04...	1548	80513	80513	186	140	757	7.5	63	7.2	152	7.2
04...	1549	80513	80513	186	150	757	7.7	64	7.2	152	7.1
04...	1550	80513	80513	186	160	757	8.1	67	7.3	152	7.0
04...	1551	80513	80513	186	170	757	8.2	68	7.3	153	7.0
04...	1552	81213	80513	186	180	757	8.1	67	7.3	153	7.0
04...	1553	80513	80513	186	186	757	8.1	67	7.3	153	7.0
MAR											
07...	0830	80513	80513	186	.00	748	9.4	79	7.5	144	7.1
07...	0831	80020	80513	186	6.00	748	9.1	77	7.5	145	7.1
07...	0832	80513	80513	186	10.1	748	9.1	76	7.5	146	7.0
07...	0833	80513	80513	186	19.9	748	9.0	76	7.4	146	7.0
07...	0834	81213	80513	186	30.0	748	8.9	75	7.4	145	6.9
07...	0835	80513	80513	186	40.1	748	8.8	74	5.6	145	6.9
07...	0836	80513	80513	186	50.1	748	8.8	73	7.5	145	6.9
07...	0837	80513	80513	186	59.9	748	8.7	73	7.5	145	6.9
07...	0838	80513	80513	186	70.0	748	8.7	73	7.5	145	6.8
07...	0839	80513	80513	186	79.9	748	8.7	73	7.5	145	6.8
07...	0840	80513	80513	186	90.1	748	8.7	73	7.5	145	6.8
07...	0841	80513	80513	186	100	748	8.7	73	7.5	146	6.8
07...	0842	80513	80513	186	110	748	8.6	72	7.5	145	6.7
07...	0843	80513	80513	186	120	748	8.6	72	7.5	146	6.7
07...	0844	80513	80513	186	130	748	8.6	71	7.5	145	6.7
07...	0845	80513	80513	186	140	748	8.6	71	7.5	145	6.7
07...	0846	80513	80513	186	150	748	8.6	71	7.5	145	6.6
07...	0847	80513	80513	186	160	748	8.5	71	7.5	145	6.6
07...	0848	80513	80513	186	170	748	8.5	71	7.5	146	6.6
07...	0849	81213	80513	186	180	748	8.5	70	7.5	145	6.6
07...	0850	80513	80513	186	186	748	8.2	68	7.4	146	6.6
21...	1004	80513	80513	192	.70	761	11.3	95	7.8	153	7.9
21...	1005	80513	80513	192	10.0	761	11.0	93	7.8	154	7.9
21...	1006	80513	80513	192	20.0	761	11.0	93	7.8	154	7.9
21...	1007	80513	80513	192	30.0	761	10.9	92	7.8	154	7.9
21...	1008	80513	80513	192	40.0	761	10.8	92	5.8	154	7.9
21...	1009	80513	80513	192	50.0	761	10.8	91	7.8	154	7.9
21...	1010	80513	80513	192	60.0	761	10.6	89	7.8	155	7.6
21...	1012	80513	80513	192	70.0	761	10.5	88	7.8	155	7.5
21...	1013	80513	80513	192	80.0	761	10.4	87	7.8	155	7.3
21...	1014	80513	80513	192	90.0	761	10.4	86	7.7	155	7.3
21...	1015	80513	80513	192	100	761	10.4	86	7.7	155	7.1
21...	1016	80513	80513	192	110	761	10.3	85	7.7	155	7.0
21...	1017	80513	80513	192	120	761	10.2	84	7.7	155	7.0
21...	1018	80513	80513	192	130	761	10.2	84	7.7	154	6.8
21...	1019	80513	80513	192	140	761	10.0	82	7.6	154	6.6
21...	1020	80513	80513	192	150	761	10.0	81	7.6	155	6.6
21...	1021	80513	80513	192	160	761	9.9	81	7.6	156	6.5
21...	1022	80513	80513	192	170	761	9.9	80	7.6	156	6.4
21...	1023	80513	80513	192	180	761	9.8	80	7.6	157	6.4
21...	1024	80513	80513	192	190	761	9.4	77	7.5	158	6.4
21...	1025	80513	80513	192	192	761	9.2	75	7.5	159	6.3
APR											
17...	1124	80513	80513	191	.20	748	9.5	98	7.7	154	16.0
17...	1125	80020	80513	191	6.00	748	9.6	99	7.7	154	15.9
17...	1126	80513	80513	191	10.1	748	9.7	99	7.7	154	15.8
17...	1127	80513	80513	191	20.1	748	10.0	101	7.5	154	15.1
17...	1128	81213	80513	191	30.0	748	10.3	100	5.4	152	13.2
17...	1129	80513	80513	191	40.1	748	10.9	99	6.8	151	10.5
17...	1130	80513	80513	191	50.1	748	11.0	99	7.7	151	10.0
17...	1131	80513	80513	191	60.2	748	10.8	96	7.6	152	9.4
17...	1133	80513	80513	191	69.8	748	10.7	94	7.6	152	8.8
17...	1134	80513	80513	191	80.2	748	10.7	92	7.5	152	8.3
17...	1135	80513	80513	191	90.0	748	10.5	90	7.4	151	7.8
17...	1136	80513	80513	191	100	748	10.3	88	7.3	151	7.5
17...	1137	80513	80513	191	110	748	10.2	86	7.3	151	7.3
17...	1138	80513	80513	191	120	748	10.1	85	7.3	151	7.2
17...	1139	80513	80513	191	130	748	10.0	84	7.3	150	7.0
17...	1140	80513	80513	191	140	748	9.8	82	7.2	151	6.9
17...	1141	80513	80513	191	150	748	9.6	80	7.2	150	6.8
17...	1142	80513	80513	191	160	748	9.5	79	7.2	150	6.8
17...	1143	80513	80513	191	170	748	9.4	79	7.2	151	6.7
17...	1144	80513	80513	191	180	748	9.4	78	7.2	150	6.7
17...	1146	81213	80513	191	186	748	9.2	76	7.2	150	6.7
17...	1147	80513	80513	191	190	748	9.1	76	7.2	150	6.7
17...	1149	80513	80513	191	191	748	9.0	75	7.2	151	6.7
MAY											
15...	0820	80513	80513	193	.20	750	10.2	111	--	149	18.9
15...	0821	81213	80513	193	6.00	750	10.0	109	--	149	18.9
15...	0822	80513	80513	193	10.0	750	10.1	110	--	149	18.9

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
MAY											
15...	0823	80513	80513	193	20.1	750	9.9	107	--	149	18.5
15...	0824	81213	80513	193	30.0	750	9.5	101	--	150	17.8
15...	0825	80513	80513	193	32.0	750	9.4	99	--	151	16.6
15...	0826	80513	80513	193	33.0	750	9.4	96	--	151	15.8
15...	0827	80513	80513	193	34.1	750	9.2	93	--	150	14.9
15...	0828	80513	80513	193	35.0	750	9.3	93	--	150	14.3
15...	0829	80513	80513	193	36.1	750	9.4	91	--	150	13.3
15...	0831	80513	80513	193	38.0	750	9.6	91	--	150	12.6
15...	0832	80513	80513	193	40.0	750	9.6	91	--	150	12.2
15...	0833	80513	80513	193	44.8	750	9.8	91	--	151	11.4
15...	0834	80513	80513	193	49.9	750	10.0	91	--	150	10.4
15...	0835	80513	80513	193	59.9	750	10.1	90	--	150	9.7
15...	0836	80513	80513	193	70.0	750	9.8	87	--	151	9.3
15...	0837	80513	80513	193	80.1	750	9.9	87	--	151	9.1
15...	0838	80513	80513	193	90.1	750	9.7	84	--	150	8.6
15...	0839	80513	80513	193	100	750	9.5	82	--	151	8.2
15...	0840	80513	80513	193	110	750	9.4	81	--	151	8.0
15...	0841	80513	80513	193	120	750	9.2	79	--	151	7.6
15...	0842	80513	80513	193	130	750	9.2	77	--	150	7.4
15...	0843	80513	80513	193	140	750	8.8	74	--	151	7.2
15...	0844	80513	80513	193	150	750	8.7	73	--	151	7.1
15...	0845	80513	80513	193	160	750	8.3	69	--	151	7.0
15...	0846	80513	80513	193	170	750	8.1	68	--	152	6.9
15...	0847	80513	80513	193	180	750	8.0	66	--	152	6.9
15...	0850	81213	80513	193	187	750	7.9	66	--	152	6.9
15...	0851	80513	80513	193	190	750	7.9	66	--	152	6.9
15...	0852	80513	80513	193	193	750	7.8	65	--	152	6.9
JUN											
18...	0947	80513	80513	186	.00	748	10.3	120	8.5	151	21.8
18...	0948	81213	80513	186	6.00	748	8.3	104	8.5	151	25.8
18...	0949	80513	80513	186	10.2	748	8.2	103	8.5	150	25.8
18...	0950	80513	80513	186	15.3	748	8.4	104	8.5	150	25.4
18...	0952	80513	80513	186	17.1	748	8.6	106	8.5	149	25.3
18...	0953	80513	80513	186	20.1	748	9.0	109	8.5	149	24.2
18...	0955	80513	80513	186	21.0	748	9.2	111	8.5	150	23.7
18...	0956	80513	80513	186	22.1	748	9.4	112	8.5	152	23.1
18...	0957	80513	80513	186	23.0	748	9.3	109	8.4	151	22.1
18...	0958	80513	80513	186	24.0	748	9.3	107	8.4	151	21.6
18...	0959	80513	80513	186	26.0	748	9.0	102	8.3	151	20.4
18...	1000	81213	80513	186	30.2	748	8.4	93	8.2	150	19.3
18...	1001	80513	80513	186	30.1	748	8.4	93	8.1	151	19.1
18...	1002	80513	80513	186	33.1	748	8.1	88	8.1	152	18.4
18...	1003	80513	80513	186	35.9	748	7.7	82	8.0	152	17.5
18...	1005	80513	80513	186	38.2	748	7.3	76	7.9	153	16.4
18...	1006	80513	80513	186	39.1	748	7.2	75	7.8	151	16.0
18...	1007	80513	80513	186	40.1	748	7.2	74	7.8	153	15.7
18...	1009	80513	80513	186	42.2	748	7.3	73	7.7	152	14.9
18...	1011	80513	80513	186	44.1	748	7.3	73	7.6	151	14.1
18...	1012	80513	80513	186	47.0	748	7.4	71	7.6	151	12.9
18...	1013	80513	80513	186	50.0	748	7.6	72	7.7	150	11.8
18...	1014	80513	80513	186	55.0	748	7.7	71	7.6	150	11.0
18...	1015	80513	80513	186	60.3	748	7.8	72	7.6	150	10.6
18...	1016	80513	80513	186	69.9	748	8.0	72	7.6	148	10.2
18...	1017	80513	80513	186	80.0	748	8.2	74	7.6	149	9.9
18...	1018	80513	80513	186	90.0	748	8.3	75	7.6	150	9.6
18...	1019	80513	80513	186	100	748	8.4	75	7.5	149	9.3
18...	1020	80513	80513	186	110	748	8.3	73	7.5	149	9.0
18...	1021	80513	80513	186	120	748	8.2	72	7.5	149	8.8
18...	1022	80513	80513	186	130	748	8.0	70	7.5	151	8.4
18...	1023	80513	80513	186	140	748	7.8	67	7.5	152	8.2
18...	1024	80513	80513	186	150	748	7.4	64	7.5	151	7.9
18...	1025	80513	80513	186	160	748	7.2	62	7.4	154	7.8
18...	1026	80513	80513	186	170	748	6.9	59	7.4	154	7.7
18...	1027	81213	80513	186	180	748	6.6	57	7.4	154	7.6
18...	1028	80513	80513	186	186	748	6.5	56	7.4	154	7.7
JUL											
09...	0714	80513	80513	196	.01	750	7.5	99	8.5	156	29.2
09...	0718	80020	80513	196	6.00	750	7.4	99	8.5	155	29.2
09...	0719	80513	80513	196	10.0	750	7.7	101	8.6	155	28.8
09...	0721	80513	80513	196	15.9	750	9.3	120	8.7	155	27.7
09...	0722	80513	80513	196	18.0	750	10.2	130	8.8	155	26.9
09...	0723	80513	80513	196	19.0	750	11.2	138	8.9	154	25.1
09...	0724	80513	80513	196	20.0	750	11.3	137	8.9	153	24.2
09...	0725	80513	80513	196	22.0	750	10.9	128	8.8	152	22.6
09...	0726	80513	80513	196	23.0	750	10.7	124	8.6	153	21.7
09...	0727	80513	80513	196	24.0	750	10.1	115	8.5	153	21.0
09...	0728	80513	80513	196	25.0	750	9.3	105	8.3	153	20.3
09...	0729	80513	80513	196	26.9	750	8.7	97	8.0	154	19.5
09...	0730	81213	80513	196	30.0	750	7.9	86	7.7	155	18.7
09...	0732	80513	80513	196	36.0	750	7.0	74	7.4	156	17.3
09...	0733	80513	80513	196	38.0	750	6.8	71	7.3	156	16.6
09...	0734	80513	80513	196	40.0	750	6.6	68	7.2	156	15.8
09...	0735	80513	80513	196	43.0	750	6.4	64	7.2	156	14.8
09...	0736	80513	80513	196	45.0	750	6.4	64	7.1	156	14.1
09...	0737	80513	80513	196	48.0	750	6.3	61	7.1	155	13.2
09...	0738	80513	80513	196	50.0	750	6.5	62	7.0	155	12.5
09...	0739	80513	80513	196	55.0	750	6.7	62	7.0	155	11.4
09...	0740	80513	80513	196	60.0	750	7.0	64	7.0	154	10.7

## WHITE RIVER BASIN

## 07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL											
09...	0741	80513	80513	196	70.0	750	7.4	67	7.1	156	9.9
09...	0743	80513	80513	196	80.0	750	7.8	69	7.1	155	9.4
09...	0744	80513	80513	196	90.0	750	8.1	71	7.2	156	9.1
09...	0746	80513	80513	196	100	750	8.1	71	7.2	156	8.8
09...	0747	80513	80513	196	110	750	8.1	71	7.2	156	8.6
09...	0748	80513	80513	196	120	750	8.0	69	7.1	157	8.2
09...	0749	80513	80513	196	130	750	7.8	67	7.1	158	7.9
09...	0750	80513	80513	196	140	750	7.5	64	7.1	158	7.7
09...	0751	80513	80513	196	150	750	7.3	62	7.0	159	7.5
09...	0752	80513	80513	196	160	750	6.9	58	7.0	159	7.4
09...	0753	80513	80513	196	170	750	6.5	55	7.0	160	7.3
09...	0754	80513	80513	196	180	750	6.2	52	7.0	160	7.3
09...	0756	81213	80513	196	190	750	5.8	49	7.0	160	7.3
09...	0757	80513	80513	196	196	750	5.8	49	7.0	160	7.3
23...	0837	80513	80513	198	.80	751	7.2	96	8.6	147	29.0
23...	0839	80020	80513	198	6.00	751	7.2	96	8.6	147	29.1
23...	0840	80513	80513	198	10.0	751	7.1	94	8.6	146	29.1
23...	0842	80513	80513	198	16.0	751	7.2	95	8.6	147	29.0
23...	0843	80513	80513	198	18.0	751	7.2	95	8.6	147	28.6
23...	0844	80513	80513	198	19.0	751	7.5	97	8.6	147	27.9
23...	0845	80513	80513	198	20.0	751	8.0	102	8.6	146	26.6
23...	0846	80513	80513	198	22.0	751	8.8	110	8.7	146	25.5
23...	0847	80513	80513	198	24.0	751	9.5	116	8.7	145	24.3
23...	0848	80513	80513	198	26.0	751	9.9	117	8.6	145	22.9
23...	0849	80513	80513	198	27.0	751	8.9	101	8.3	145	20.9
23...	0850	80513	80513	198	28.0	751	8.6	96	8.1	145	20.0
23...	0851	81213	80513	198	30.0	751	7.8	86	7.7	146	19.2
23...	0852	80513	80513	198	32.0	751	6.9	75	7.5	147	18.3
23...	0853	80513	80513	198	36.0	751	6.5	68	7.3	147	16.9
23...	0854	80513	80513	198	38.0	751	6.1	64	7.2	147	16.4
23...	0855	80513	80513	198	40.0	751	6.0	62	7.2	148	15.9
23...	0856	80513	80513	198	45.0	751	5.5	55	7.1	147	14.3
23...	0857	80513	80513	198	50.0	751	5.5	53	7.0	146	13.2
23...	0858	80513	80513	198	55.0	751	5.8	54	7.0	146	11.7
23...	0859	80513	80513	198	60.0	751	6.3	58	7.0	146	10.6
23...	0900	80513	80513	198	70.0	751	6.9	62	7.0	147	9.8
23...	0901	80513	80513	198	80.0	751	7.2	64	7.1	146	9.4
23...	0902	80513	80513	198	90.0	751	7.3	64	7.1	147	9.1
23...	0903	80513	80513	198	100	751	7.5	65	7.1	147	8.9
23...	0904	80513	80513	198	110	751	7.3	63	7.1	148	8.6
23...	0905	80513	80513	198	120	751	7.3	63	7.1	148	8.3
23...	0906	80513	80513	198	130	751	7.2	62	7.1	149	8.0
23...	0907	80513	80513	198	140	751	7.0	60	7.1	149	7.8
23...	0908	80513	80513	198	150	751	6.7	57	7.0	150	7.6
23...	0909	80513	80513	198	160	751	6.4	54	7.0	150	7.5
23...	0910	80513	80513	198	170	751	6.1	51	7.0	151	7.4
23...	0911	80513	80513	198	180	751	5.4	46	6.9	151	7.3
23...	0912	80513	80513	198	190	751	4.8	41	6.9	152	7.3
23...	0913	81213	80513	198	192	751	4.6	39	6.9	152	7.3
23...	0915	80513	80513	198	198	751	4.4	37	6.9	152	7.3
AUG											
15...	0754	80513	80513	190	.60	747	7.6	98	8.4	150	27.4
15...	0755	80513	80513	190	10.1	747	7.6	98	8.4	150	27.4
15...	0756	80513	80513	190	20.1	747	7.7	99	8.4	150	27.4
15...	0758	80513	80513	190	26.0	747	7.6	98	8.4	150	27.4
15...	0759	80513	80513	190	27.1	747	8.4	106	8.4	150	26.5
15...	0800	80513	80513	190	28.1	747	9.4	112	8.3	150	23.1
15...	0801	80513	80513	190	29.1	747	9.2	107	8.2	149	21.8
15...	0802	80513	80513	190	30.0	747	8.9	102	8.0	150	20.9
15...	0803	80513	80513	190	32.2	747	8.0	89	7.7	150	19.9
15...	0804	80513	80513	190	34.1	747	7.1	78	7.4	151	19.0
15...	0805	80513	80513	190	37.1	747	6.5	70	7.3	150	18.2
15...	0806	80513	80513	190	40.1	747	5.8	61	7.2	151	17.2
15...	0807	80513	80513	190	44.3	747	5.1	52	7.1	151	15.8
15...	0808	80513	80513	190	48.2	747	4.5	46	7.0	151	14.6
15...	0809	80513	80513	190	50.3	747	4.5	45	6.9	151	14.0
15...	0810	80513	80513	190	53.3	747	4.7	45	6.9	151	13.2
15...	0812	80513	80513	190	58.1	747	5.1	49	6.9	151	12.0
15...	0813	80513	80513	190	60.1	747	5.2	49	6.9	151	11.7
15...	0814	80513	80513	190	68.2	747	5.8	53	7.0	151	10.6
15...	0815	80513	80513	190	70.2	747	5.9	54	7.0	152	10.4
15...	0816	80513	80513	190	80.3	747	6.2	56	7.0	150	9.8
15...	0817	80513	80513	190	90.3	747	6.6	59	7.0	150	9.5
15...	0818	80513	80513	190	99.9	747	6.9	61	7.0	151	9.1
15...	0819	80513	80513	190	110	747	6.9	61	7.0	152	8.9
15...	0821	80513	80513	190	120	747	6.9	60	7.0	152	8.6
15...	0822	80513	80513	190	130	747	6.6	57	7.0	152	8.3
15...	0823	80513	80513	190	140	747	6.3	55	7.0	153	8.0
15...	0825	80513	80513	190	150	747	6.0	51	6.9	154	7.8
15...	0826	80513	80513	190	160	747	5.6	47	6.9	155	7.7
15...	0827	80513	80513	190	170	747	4.9	42	6.9	155	7.6
15...	0829	80513	80513	190	180	747	4.2	36	6.8	156	7.5
15...	0830	80513	80513	190	190	747	3.7	31	6.8	157	7.5
22...	0900	80513	80513	190	.30	750	7.6	100	8.7	149	28.8
22...	0901	81213	80513	190	6.30	750	7.8	102	8.7	150	28.8
22...	0902	80513	80513	190	10.0	750	7.7	101	8.7	149	28.8
22...	0903	80513	80513	190	20.4	750	7.9	103	8.7	150	28.4
22...	0905	80513	80513	190	24.1	750	7.5	97	8.6	150	27.5
22...	0906	80513	80513	190	26.2	750	7.7	98	8.5	150	26.7
22...	0907	80513	80513	190	27.1	750	7.7	97	8.5	150	26.4

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COLLECTING SAMPLE NUMBER (00027)	RESERVOIR DEPTH (FEET) (72025)	SAMPLING DEPTH (FEET) (00003)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
AUG											
22...	0909	80513	80513	190	28.3	750	7.8	97	8.4	150	25.4
22...	0910	80513	80513	190	29.2	750	8.2	97	8.2	150	23.1
22...	0911	81213	80513	190	30.2	750	8.0	92	7.9	150	21.5
22...	0912	80513	80513	190	30.2	750	7.6	86	7.7	150	20.3
22...	0914	80513	80513	190	31.3	750	7.4	83	7.6	150	19.9
22...	0915	80513	80513	190	33.1	750	6.7	73	7.4	150	19.2
22...	0916	80513	80513	190	34.2	750	6.1	66	7.3	150	18.5
22...	0917	80513	80513	190	37.0	750	5.5	58	7.2	151	17.4
22...	0919	80513	80513	190	40.1	750	7.9	83	7.1	151	16.6
22...	0920	80513	80513	190	40.1	750	4.6	47	7.0	151	15.7
22...	0921	80513	80513	190	44.1	750	4.2	42	7.0	152	14.9
22...	0922	80513	80513	190	50.2	750	4.2	41	6.9	151	14.0
22...	0923	80513	80513	190	50.2	750	4.2	40	6.9	151	13.2
22...	0924	80513	80513	190	53.2	750	4.5	43	6.9	150	12.3
22...	0925	80513	80513	190	56.1	750	4.8	45	7.0	150	11.7
22...	0926	80513	80513	190	60.2	750	5.4	50	7.0	150	10.9
22...	0927	80513	80513	190	70.2	750	5.5	50	7.0	150	10.1
22...	0928	80513	80513	190	80.3	750	6.2	55	7.0	149	9.6
22...	0929	80513	80513	190	90.2	750	6.4	56	7.0	149	9.3
22...	0930	80513	80513	190	100	750	6.6	58	7.1	150	9.0
22...	0931	80513	80513	190	110	750	6.6	58	7.0	150	8.7
22...	0932	80513	80513	190	120	750	6.3	55	7.0	151	8.5
22...	0933	80513	80513	190	130	750	6.3	54	7.0	151	8.2
22...	0934	80513	80513	190	140	750	5.9	50	7.0	152	8.0
22...	0935	80513	80513	190	150	750	5.6	48	7.0	153	7.8
22...	0936	80513	80513	190	160	750	5.2	44	6.9	154	7.6
22...	0937	80513	80513	190	180	750	3.8	32	6.9	155	7.5
22...	0940	81213	80513	190	184	750	3.3	28	6.8	155	7.4
22...	0941	80513	80513	190	190	750	2.9	24	6.8	156	7.4
SEP											
05...	1144	80513	80513	188	1.80	750	8.7	116	8.5	156	29.3
05...	1145	81213	80513	188	6.00	750	8.8	116	8.6	156	28.8
05...	1146	80513	80513	188	10.1	750	8.7	114	8.6	156	28.8
05...	1147	80513	80513	188	20.1	750	8.5	111	8.6	156	28.0
05...	1149	80513	80513	188	22.1	750	8.5	110	8.5	156	27.7
05...	1150	80513	80513	188	22.9	750	8.5	109	8.5	156	27.5
05...	1151	80513	80513	188	24.0	750	8.4	106	8.3	156	26.2
05...	1152	80513	80513	188	25.2	750	8.6	106	8.0	156	25.0
05...	1153	80513	80513	188	26.0	750	8.5	103	7.9	156	24.1
05...	1154	80513	80513	188	27.1	750	8.6	103	7.8	156	23.5
05...	1155	80513	80513	188	28.1	750	8.3	98	7.6	155	22.4
05...	1156	80513	80513	188	29.0	750	8.3	96	7.5	156	22.0
05...	1157	81213	80513	188	30.0	750	7.9	92	7.4	156	21.6
05...	1158	80513	80513	188	32.1	750	7.7	88	7.3	156	20.8
05...	1159	80513	80513	188	34.1	750	7.0	78	7.1	156	19.7
05...	1200	80513	80513	188	36.1	750	6.2	67	6.9	157	18.5
05...	1201	80513	80513	188	38.2	750	5.6	60	6.8	157	17.6
05...	1202	80513	80513	188	40.0	750	5.1	54	6.8	157	16.9
05...	1203	80513	80513	188	43.0	750	4.4	45	6.7	156	15.8
05...	1204	80513	80513	188	46.0	750	4.0	40	6.6	157	14.8
05...	1205	80513	80513	188	50.0	750	3.9	38	6.6	156	13.6
05...	1206	80513	80513	188	53.1	750	4.2	40	6.6	156	12.9
05...	1207	80513	80513	188	56.1	750	4.7	44	6.6	155	12.1
05...	1208	80513	80513	188	60.0	750	5.0	47	6.6	155	11.3
05...	1209	80513	80513	188	67.1	750	5.6	51	6.7	155	10.6
05...	1210	80513	80513	188	70.1	750	5.8	52	6.7	154	10.3
05...	1211	80513	80513	188	80.0	750	6.1	55	6.7	154	9.7
05...	1212	80513	80513	188	90.1	750	6.4	57	6.7	155	9.4
05...	1213	80513	80513	188	100	750	6.6	59	6.7	156	9.1
05...	1214	80513	80513	188	110	750	6.8	59	6.7	156	8.9
05...	1215	80513	80513	188	120	750	6.8	59	6.7	156	8.6
05...	1216	80513	80513	188	130	750	6.5	56	6.7	156	8.3
05...	1217	80513	80513	188	140	750	6.2	53	6.6	157	8.1
05...	1218	80513	80513	188	150	750	5.8	50	6.6	158	7.8
05...	1219	80513	80513	188	160	750	5.3	46	6.6	159	7.7
05...	1220	80513	80513	188	170	750	4.4	38	6.5	160	7.6
05...	1221	80513	80513	188	180	750	3.4	29	6.5	162	7.5
05...	1223	81213	80513	188	182	750	3.0	25	6.5	162	7.5
05...	1225	80513	80513	188	189	750	2.6	22	6.5	163	7.5
11...	1147	80513	80513	192	1.00	751	7.8	103	8.8	151	28.4
11...	1148	80513	80513	192	10.1	751	8.0	104	8.8	150	28.2
11...	1149	80513	80513	192	20.1	751	7.9	102	8.7	150	27.9
11...	1150	80513	80513	192	22.1	751	7.8	100	8.6	151	27.4
11...	1151	80513	80513	192	23.1	751	7.7	98	8.5	150	26.8
11...	1152	80513	80513	192	24.1	751	7.8	97	8.3	150	25.8
11...	1153	80513	80513	192	25.0	751	7.8	95	8.2	151	24.9
11...	1154	80513	80513	192	27.0	751	7.4	88	7.8	151	23.4
11...	1155	80513	80513	192	29.2	751	6.9	80	7.5	151	21.9
11...	1156	80513	80513	192	30.0	751	6.7	77	7.5	151	21.6
11...	1157	80513	80513	192	32.1	751	6.3	71	7.3	150	20.7
11...	1158	80513	80513	192	34.2	751	5.8	65	7.2	151	19.8
11...	1159	80513	80513	192	38.1	751	4.9	53	7.1	152	18.0
11...	1200	80513	80513	192	39.5	751	4.3	45	7.0	152	17.3
11...	1201	80513	80513	192	46.0	751	3.4	35	6.9	152	15.4
11...	1202	80513	80513	192	50.1	751	3.2	32	6.8	152	14.1
11...	1203	80513	80513	192	60.0	751	3.9	36	6.8	152	11.9
11...	1204	80513	80513	192	70.2	751	4.5	41	6.8	150	10.6
11...	1205	80513	80513	192	80.1	751	5.1	45	6.9	150	9.9
11...	1206	80513	80513	192	90.1	751	5.4	48	6.9	150	9.6
11...	1207	80513	80513	192	100	751	5.7	50	6.9	150	9.2





WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + DIS- TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, ORGANIC (MG/L) AS N) (00605)	NITRO- GEN, TOTAL (MG/L) AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS P04) (00660)
OCT									
03...	81	<.01	.40	--	.10	<.010	--	.50	--
03...	78	.02	<.20	.03	.10	<.010	--	--	.061
03...	86	.01	.80	.01	.33	<.010	.79	1.1	.061
16...	84	.03	<.20	.04	.10	<.010	--	--	.031
16...	83	.01	<.20	.01	.10	<.010	--	--	--
16...	88	.02	<.20	.03	.36	<.010	.031	--	--
31...	87	<.01	<.20	--	.11	<.010	--	--	--
31...	86	<.01	<.20	--	.11	<.010	--	--	--
31...	89	<.01	<.20	--	.38	<.010	--	--	--
NOV									
08...	81	.01	.30	.01	.10	<.010	.29	.40	--
08...	79	.01	.30	.01	.10	<.010	.29	.40	--
08...	89	.01	.20	.01	.37	<.010	.19	.57	--
27...	83	.02	<.20	.03	.12	<.010	--	--	--
27...	78	.02	<.20	.03	.13	<.010	--	--	--
27...	82	.02	<.20	.03	.41	<.010	--	--	--
DEC									
11...	86	.03	.30	.04	.15	<.010	.27	.45	--
11...	84	.02	.20	.03	.15	<.010	.18	.35	--
11...	90	.03	.30	.04	.41	<.010	.27	.71	--
JAN									
15...	84	<.01	<.20	--	.28	<.010	--	--	--
15...	83	<.01	<.20	--	.28	<.010	--	--	--
15...	92	.01	<.20	.01	.42	<.010	--	--	--
FEB									
04...	89	<.01	<.20	--	.27	<.010	--	--	.031
04...	84	<.01	<.20	--	.27	<.010	--	--	.031
04...	91	.04	.20	.05	.21	<.010	.16	.41	.031
MAR									
07...	89	.02	.20	.03	.28	<.010	.18	.48	.123
07...	90	.03	.30	.04	.27	<.010	.27	.57	.123
07...	89	.03	<.20	.04	.27	<.010	--	--	.123
APR									
17...	87	.04	<.20	.05	.28	<.010	--	--	--
17...	79	.03	<.20	.04	.30	<.010	--	--	--
17...	88	.04	<.20	.05	.31	<.010	--	--	--
MAY									
15...	88	<.01	.40	--	.29	<.010	--	.69	--
15...	86	.03	.40	.04	.34	<.010	.37	.74	--
15...	89	.01	.30	.01	.35	<.010	.29	.65	--
JUN									
18...	86	.02	.30	.03	.20	<.010	.28	.50	--
18...	93	.04	.20	.05	.34	<.010	.16	.54	--
18...	82	.02	<.20	.03	.42	<.010	--	--	--
JUL									
09...	89	.02	.30	.03	.15	<.010	.28	.45	.061
09...	89	.02	.20	.03	.34	<.010	.18	.54	--
09...	96	<.01	<.20	--	.44	<.010	--	--	--
23...	84	<.01	<.20	--	.13	<.010	--	--	--
23...	86	.01	<.20	.01	.33	<.010	--	--	--
23...	91	<.01	<.20	.46	--	<.010	--	--	--
AUG									
22...	87	<.01	<.20	--	.07	<.010	--	--	--
22...	85	<.01	<.20	--	.22	<.010	--	--	--
22...	92	<.01	<.20	--	.51	<.010	--	--	--
SEP									
05...	82	<.01	.40	--	.04	<.010	--	.44	--
05...	84	.02	.30	.03	.34	<.010	.28	.64	--
05...	96	<.01	<.20	--	.53	<.010	--	--	--

Date	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P) (00671)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L) AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-F (COLS./ 100 ML) (31625)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN) (01055)
OCT									
03...	<.02	<.01	<.02	2.8	2.8	<1	2.2	4	6
03...	<.02	.02	<.02	2.8	3.0	--	--	4	6
03...	<.02	.02	<.02	3.3	3.1	--	--	19	132
16...	<.02	.01	<.02	2.8	2.9	<1	3.2	7	6
16...	<.02	<.01	<.02	2.8	2.9	--	--	6	6
16...	<.02	.01	<.02	2.4	2.6	--	--	20	236
31...	<.02	<.01	<.02	3.4	3.8	<1	2.4	4	5
31...	<.02	<.01	<.02	2.4	2.4	--	--	4	5
31...	<.02	<.01	<.02	3.7	4.7	--	--	21	79
NOV									
08...	<.02	<.01	<.02	5.7	5.8	<1	1.3	4	4
08...	<.02	<.01	<.02	5.4	6.0	--	--	4	6
08...	<.02	<.01	<.02	5.3	5.6	--	--	31	266
27...	<.02	<.01	<.02	3.4	3.4	<1	2.7	7	8
27...	<.02	<.01	<.02	3.5	3.5	--	--	7	8
27...	<.02	<.01	<.02	2.8	3.4	--	--	21	80
DEC									
11...	.02	<.01	.02	2.3	2.8	<1	2.2	7	7
11...	.02	<.01	.02	2.4	3.1	--	--	7	7
11...	.02	<.01	.02	2.1	2.5	--	--	53	262

## WHITE RIVER BASIN

## 07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
JAN									
15...	<.02	<.01	<.02	2.9	3.8	E1	2.4	10	22
15...	<.02	<.01	<.02	2.2	3.4	--	--	10	26
15...	<.02	<.01	<.02	1.9	2.6	--	--	33	271
FEB									
04...	<.02	.01	<.02	1.8	1.9	<1	3.1	9	21
04...	<.02	.01	<.02	1.7	1.9	--	--	9	24
04...	<.02	.01	<.02	1.8	2.0	--	--	114	379
MAR									
07...	<.02	.04	<.02	3.8	4.0	<1	<.1	32	49
07...	<.02	.04	<.02	4.6	5.7	--	--	20	30
07...	<.02	.04	<.02	4.4	4.5	--	--	16	27
APR									
17...	<.02	<.01	<.02	2.0	2.1	<1	.9	13	7
17...	<.02	<.01	<.02	2.0	2.0	--	--	23	6
17...	<.02	<.01	<.02	1.8	1.9	--	--	31	37
MAY									
15...	<.02	<.01	<.02	2.6	2.8	<1	7.0	12	5
15...	<.02	<.01	<.02	2.4	2.5	--	--	18	6
15...	<.02	<.01	<.02	2.0	2.5	--	--	18	69
JUN									
18...	<.02	<.01	<.02	2.6	2.8	<1	1.8	8	4
18...	<.02	<.01	<.02	2.3	2.3	--	--	10	4
18...	<.02	<.01	<.02	2.0	2.0	--	--	24	109
JUL									
09...	.02	.02	.02	2.9	3.1	<1	<.1	6	3
09...	<.02	<.01	.02	2.6	2.6	--	--	4	3
09...	.02	<.01	.02	2.4	2.2	--	--	16	149
23...	.02	<.01	.02	2.7	3.0	<1	1.4	4	3
23...	.02	<.01	.02	2.7	2.9	--	--	5	5
23...	.02	<.01	.02	2.2	2.2	--	--	13	133
AUG									
22...	<.02	<.01	<.02	2.4	2.4	<1	3.7	4	5
22...	<.02	<.01	<.02	2.3	2.4	--	--	5	7
22...	<.02	<.01	<.02	1.7	1.7	--	--	18	108
SEP									
05...	<.02	<.01	<.02	2.3	2.4	<1	4.9	7	6
05...	<.02	<.01	<.02	2.3	2.3	--	--	5	6
05...	<.02	<.01	<.02	1.7	1.7	--	--	17	121

Remark codes used in this report:

< -- Less than  
E -- Estimated value

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS

LOCATION.--Lat 36°25'15", long 93°50'50", in NW1/4NW1/4 sec.10, T.20 N., R.27 W., Carroll County, Hydrologic Unit 11010001, at Beaver Dam, 6.0 mi west of Eureka Springs, and at mile 609.0.

DRAINAGE AREA.--1,192 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1946, 1950-53, October 1967 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1999 to current year.

DISSOLVED OXYGEN: June 1999 to current year.

REMARKS.--Dissolved oxygen and water temperature collected continuously June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	SAMPLE LOCATION, CROSS SECTION (FT FM R BK) (72103)	SAM-PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT											
02...	1047	80513	--	--	--	758	9.2	79	6.3	132	8.2
NOV											
06...	1130	80513	--	--	--	760	10.5	--	7.1	--	9.6
DEC											
17...	1504	80513	--	--	--	747	9.7	--	7.2	--	9.3
MAR											
21...	1048	80513	--	--	--	761	11.3	95	7.7	178	7.5
JUL											
15...	1305	80513	12.0	2.80	150	760	8.8	79	--	152	10.2
15...	1306	80513	38.0	2.20	150	760	8.8	78	--	151	9.9
15...	1308	80513	62.0	2.20	150	760	9.1	80	--	152	9.5
15...	1309	80513	87.0	1.70	150	760	9.2	80	--	153	9.4
15...	1310	80513	112.0	2.00	150	760	9.8	86	--	154	9.4
15...	1311	80513	138.0	1.60	150	760	9.7	85	8.4	157	9.5
AUG											
15...	0815	80513	--	--	--	753	8.8	77	7.2	156	9.4
SEP											
11...	1108	80513	--	--	--	755	9.0	80	7.3	155	9.8

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.5	6.1	9.3	9.6	7.7	8.5	9.4	5.9	8.2	---	---	---
2	9.4	7.2	8.6	9.5	7.2	7.9	9.0	7.3	8.1	---	---	---
3	11.5	8.0	9.5	9.5	4.7	8.0	10.1	7.0	8.2	---	---	---
4	10.4	6.6	9.0	9.4	7.2	8.1	8.5	6.8	7.5	---	---	---
5	10.4	7.1	9.1	9.9	7.0	8.6	8.6	6.7	7.2	---	---	---
6	10.7	7.9	9.6	11.3	8.4	9.7	8.5	4.8	7.3	---	---	---
7	10.0	8.8	9.4	9.9	6.6	9.0	9.4	5.9	8.0	---	---	---
8	9.5	6.7	8.5	10.0	5.7	8.4	11.2	7.2	8.6	---	---	---
9	10.4	6.3	8.7	9.7	5.8	8.3	10.1	8.0	8.6	---	---	---
10	10.3	6.5	8.8	9.6	6.4	8.5	9.2	6.2	7.9	---	---	---
11	9.9	6.0	9.1	9.9	8.2	8.9	9.1	7.8	8.5	---	---	---
12	9.8	7.2	8.8	9.7	6.3	8.1	9.0	6.2	8.2	---	---	---
13	10.1	8.0	8.8	9.6	6.8	8.6	9.2	4.9	7.5	---	---	---
14	10.7	6.0	9.1	11.0	6.8	9.0	8.8	7.2	7.9	---	---	---
15	10.2	7.6	9.0	9.5	7.1	8.8	9.0	7.3	8.1	---	---	---
16	10.6	6.0	9.0	9.2	7.5	8.4	9.5	7.2	8.3	---	---	---
17	10.5	6.2	8.5	9.6	7.6	8.3	9.4	5.8	8.0	---	---	---
18	10.3	7.8	9.3	9.2	7.0	7.8	8.9	6.1	8.0	---	---	---
19	9.9	5.9	8.4	11.1	5.1	8.9	9.8	6.4	8.5	---	---	---
20	9.6	7.7	8.6	9.6	6.1	8.8	9.3	4.1	8.0	---	---	---
21	9.8	7.8	8.7	8.9	6.1	8.1	9.3	7.3	8.3	---	---	---
22	10.1	7.6	8.7	9.2	7.2	8.0	8.7	7.2	7.7	---	---	---
23	9.5	5.5	8.5	8.1	6.7	7.4	8.7	7.5	7.9	---	---	---
24	10.3	5.4	8.5	9.3	6.5	7.7	10.8	5.5	8.1	---	---	---
25	10.5	7.2	9.1	9.3	5.2	7.7	9.4	7.6	8.4	---	---	---
26	10.6	6.4	9.0	10.3	6.8	7.8	9.0	7.7	8.3	---	---	---
27	10.8	9.0	9.6	10.6	6.5	8.5	9.1	7.5	8.2	---	---	---
28	10.3	7.0	9.1	10.4	6.9	8.7	9.7	7.6	8.3	---	---	---
29	10.2	6.5	9.2	9.4	6.9	8.4	10.4	7.6	8.5	---	---	---
30	10.4	7.5	9.0	8.8	5.7	7.7	9.4	8.2	8.6	---	---	---
31	9.9	7.9	8.9	---	---	---	10.2	8.3	8.9	---	---	---
MONTH	11.5	5.4	8.9	11.3	4.7	8.4	11.2	4.1	8.1	---	---	---

## WHITE RIVER BASIN

## 07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS--CONTINUED

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.7	12.6	13.8	11.1	9.1	10.1	11.7	8.6	10.3	11.9	8.2	10.1
2	14.8	12.1	13.4	11.0	9.1	9.9	13.1	8.6	10.5	11.5	9.2	10.3
3	14.7	11.9	13.4	11.4	8.8	9.8	12.2	9.1	10.4	11.3	7.9	9.9
4	14.2	12.1	12.9	11.0	8.7	9.8	11.5	8.8	10.3	11.9	8.3	10.2
5	13.5	11.6	12.0	12.5	8.9	10.2	12.3	9.0	10.7	12.3	8.4	10.5
6	12.9	11.4	11.8	12.4	9.1	10.4	12.8	8.8	10.6	12.3	8.3	10.4
7	12.6	11.2	11.9	11.6	10.3	10.8	13.1	8.9	10.7	12.1	8.3	10.4
8	13.0	11.9	12.4	12.0	10.0	10.8	12.3	8.9	10.5	10.9	8.7	9.9
9	12.8	10.8	12.0	11.8	9.2	10.6	12.7	9.2	10.8	11.7	8.8	10.0
10	11.8	10.3	11.3	11.3	9.1	10.4	12.0	9.2	10.8	11.8	9.6	10.6
11	12.6	10.3	11.8	11.4	8.7	10.2	11.8	8.6	10.8	11.8	8.6	10.0
12	12.4	10.0	11.2	10.8	9.1	10.2	11.5	9.0	10.2	11.0	8.5	9.7
13	10.3	9.9	10.1	11.0	8.8	10.0	11.7	8.4	10.2	11.7	8.3	9.7
14	11.8	10.1	10.3	11.1	9.3	10.1	12.1	8.7	10.2	11.1	7.4	9.3
15	12.2	10.7	11.6	10.5	9.0	9.8	11.5	8.8	10	11.3	7.9	9.5
16	12.3	10.4	11.6	10.7	8.8	10	11.7	8.9	10.2	11.0	7.2	10.0
17	12.2	10.2	11.4	10.5	8.6	9.6	11.6	8.8	10.3	10.9	7.3	9.6
18	12.4	10.4	11.4	11.9	8.7	9.9	11.3	8.8	9.8	10.9	7.1	9.4
19	12.4	10.1	11.1	11.1	8.8	9.7	13.1	8.6	10	10.6	7.0	8.8
20	12.6	10.1	11.1	11.0	8.7	9.9	12.1	9.8	11.1	11.0	7.0	9.0
21	12.2	10.3	11.2	11.0	8.7	9.8	12.3	8.5	10.2	10.6	7.2	9.2
22	12.3	10.4	11.4	---	---	---	11.9	8.8	10.6	11.7	7.4	9.4
23	12.9	10.6	12.0	---	---	---	11.3	8.9	10.5	11.5	6.7	8.9
24	12.6	10.4	11.6	---	---	---	11.9	8.3	10.1	7.1	6.8	7.0
25	12.6	10.4	11.5	---	---	---	11.4	8.6	10.3	6.9	6.6	6.8
26	13.0	10.5	11.4	11.1	8.3	9.9	11.5	8.0	9.6	6.6	6.3	6.5
27	12.3	8.9	10.5	10.7	8.2	9.8	11.6	8.0	9.8	6.7	6.2	6.4
28	11.7	9.1	10.2	10.3	8.2	9.2	11.9	8.3	9.8	9.3	6.4	7.7
29	11.1	8.9	10.5	10.4	8.0	8.9	11.6	8.4	9.8	10.4	6.4	7.9
30	11.1	9.1	10.3	11.3	9.0	10.0	12.0	8.5	10	9.3	5.6	7.6
31	---	---	---	11.8	8.4	10.0	11.8	8.4	10.0	---	---	---
MONTH	14.8	8.9	11.6	---	---	---	13.1	8.0	10.3	12.3	5.6	9.2

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.2	7.0	7.8	8.7	7.6	8.1	8.9	6.8	7.7	---	---	---
2	7.9	6.8	7.4	8.4	7.7	8.0	8.8	6.5	7.5	---	---	---
3	9.0	7.3	7.7	8.6	7.6	7.9	8.5	7.0	8.0	---	---	---
4	8.2	7.2	7.6	9.6	7.6	8.2	9.0	7.8	8.2	---	---	---
5	9.4	7.6	8.1	9.6	7.6	8.2	9.1	7.8	8.2	---	---	---
6	9.4	6.9	7.7	9.3	7.5	8.2	8.8	7.8	8.1	---	---	---
7	8.8	6.3	7.5	9.1	7.1	7.9	8.6	6.8	7.8	---	---	---
8	9.1	6.5	7.8	10.3	7.3	8.2	8.9	6.6	7.7	---	---	---
9	8.6	7.7	8.0	8.3	7.2	7.9	8.6	5.9	6.8	---	---	---
10	8.4	7.5	8.0	9.1	7.7	8.3	8.6	6.0	7.6	---	---	---
11	8.2	7.6	7.9	9.3	7.0	7.8	8.3	6.2	7.4	---	---	---
12	8.3	7.4	7.8	8.3	6.8	7.9	8.7	7.6	8.0	---	---	---
13	9.1	7.4	8.0	8.4	7.3	8.1	8.7	7.8	8.2	---	---	---
14	9.4	6.8	7.8	8.8	7.6	8.2	8.3	6.9	7.8	---	---	---
15	8.5	6.6	7.5	9.1	7.4	8.2	7.9	6.7	7.3	---	---	---
16	10.5	6.5	8.1	8.5	7.1	7.8	8.1	7.7	7.9	---	---	---
17	8.9	6.9	8.0	8.8	7.2	7.7	8.9	7.8	8.3	---	---	---
18	8.8	7.4	8.1	8.7	7.4	7.9	8.8	7.3	8.2	---	---	---
19	9.2	7.6	8.2	9.8	7.4	8.3	9.2	6.5	8.0	---	---	---
20	8.9	7.5	8.0	8.8	6.1	7.2	8.6	6.3	7.9	---	---	---
21	9.2	7.4	8.0	8.8	6.3	7.2	8.6	6.4	7.4	---	---	---
22	8.6	7.4	7.9	8.6	6.3	7.3	8.6	6.7	7.7	---	---	---
23	8.9	7.8	8.2	8.4	7.4	7.9	7.6	6.3	6.8	---	---	---
24	9.6	7.5	8.2	8.0	7.6	7.8	7.8	6.2	6.7	---	---	---
25	9.5	6.6	7.9	9.2	6.8	7.7	7.3	5.9	6.4	---	---	---
26	9.7	6.2	7.8	8.8	7.4	8.0	7.3	5.8	6.4	---	---	---
27	9.4	6.0	7.4	8.6	6.4	7.5	7.8	6.0	6.8	---	---	---
28	9.0	6.2	7.4	8.3	6.4	7.5	8.3	6.3	7.1	---	---	---
29	9.3	6.6	7.7	8.3	6.8	7.7	7.7	6.0	6.6	---	---	---
30	9.6	6.8	8.0	8.6	6.9	8.0	6.9	5.7	6.3	---	---	---
31	8.5	6.7	7.6	---	---	---	7.9	5.6	6.4	---	---	---
MONTH	10.5	6.0	7.8	10.3	6.1	7.9	9.2	5.6	7.5	---	---	---

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS--CONTINUED

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.8	8.0	8.6	8.0	8.1	10.2	8.1	8.6	10.7	8.4	8.9
2	8.1	7.9	8.0	8.4	7.9	8.2	10.7	8.2	8.6	9.8	8.4	8.7
3	8.4	7.9	8.1	8.4	7.9	8.2	10.5	8.2	8.6	10.6	8.4	8.9
4	8.8	7.9	8.3	8.4	7.9	8.1	9.9	8.3	8.6	10.8	8.4	8.9
5	9.1	7.9	8.3	8.8	7.9	8.2	10.3	8.2	8.6	11.2	8.4	8.9
6	8.4	8.1	8.2	8.6	7.9	8.2	9.8	8.2	8.6	10.6	8.5	8.8
7	8.3	8.0	8.1	9.0	8.0	8.3	10.6	8.2	8.7	10.3	8.4	8.8
8	8.4	8.0	8.2	8.8	8.0	8.2	10.6	8.1	8.6	8.7	8.5	8.6
9	8.7	8.0	8.3	8.8	7.9	8.2	10.1	8.0	8.5	10.6	8.5	8.8
10	9.9	8.0	8.6	9.2	7.9	8.3	10.0	8.2	8.7	10.1	8.4	8.8
11	8.5	8.0	8.2	8.9	8.0	8.3	9.8	8.3	8.6	10.8	8.5	8.9
12	9.0	8.1	8.4	9.3	8.0	8.3	9.1	8.3	8.5	11.0	8.4	9.0
13	8.3	8.1	8.2	9.2	8.0	8.3	9.5	8.3	8.7	10.3	8.4	8.8
14	8.4	8.1	8.2	8.8	8.0	8.2	9.5	8.4	8.9	9.6	8.5	8.8
15	9.7	7.9	8.3	8.9	7.9	8.2	10.1	8.3	8.9	11.5	8.7	9.0
16	9.2	8.1	8.3	8.9	7.9	8.2	10.7	8.4	8.8	10.2	8.6	8.9
17	9.1	8.0	8.3	8.6	8.0	8.3	9.7	8.5	8.7	10.6	8.6	9.0
18	8.6	8.0	8.2	9.5	8.0	8.4	9.8	8.3	8.7	10.5	8.5	9.1
19	9.2	8.0	8.3	9.5	8.0	8.4	10.5	8.4	8.9	10.2	8.7	9.1
20	8.8	8.1	8.3	10.1	8.0	8.5	10.3	8.4	8.9	10.9	8.6	9.2
21	9.1	8.1	8.3	9.0	8.1	8.3	10.7	8.5	9.0	9.8	8.1	8.7
22	8.6	8.1	8.3	---	---	---	10.6	8.4	8.9	11.0	8.3	9.0
23	8.9	8.0	8.3	---	---	---	10.2	8.4	8.9	9.6	7.7	8.6
24	---	---	---	---	---	---	10.3	8.5	8.9	9.0	8.9	9.0
25	9.6	8.1	8.4	10.3	8.1	8.6	10.7	8.4	9.0	9.1	9.0	9.1
26	9.3	8.1	8.4	9.8	8.1	8.6	10.6	8.3	8.8	9.2	9.1	9.1
27	8.9	8.0	8.3	10.4	8.4	9.0	10.4	8.3	8.8	9.3	9.2	9.2
28	8.5	8.0	8.2	10.4	8.4	8.7	10.8	8.4	8.9	10.6	9.2	9.3
29	8.5	7.9	8.2	9.9	8.3	8.6	10.5	8.3	8.8	9.5	9.2	9.2
30	8.4	7.9	8.2	10.7	8.2	8.8	9.9	8.3	8.6	9.4	9.2	9.3
31	---	---	---	10.4	8.2	8.7	10.4	8.4	8.9	---	---	---
MONTH	---	---	---	---	---	---	10.8	8.0	8.7	11.5	7.7	8.9

## WHITE RIVER BASIN

## 07050500 KINGS RIVER NEAR BERRYVILLE

**LOCATION.**--Lat 36°25'38", long 93°37'15", in SE1/4NE1/4 sec.3, T.20 N., R.25 W., Carroll County, Hydrologic Unit 11010001, on right bank at downstream side of bridge on State Highway 143, 1.5 mi downstream from Bee Creek, 2.5 mi upstream from Clabber Creek, 5.3 mi northwest of Berryville, and at mile 35.1.

**DRAINAGE AREA.**--527 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--April 1939 to September 1975, October 1992 to September 1995, October 1998 to current year. Annual maximum, water years 1976-92, and 1996-98. Monthly discharge only for April 1939, published in WSP 1311.

**REVISED RECORDS.**--WDR Ark. 1995: 1991 (M), 1992 (M), 1993 (M), 1994 (M).

**GAGE.**--Water-stage recorder. Datum of gage is 963.10 ft above NGVD of 1929. Apr. 4 to July 11, 1939, nonrecording gage and July 12, 1939 to Sept. 30, 1951 water-stage recorder at site 5.0 mi upstream at datum 27.71 ft higher. Oct. 1, 1951 to Oct. 22, 1952 and July 18, 1975 to Sept. 30, 1975 nonrecording gage at present site and datum.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Apr. 4, 1927, reached a stage of about 38.0 ft, present site and datum, from information by local residents, discharge 62,000 ft<sup>3</sup>/s.

## DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	37	328	221	9120	291	671	1370	1250	177	51	19
2	16	41	381	207	2860	364	599	1060	897	171	46	16
3	16	62	321	184	1720	424	540	909	722	192	45	14
4	16	56	253	174	1160	470	480	801	616	191	41	14
5	26	50	207	169	862	461	434	718	976	165	35	13
6	38	47	178	164	734	492	398	653	2080	152	33	13
7	32	43	166	158	653	519	522	600	1170	144	29	11
8	28	41	193	154	628	501	20900	664	804	131	26	10
9	25	42	170	149	632	493	10200	1050	769	119	23	8.8
10	79	42	149	144	615	1170	3420	957	1540	108	23	7.3
11	340	41	134	140	551	777	2380	799	2810	100	26	7.7
12	194	39	161	136	496	680	1900	1190	1640	92	26	6.7
13	233	37	263	132	460	658	1590	2970	2410	95	52	6.3
14	251	36	349	125	420	579	1490	1950	2440	100	235	5.4
15	212	35	394	121	386	561	1290	1360	1340	99	274	5.3
16	190	34	3810	117	359	624	1140	1080	927	103	215	5.3
17	153	33	15000	112	331	674	1270	1850	735	119	183	5.3
18	125	32	5440	109	309	594	1260	4430	619	103	141	5.3
19	105	68	2430	113	342	4790	1080	2020	530	195	110	7.6
20	90	115	1410	112	488	14000	1000	1300	460	161	89	16
21	78	85	954	110	599	5310	956	953	398	233	72	17
22	67	66	739	114	515	2680	874	774	353	164	59	22
23	62	55	609	121	454	1820	859	662	314	138	50	17
24	58	54	517	651	413	1380	1510	598	284	119	43	16
25	52	52	446	1240	382	1840	1280	563	322	98	40	16
26	47	53	393	739	353	2990	1070	513	279	83	34	14
27	46	65	352	578	322	2030	1200	611	235	73	32	12
28	44	89	319	498	297	1470	1220	2770	213	62	29	10
29	42	109	292	443	---	1150	1110	4790	196	55	26	9.6
30	40	255	275	406	---	925	1040	4190	196	54	23	7.8
31	39	---	240	3250	---	769	---	1980	---	52	21	---
TOTAL	2762	1814	36873	11091	26461	51486	63683	46135	27525	3848	2132	338.4
MEAN	89.10	60.47	1189	357.8	945.0	1661	2123	1488	917.5	124.1	68.77	11.28
MAX	340	255	15000	3250	9120	14000	20900	4790	2810	233	274	22
MIN	16	32	134	109	297	291	398	513	196	52	21	5.3
AC-FT	5480	3600	73140	22000	52490	102100	126300	91510	54600	7630	4230	671
CFSM	0.17	0.11	2.26	0.68	1.79	3.15	4.03	2.82	1.74	0.24	0.13	0.02
IN.	0.19	0.13	2.60	0.78	1.87	3.63	4.50	3.26	1.94	0.27	0.15	0.02

WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-75, 1993-95, 1999-02, BY WATER YEAR (WY)

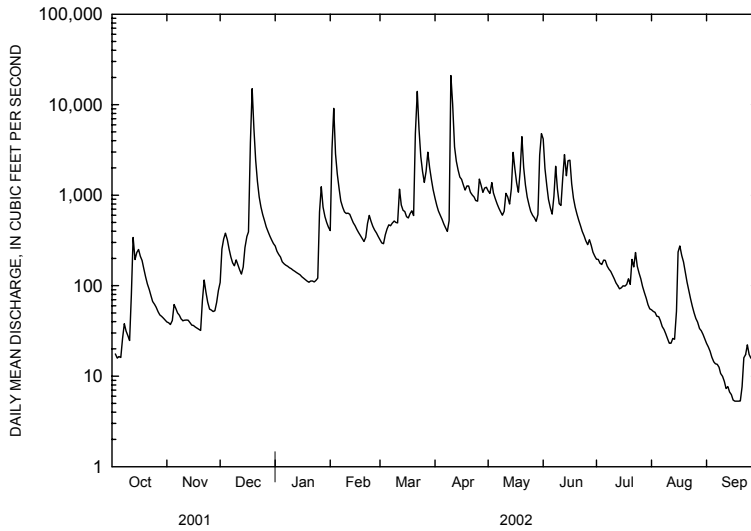
MEAN	186.2	581.9	508.3	601.5	847.6	1010	1209	1209	531.9	218.5	108.0	117.9
MAX	1471	2820	2100	2119	2792	3472	5184	4570	2494	1252	923	789
(WY)	1971	1997	1969	1950	1951	1945	1945	1961	1957	1960	1950	1970
MIN	1.49	6.14	14.0	12.9	35.7	94.3	128	127	38.2	9.21	1.08	4.25
(WY)	1964	1964	1964	1964	1964	1972	1963	2001	1972	1954	1954	1953

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1939-75, 1993-95, 1999-02

ANNUAL TOTAL	135011.9		274148.4		585.6		1251		1945		
ANNUAL MEAN	369.9		751.1		0.20		88.3		1954		
HIGHEST ANNUAL MEAN					0.20		88.3		1954		
LOWEST ANNUAL MEAN					0.40		88.3		1954		
HIGHEST DAILY MEAN	15000	Dec 17	20900	Apr 8	37300	Apr 15	1945				
LOWEST DAILY MEAN	6.5	Sep 6	5.3	Sep 15	0.20	Aug 17		1954			
ANNUAL SEVEN-DAY MINIMUM	8.5	Sep 1	5.7	Sep 12	0.40	Aug 13		1954			
MAXIMUM PEAK FLOW			32300	Apr 8	166000	Nov 19		1985			
MAXIMUM PEAK STAGE			27.41	Apr 8	38.91	Nov 19		1985			
INSTANTANEOUS LOW FLOW			5.3	Sep 12-19	0.10	Aug 27		1954			
ANNUAL RUNOFF (AC-FT)	267800		543800		424200						
ANNUAL RUNOFF (CFSM)	0.70		1.43		1.11						
ANNUAL RUNOFF (INCHES)	9.53		19.35		15.10						
10 PERCENT EXCEEDS	643		1560		1330						
50 PERCENT EXCEEDS	136		235		175						
90 PERCENT EXCEEDS	26		23		20						

<sup>1</sup>Occurred during period of computation of annual maximum only, water years 1976-92

<sup>2</sup>Also August 28, 1954



## WHITE RIVER BASIN

## 07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1953 to September 1960, October 1971 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
DEC 18...	0815	81213	80513	5700	733	10.1	92	8.0	135	9.8	
JAN 25...	1115	81213	80513	1140	758	11.7	95	7.9	140	6.3	
31...	1645	81213	80513	5090	738	11.3	99	7.8	202	8.2	
31...	2300	81213	80513	9990	743	8.2	72	7.5	137	8.4	
FEB 01...	0830	81213	80513	11600	749	11.9	103	7.0	100	8.2	
MAR 19...	1150	81213	80513	2630	750	9.3	85	8.1	225	10.4	
20...	1300	81213	80513	15800	755	7.9	71	8.1	93	10.3	
21...	1215	81213	80513	4630	761	6.5	57	8.0	143	9.5	
APR 08...	1250	81213	80513	25200	730	11.7	109	7.6	83	10.5	
Date		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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)		
DEC 18...	66	20.0	3.80	1.90	.1	1.5	5	2.80			
JAN 25...	60	19.0	3.10	1.50	.1	2.3	7	3.50			
31...	93	23.0	8.60	3.10	.1	2.4	5	3.90			
31...	63	19.0	3.80	1.90	.1	1.5	5	2.60			
FEB 01...	44	14.0	2.30	1.70	.1	1.3	6	2.30			
MAR 19...	110	28.0	9.00	1.70	.1	2.3	4	4.10			
20...	44	14.0	2.20	1.40	.1	1.2	5	2.00			
21...	67	21.0	3.60	1.30	.1	1.6	5	2.80			
APR 08...	38	12.0	1.90	1.80	.1	1.0	5	1.50			
Date		SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
DEC 18...	4.90	92	.02	.80	.03	1.40	<.010	.78	2.2	.123	
JAN 25...	5.70	84	<.01	.70	--	.76	<.010	--	1.5	.092	
31...	5.70	122	.08	2.0	.10	1.00	<.010	1.9	3.0	.736	
31...	4.70	89	.03	1.7	.04	.81	<.010	1.7	2.5	.245	
FEB 01...	4.00	69	.01	1.3	.01	.75	<.010	1.3	2.0	.092	
MAR 19...	5.90	129	.02	1.0	.03	.71	<.010	.98	1.7	.307	
20...	3.70	59	.02	1.0	.03	.59	<.010	.98	1.6	.092	
21...	4.70	84	.02	.30	.03	1.00	<.010	.28	1.3	.061	
APR 08...	3.20	60	.08	3.3	.10	.51	<.010	3.2	3.8	.215	



WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF (COL/ 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)
DEC 18...	.03	.04	.08	1100	1500	1620	87	112	1720
JAN 25...	.04	.03	.09	920	E1300	E2700	91	75	231
31...	.24	.24	.54	E10000	E13000	4800	78	445	6120
31...	.08	.08	.35	--	5400	2800	86	459	12400
FEB 01...	.04	.03	.23	3600	5300	3900	88	322	10100
MAR 19...	.08	.10	.23	1500	1400	1500	58	161	1140
20...	.02	.03	.20	3900	3200	4000	79	374	16000
21...	<.02	.02	.06	400	430	1100	74	106	1330
APR 08...	.07	.07	.57	4600	5600	7200	85	1080	73500

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value



**WHITE RIVER BASIN**  
**07053207 LONG CREEK NEAR DENVER--CONTINUED**

SUMMARY STATISTICS

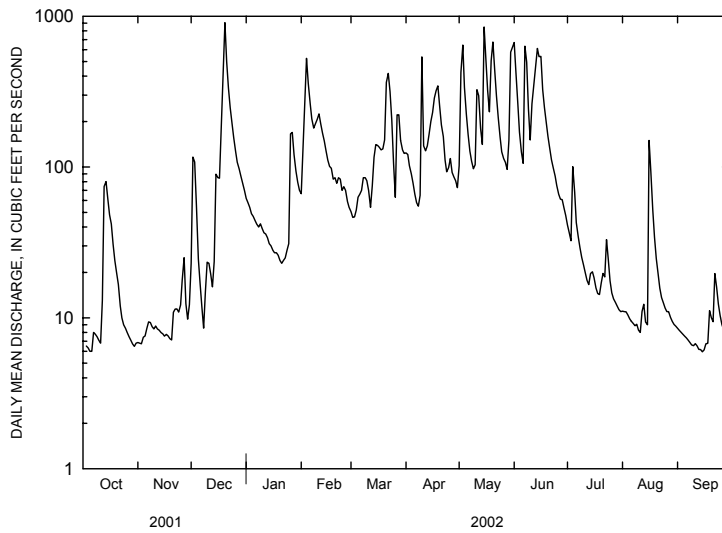
FOR 2002 WATER YEAR

ANNUAL TOTAL	50299.7	
ANNUAL MEAN	137.8	
HIGHEST DAILY MEAN	4220	Jun 10
LOWEST DAILY MEAN	6.0	Oct 3
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 8
MAXIMUM PEAK FLOW	<sup>1</sup>	Jun 10
MAXIMUM PEAK STAGE	<sup>2</sup> 17.89	Jun 10
INSTANTANEOUS LOW FLOW	<sup>2</sup> 24.4	Oct 1
ANNUAL RUNOFF (AC-FT)	99770	
ANNUAL RUNOFF (CFSM)	1.33	
ANNUAL RUNOFF (INCHES)	17.99	
10 PERCENT EXCEEDS	318	
50 PERCENT EXCEEDS	52	
90 PERCENT EXCEEDS	7.8	

<sup>1</sup>Not determined

<sup>2</sup>Also extreme for period of record

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07053250 YOCUM CREEK NEAR OAK GROVE

**LOCATION.**--Lat 36°27'17", long 93°21'21", in SW<sub>1/4</sub>NE<sub>1/4</sub> sec.30, T.21 N., R.22 W., Carroll County, Hydrologic Unit 11010001, on right bank 50 ft upstream from County Road 86, 0.4 mi upstream from Spring Creek, 1.2 mi downstream from Stillhouse Creek, and 4.7 mi east of Oak Grove.

**DRAINAGE AREA.**--52.8 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--April 1993 to current year. Occasional low-flow measurements 1964-67, 1987-88.

**GAGE.**--Water-stage recorder.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	6.0	36	30	308	23	50	49	120	16	15	12
2	5.4	6.4	29	26	208	26	43	43	103	52	15	12
3	5.0	6.9	21	22	157	28	36	35	90	62	15	11
4	4.9	7.5	15	20	122	28	31	32	79	41	16	9.4
5	5.7	8.0	13	20	98	31	27	31	123	29	15	9.1
6	5.8	7.1	11	21	85	36	25	27	100	22	13	9.4
7	6.2	6.3	10	20	75	39	45	22	81	19	13	10
8	6.5	6.1	9.6	17	73	41	1150	70	70	17	13	11
9	6.1	6.3	9.9	17	67	38	513	173	111	15	12	11
10	9.8	6.1	9.9	17	64	34	363	146	86	13	15	9.1
11	47	6.5	8.7	16	54	31	285	118	69	13	17	9.0
12	38	7.1	13	15	48	29	225	157	101	18	15	8.9
13	26	7.0	34	16	44	27	184	507	161	17	98	8.8
14	18	6.6	30	16	39	26	159	279	169	18	119	10
15	15	5.9	26	14	37	26	138	192	117	17	73	12
16	13	5.7	401	14	34	31	125	148	101	16	53	11
17	11	5.7	683	13	32	36	123	396	86	20	38	9.6
18	10	6.0	353	13	29	38	108	350	72	26	28	8.9
19	9.7	10	262	14	38	264	98	243	61	29	22	14
20	9.6	9.4	203	14	55	352	91	174	52	32	19	17
21	9.4	9.8	161	14	44	217	83	140	46	58	17	15
22	9.0	8.9	137	13	39	159	71	120	41	39	14	13
23	8.6	9.6	115	15	37	126	66	104	37	28	13	12
24	8.7	11	98	42	34	105	64	95	32	23	14	9.5
25	8.2	9.4	82	46	31	156	54	86	27	20	15	9.3
26	7.7	9.4	68	41	26	122	54	76	24	19	14	9.2
27	7.5	8.1	57	37	25	102	58	117	22	19	12	9.1
28	7.5	8.1	49	32	23	92	59	239	20	20	11	9.2
29	7.5	9.5	44	28	---	82	53	217	19	19	11	11
30	7.0	23	40	24	---	70	48	175	18	16	11	12
31	6.3	---	34	301	---	59	---	141	---	15	11	---
TOTAL	345.8	243.4	3063.1	948	1926	2474	4429	4702	2238	768	767	322.5
MEAN	11.15	8.113	98.81	30.58	68.79	79.81	147.6	151.7	74.60	24.77	24.74	10.75
MAX	47	23	683	301	308	352	1150	507	169	62	119	17
MIN	4.9	5.7	8.7	13	23	23	25	22	18	13	11	8.8
AC-FT	686	483	6080	1880	3820	4910	8780	9330	4440	1520	1520	640
CFSM	0.21	0.15	1.87	0.58	1.30	1.51	2.80	2.87	1.41	0.47	0.47	0.20
IN.	0.24	0.17	2.16	0.67	1.36	1.74	3.12	3.31	1.58	0.54	0.54	0.23

WHITE RIVER BASIN

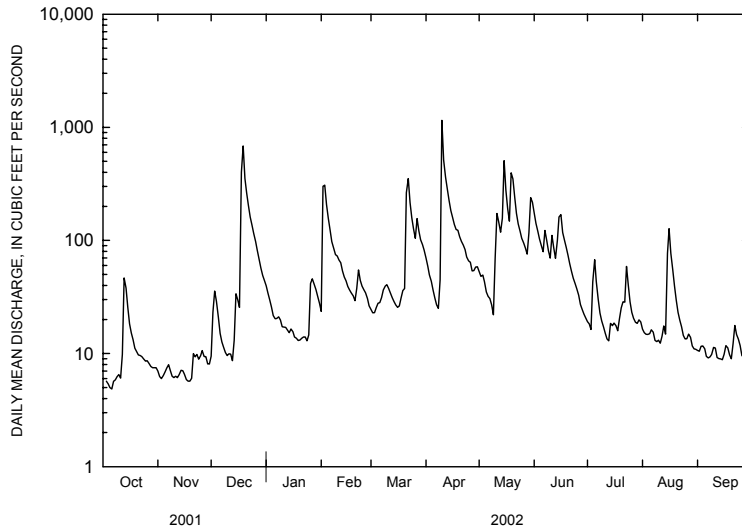
07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

MEAN	12.59	51.77	41.70	63.17	71.84	92.93	81.20	61.32	51.69	36.52	19.40	17.25
MAX	21.3	233	99.2	208	134	175	173	152	137	101	39.4	45.0
(WY)	1994	1997	2002	1998	1998	1998	2002	2002	2000	2002	2000	1996
MIN	7.71	6.80	14.2	19.5	26.7	27.1	15.2	12.9	9.64	12.8	7.70	6.69
(WY)	1995	2000	1999	2000	2000	2000	2000	2001	2001	1997	2001	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	11703.3		22226.8			
ANNUAL MEAN	32.06		60.90		49.42	
HIGHEST ANNUAL MEAN					73.1 2002	
LOWEST ANNUAL MEAN					25.2 2001	
HIGHEST DAILY MEAN	683	Dec 17	1150	Apr 8	1940	Jan 5 1998
LOWEST DAILY MEAN	4.8	Sep 29	4.9	Oct 4	2.5	Feb 9 1998
ANNUAL SEVEN-DAY MINIMUM	5.2	Sep 26	5.5	Oct 1	3.0	Feb 4 1998
MAXIMUM PEAK FLOW			2170	Apr 8	<sup>1</sup> 3740	Jan 5 1998
MAXIMUM PEAK STAGE			11.50	Apr 8	11.50	Apr 8 2002
INSTANTANEOUS LOW FLOW			4.8	Oct 3-5	2.3	Feb 9 1998
ANNUAL RUNOFF (AC-FT)	23210		44090		35800	
ANNUAL RUNOFF (CFSM)	0.61		1.15		0.94	
ANNUAL RUNOFF (INCHES)	8.25		15.66		12.72	
10 PERCENT EXCEEDS	70		151		118	
50 PERCENT EXCEEDS	12		26		21	
90 PERCENT EXCEEDS	6.0		8.4		8.4	

<sup>1</sup>From rating curve extended above 930 ft<sup>3</sup>/s



## WHITE RIVER BASIN

## 07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

## WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT IT FIELD MG/L AS CACO3 (39086)
NOV 20...	1530	80020	80513	8.9	755	8.2	80	8.3	376	13.7	151
DEC 12...	1445	80020	80513	17	740	10.3	96	7.7	382	10.8	156
JAN 09...	1410	80020	80513	17	747	12.8	115	8.1	388	9.7	137
FEB 13...	1445	80020	80513	45	760	13.7	125	8.3	360	11.2	123
MAR 12...	1700	80020	80513	29	747	13.1	127	8.8	342	13.1	133
APR 10...	1115	80020	80513	346	765	9.9	93	7.6	160	12.9	98
MAY 08...	1500	80020	80513	99	745	9.6	104	8.3	355	18.1	139
JUN 05...	1245	80020	80513	89	749	10.3	113	8.2	326	18.8	127
JUL 09...	1320	80020	80513	16	756	8.3	99	7.9	365	23.6	147
SEP 09...	1400	80020	80513	--	--	--	--	--	--	--	--
10...	1710	80020	80513	8.9	752	8.3	102	7.4	359	25.0	149
Date	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE SOLVED (MG/L AS N) (00613)
NOV 20...	184	0	11.9	5.6	<.04	.22	--	--	2.92	--	<.008
DEC 12...	190	0	12.1	7.0	<.04	<.10	--	--	3.99	--	<.008
JAN 09...	167	0	11.1	6.4	<.04	E.09	--	--	5.86	--	<.008
FEB 13...	151	0	9.95	6.6	<.04	.16	--	--	5.53	--	E.005
MAR 12...	153	0	9.97	6.5	<.04	.18	4.59	20.3	4.60	.026	.008
APR 10...	120	4	7.27	5.3	<.04	.27	--	--	5.05	--	E.005
MAY 08...	170	0	9.74	5.9	<.04	.24	--	--	4.09	--	E.005
JUN 05...	155	0	7.74	4.4	<.04	.17	--	--	4.24	--	E.006
JUL 09...	179	0	8.84	4.5	<.04	.26	--	--	4.09	--	E.005
SEP 09...	--	--	--	--	--	--	--	--	--	--	--
10...	182	0	9.13	4.6	<.04	E.08	--	--	3.37	--	<.008
Date	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI-PHYTON BIOMASS DRY WEIGHT (G/SQ M) (00573)	PERI-PHYTON BIOMASS FREE DRY (G/SQ M) (49954)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)
NOV 20...	3.1	.074	.02	.035	--	--	--	--	63	52	160
DEC 12...	--	.092	.03	.035	--	--	--	--	330	530	540
JAN 09...	--	.138	.04	.049	--	--	--	--	21	E15	110
FEB 13...	5.7	.138	.04	.061	--	--	--	--	28	28	20
MAR 12...	4.8	.092	.03	.036	--	--	--	--	E6	39	E7
APR 10...	5.3	.322	.10	.136	--	--	--	--	570	700	210
MAY 08...	4.3	.129	.04	.063	--	--	--	--	550	850	740
JUN 05...	4.4	.202	.07	.072	--	--	--	--	1200	1470	E2160
JUL 09...	4.3	.202	.07	.076	--	--	--	--	160	240	63
SEP 09...	--	--	--	--	450	477.6	24.300	29	--	--	--
10...	--	.163	.05	.061	--	--	--	--	49	120	150

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
NOV 20...	--	<.002	<.004	<.002	<.005	.014	<.010	<.002	<.041	<.020	<.005
DEC 12...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
FEB 13...	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
APR 10...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	E.009	<.005
MAY 08...	--	<.006	<.006	<.004	<.005	E.006	<.010	<.002	<.041	<.020	<.005
JUN 05...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
JUL 09...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
SEP 09...	66.0	--	--	--	--	--	--	--	--	--	--
10...	--	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005

Date	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
NOV 20...	<.018	<.003	E.007	<.005	<.005	<.02	<.002	<.009	<.005	<.003
DEC 12...	--	--	--	--	--	--	--	--	--	--
JAN 09...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
FEB 13...	--	--	--	--	--	--	--	--	--	--
MAR 12...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
APR 10...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
MAY 08...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
JUN 05...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
JUL 09...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003
SEP 09...	--	--	--	--	--	--	--	--	--	--
10...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003

Date	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL THION WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV 20...	<.004	<.035	<.027	<.050	<.006	E.004	<.006	<.002	<.007	<.003	<.007
DEC 12...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
FEB 13...	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
APR 10...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
MAY 08...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
JUN 05...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
JUL 09...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010
SEP 09...	--	--	--	--	--	--	--	--	--	--	--
10...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010

## WHITE RIVER BASIN

## 07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)
NOV 20...	<.002	<.010	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.011
DEC 12...	--	--	--	--	--	--	--	--	--	--
JAN 09...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
FEB 13...	--	--	--	--	--	--	--	--	--	--
MAR 12...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
APR 10...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
MAY 08...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
JUN 05...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
JUL 09...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005
SEP 09...	--	--	--	--	--	--	--	--	--	--
10...	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005

Date	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDEDED THAN (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
NOV 20...	<.02	<.034	<.02	<.005	<.002	<.009	31	95	2.3
DEC 12...	--	--	--	--	--	--	43	83	3.8
JAN 09...	<.02	<.034	<.02	<.005	<.002	<.009	55	49	2.2
FEB 13...	--	--	--	--	--	--	36	80	9.7
MAR 12...	E.01	<.034	<.02	<.005	<.002	<.009	32	72	5.6
APR 10...	E.01	E.009	<.02	<.005	<.002	<.009	90	39	36.4
MAY 08...	E.01	<.034	<.02	<.005	<.002	<.009	85	54	14.4
JUN 05...	E.01	<.034	<.02	<.005	<.002	<.009	91	24	5.8
JUL 09...	E.01	<.034	<.02	<.005	<.002	<.009	87	33	1.4
SEP 09...	--	--	--	--	--	--	--	--	--
10...	<.02	<.034	<.02	<.005	<.002	<.009	12	18	.43

Remark codes used in this report:

< -- Less than  
E -- Estimated value



WHITE RIVER BASIN

159

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI

LOCATION.--Lat 36°35'46", long 93°18'35", in NW1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek, and 6.1 mi southwest of Branson, Missouri.

DRAINAGE AREA.--4,020 mi<sup>2</sup>.

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

COOPERATION.--Records prior to October 1978 are available from U.S. Army Corps of Engineers, Little Rock, Arkansas.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
OCT											
01...	1508	80513	175	.20	5.80	758	8.4	100	8.4	249	23.7
01...	1509	80513	175	9.90	--	758	8.5	100	8.4	259	23.2
01...	1510	80513	175	19.9	--	758	8.6	100	8.4	277	22.6
01...	1512	80513	175	30.1	--	758	8.5	98	8.4	281	22.5
01...	1514	80513	175	39.3	--	758	8.1	94	8.4	280	22.4
01...	1516	80513	175	41.2	--	758	6.3	71	8.1	315	21.3
01...	1517	80513	175	42.3	--	758	4.3	47	7.7	238	19.5
01...	1518	80513	175	43.3	--	758	3.8	40	7.6	244	18.5
01...	1519	80513	175	44.3	--	758	3.5	37	7.5	245	18.2
01...	1520	80513	175	46.1	--	758	3.1	33	7.5	238	17.6
01...	1521	80513	175	47.2	--	758	2.8	29	7.5	243	17.1
01...	1522	80513	175	50.4	--	758	2.0	21	7.4	230	16.1
01...	1523	80513	175	55.4	--	758	1.7	17	7.4	229	15.1
01...	1524	80513	175	60.0	--	758	1.9	18	7.3	229	14.2
01...	1525	80513	175	65.2	--	758	2.6	25	7.3	239	13.2
01...	1526	80513	175	70.3	--	758	3.3	31	7.3	243	12.5
01...	1527	80513	175	79.8	--	758	3.7	34	7.3	241	11.1
01...	1529	80513	175	88.4	--	758	3.7	33	7.3	244	9.9
01...	1530	80513	175	89.9	--	758	3.7	33	7.3	244	9.8
01...	1531	80513	175	100	--	758	3.9	34	7.3	244	9.0
01...	1532	80513	175	110	--	758	3.9	34	7.3	244	8.5
01...	1533	80513	175	120	--	758	4.0	34	7.3	245	8.0
01...	1534	80513	175	130	--	758	3.8	32	7.2	249	7.7
01...	1535	80513	175	140	--	758	3.5	30	7.2	251	7.5
01...	1536	80513	175	150	--	758	2.7	23	7.2	257	7.3
01...	1537	80513	175	160	--	758	2.1	18	7.2	260	7.1
01...	1538	80513	175	170	--	758	1.7	14	7.1	258	7.0
01...	1539	80513	175	175	--	758	1.4	12	7.1	257	7.0
NOV											
06...	1437	80513	196	.30	4.90	758	8.7	--	7.9	--	18.4
06...	1439	80513	196	10.1	--	758	8.7	--	7.9	--	17.4
06...	1440	80513	196	20.2	--	758	8.6	--	7.9	--	17.3
06...	1441	80513	196	40.0	--	758	8.4	--	7.9	--	17.2
06...	1443	80513	196	50.0	--	758	7.9	--	7.8	--	17.1
06...	1446	80513	196	59.1	--	758	3.3	--	7.2	--	16.0
06...	1447	80513	196	60.1	--	758	2.4	--	7.2	--	15.5
06...	1448	80513	196	61.1	--	758	1.7	--	7.1	--	15.4
06...	1450	80513	196	64.0	--	758	.7	--	7.0	--	14.7
06...	1451	80513	196	67.1	--	758	.5	--	7.0	--	14.1
06...	1452	80513	196	68.9	--	758	.6	--	7.0	--	13.4
06...	1453	80513	196	70.1	--	758	.7	--	7.0	--	13.2
06...	1454	80513	196	77.0	--	758	1.0	--	7.0	--	12.5
06...	1455	80513	196	80.2	--	758	1.4	--	7.0	--	12.0
06...	1456	80513	196	89.0	--	758	1.8	--	7.0	--	11.0
06...	1457	80513	196	90.0	--	758	1.9	--	7.0	--	10.7
06...	1458	80513	196	100	--	758	2.3	--	7.0	--	9.7
06...	1459	80513	196	110	--	758	2.4	--	6.9	--	9.2
06...	1500	80513	196	120	--	758	2.3	--	6.9	--	8.6
06...	1501	80513	196	130	--	758	2.2	--	6.9	--	8.1
06...	1502	80513	196	140	--	758	1.5	--	6.9	--	7.9
06...	1503	80513	196	150	--	758	.8	--	6.9	--	7.8
06...	1504	80513	196	160	--	758	.5	--	6.8	--	7.5
06...	1505	80513	196	170	--	758	.1	--	6.8	--	7.4
06...	1506	80513	196	180	--	758	.1	--	6.8	--	7.4
06...	1507	80513	196	190	--	758	.1	--	6.8	--	7.3
06...	1508	80513	196	196	--	758	.1	--	6.8	--	7.2
DEC											
17...	1734	80513	197	.90	3.70	753	9.5	--	7.7	--	12.3
17...	1735	80513	197	10.1	--	753	9.2	--	7.7	--	12.3
17...	1736	80513	197	20.3	--	753	9.1	--	7.7	--	12.3
17...	1737	80513	197	30.0	--	753	9.0	--	7.7	--	12.4
17...	1738	80513	197	40.6	--	753	8.9	--	7.7	--	12.4
17...	1739	80513	197	50.5	--	753	8.8	--	7.7	--	12.4
17...	1740	80513	197	60.1	--	753	8.7	--	7.7	--	12.4
17...	1741	80513	197	70.3	--	753	8.7	--	7.7	--	12.4
17...	1742	80513	197	79.9	--	753	8.5	--	7.6	--	12.4
17...	1743	80513	197	89.9	--	753	8.2	--	7.5	--	12.3
17...	1744	80513	197	95.2	--	753	5.0	--	7.2	--	12.0
17...	1745	80513	197	100	--	753	.5	--	7.0	--	11.0
17...	1746	80513	197	105	--	753	.5	--	7.0	--	10.4
17...	1747	80513	197	110	--	753	.5	--	6.9	--	10.0
17...	1748	80513	197	120	--	753	.7	--	6.9	--	9.4
17...	1749	80513	197	130	--	753	.2	--	6.9	--	9.1
17...	1750	80513	197	140	--	753	.2	--	6.9	--	8.7

## WHITE RIVER BASIN

## 07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
DEC											
17...	1751	80513	197	150	--	753	.1	--	6.9	--	8.4
17...	1752	80513	197	160	--	753	.1	--	6.9	--	8.1
17...	1753	80513	197	170	--	753	.1	--	6.8	--	7.9
17...	1754	80513	197	180	--	753	.1	--	6.8	--	7.6
17...	1755	80513	197	190	--	753	.1	--	6.8	--	7.5
17...	1756	80513	197	197	--	753	.1	--	6.8	--	7.6
JAN											
24...	0830	80513	194	.70	4.30	755	9.0	77	7.7	226	7.9
24...	0831	80513	194	10.0	--	755	8.9	76	7.7	225	7.9
24...	0832	80513	194	20.0	--	755	8.8	75	7.8	225	7.9
24...	0833	80513	194	30.0	--	755	8.8	75	7.7	226	7.9
24...	0834	80513	194	40.0	--	755	8.7	74	6.4	225	7.9
24...	0835	80513	194	50.0	--	755	8.7	74	7.5	226	7.9
24...	0836	80513	194	60.0	--	755	8.6	73	7.7	226	7.9
24...	0837	80513	194	70.0	--	755	8.5	72	7.7	226	7.8
24...	0838	80513	194	80.0	--	755	8.6	72	7.7	226	7.7
24...	0839	80513	194	90.0	--	755	8.4	71	7.7	226	7.7
24...	0840	80513	194	100	--	755	8.4	71	7.7	226	7.7
24...	0841	80513	194	110	--	755	8.4	71	7.7	226	7.6
24...	0842	80513	194	120	--	755	8.4	71	7.7	227	7.6
24...	0843	80513	194	130	--	755	8.4	71	7.7	227	7.6
24...	0844	80513	194	140	--	755	8.4	71	7.7	227	7.6
24...	0845	80513	194	150	--	755	8.4	71	7.7	227	7.6
24...	0846	80513	194	160	--	755	8.3	70	7.7	228	7.6
24...	0847	80513	194	170	--	755	8.3	70	7.7	228	7.5
24...	0848	80513	194	180	--	755	8.0	68	7.6	229	7.5
24...	0849	80513	194	190	--	755	7.7	64	7.5	232	7.3
24...	0850	80513	194	194	--	755	7.0	59	7.4	233	7.3
MAR											
27...	1449	80513	176	.40	4.60	752	11.6	101	8.0	238	8.7
27...	1450	80513	176	10.0	--	752	11.8	100	8.1	238	7.8
27...	1451	80513	176	20.1	--	752	11.7	99	8.1	237	7.7
27...	1452	80513	176	30.1	--	752	11.5	97	8.0	238	7.6
27...	1453	80513	176	39.9	--	752	11.4	96	6.1	238	7.6
27...	1454	80513	176	50.0	--	752	11.3	96	8.1	239	7.5
27...	1455	80513	176	60.0	--	752	11.2	95	8.0	239	7.5
27...	1456	80513	176	69.9	--	752	11.3	95	8.0	239	7.5
27...	1457	80513	176	80.1	--	752	11.2	94	8.0	239	7.5
27...	1458	80513	176	80.1	--	752	11.2	94	8.0	239	7.5
27...	1459	80513	176	100	--	752	10.7	90	7.9	237	7.1
27...	1500	80513	176	110	--	752	10.6	88	7.8	238	7.0
27...	1501	80513	176	120	--	752	10.3	86	7.8	239	6.8
27...	1502	80513	176	130	--	752	10.3	86	7.8	241	6.8
27...	1503	80513	176	140	--	752	10.3	85	7.8	242	6.8
27...	1504	80513	176	150	--	752	10.2	85	7.8	243	6.7
27...	1505	80513	176	160	--	752	10.1	84	7.7	244	6.7
27...	1506	80513	176	170	--	752	10.1	83	7.7	245	6.6
27...	1507	80513	176	176	--	752	9.8	81	7.7	245	6.6
JUN											
12...	0755	80513	201	.00	1.50	752	10.6	127	8.6	121	23.6
12...	0756	80513	201	10.0	--	752	9.9	122	8.6	194	25.2
12...	0757	80513	201	14.0	--	752	9.4	116	8.6	195	25.1
12...	0758	80513	201	15.0	--	752	8.5	105	8.6	196	25.0
12...	0759	80513	201	16.0	--	752	6.9	81	8.4	214	22.5
12...	0800	80513	201	17.1	--	752	6.2	68	8.1	236	19.2
12...	0801	80513	201	20.1	--	752	5.4	58	8.0	239	18.6
12...	0802	80513	201	25.0	--	752	4.8	52	7.9	238	18.2
12...	0803	80513	201	30.0	--	752	4.4	47	7.8	239	17.6
12...	0804	80513	201	40.1	--	752	3.8	39	7.8	243	16.6
12...	0805	80513	201	50.0	--	752	3.8	39	7.7	252	15.4
12...	0806	80513	201	55.0	--	752	3.8	38	7.7	247	14.9
12...	0807	80513	201	60.0	--	752	4.0	39	7.7	235	14.4
12...	0808	80513	201	65.0	--	752	4.7	45	7.7	225	13.3
12...	0809	80513	201	70.0	--	752	4.7	45	7.6	219	12.8
12...	0810	80513	201	78.0	--	752	5.8	54	7.7	215	11.7
12...	0811	80513	201	80.0	--	752	5.6	52	7.6	214	11.6
12...	0812	80513	201	90.0	--	752	6.2	57	7.6	226	11.0
12...	0813	80513	201	100	--	752	6.7	61	7.6	229	10.6
12...	0814	80513	201	110	--	752	7.2	65	7.6	227	10.1
12...	0815	80513	201	120	--	752	7.0	63	7.6	221	9.9
12...	0816	80513	201	130	--	752	7.3	65	7.6	227	9.5
12...	0817	80513	201	140	--	752	7.3	64	7.6	229	9.3
12...	0818	80513	201	140	--	752	7.2	64	7.6	229	9.3
12...	0819	80513	201	150	--	752	7.1	62	7.6	238	9.0
12...	0820	80513	201	160	--	752	6.7	58	7.5	250	8.8
12...	0821	80513	201	170	--	752	4.9	42	7.5	275	8.4
12...	0822	80513	201	180	--	752	4.3	37	7.5	277	8.3
12...	0823	80513	201	190	--	752	4.1	36	7.4	276	8.3
12...	0824	80513	201	200	--	752	3.8	33	7.4	270	8.1
12...	0825	80513	201	201	--	752	3.7	31	7.4	271	8.0
AUG											
14...	1335	80513	195	.80	2.00	758	7.4	95	8.3	203	27.5
14...	1336	80513	195	9.90	--	758	7.3	94	8.3	203	27.5
14...	1337	80513	195	20.2	--	758	7.2	92	8.3	203	27.4
14...	1338	80513	195	22.5	--	758	6.7	85	8.2	205	27.3
14...	1339	80513	195	23.1	--	758	5.5	69	8.1	212	27.0
14...	1340	80513	195	24.2	--	758	2.6	32	7.5	237	24.3
14...	1341	80513	195	25.1	--	758	1.9	22	7.4	242	23.3
14...	1342	80513	195	27.1	--	758	1.2	14	7.3	246	22.8

WHITE RIVER BASIN

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
14...	1343	80513	195	30.2	--	758	.3	3	7.2	249	21.6
14...	1344	80513	195	32.2	--	758	.2	2	7.2	251	20.7
14...	1347	80513	195	36.1	--	758	.2	2	7.2	257	19.4
14...	1349	80513	195	39.0	--	758	.2	2	7.2	256	18.5
14...	1350	80513	195	40.3	--	758	.2	2	7.2	257	18.2
14...	1351	80513	195	46.8	--	758	.1	2	7.2	260	17.3
14...	1352	80513	195	50.3	--	758	.1	1	7.2	260	16.8
14...	1353	80513	195	60.1	--	758	.1	1	7.1	264	15.9
14...	1354	80513	195	70.3	--	758	.4	4	7.1	257	14.9
14...	1355	80513	195	80.1	--	758	1.2	11	7.1	245	14.1
14...	1356	80513	195	90.5	--	758	2.7	26	7.1	221	13.1
14...	1357	80513	195	100	--	758	2.9	28	7.1	222	12.2
14...	1358	80513	195	110	--	758	3.5	32	7.1	218	11.6
14...	1359	80513	195	120	--	758	4.2	38	7.1	204	10.9
14...	1400	80513	195	130	--	758	4.5	40	7.1	210	10.4
14...	1401	80513	195	140	--	758	3.8	34	7.1	232	10.1
14...	1402	80513	195	150	--	758	3.2	28	7.1	237	9.7
14...	1403	80513	195	160	--	758	2.2	19	7.0	245	9.3
14...	1404	80513	195	170	--	758	1.0	9	6.9	250	9.0
14...	1405	80513	195	180	--	758	.3	2	6.9	254	8.9
14...	1406	80513	195	190	--	758	.2	2	7.0	258	8.7
14...	1407	80513	195	195	--	758	.2	1	7.0	260	8.6
SEP											
11...	0738	80513	184	.40	2.00	757	7.5	96	8.5	208	27.8
11...	0739	80513	184	9.90	--	757	7.5	96	8.5	208	27.8
11...	0740	80513	184	20.1	--	757	5.0	63	8.0	219	26.7
11...	0741	80513	184	22.0	--	757	3.2	40	7.6	228	25.4
11...	0742	80513	184	24.0	--	757	2.5	30	7.5	232	24.8
11...	0743	80513	184	26.0	--	757	2.0	24	7.4	234	24.4
11...	0744	80513	184	28.2	--	757	1.5	18	7.4	236	23.8
11...	0745	80513	184	30.1	--	757	.7	8	7.3	240	23.1
11...	0746	80513	184	34.0	--	757	.4	4	7.2	250	20.4
11...	0747	80513	184	35.9	--	757	.3	4	7.2	252	19.6
11...	0748	80513	184	40.0	--	757	.3	3	7.2	258	18.5
11...	0749	80513	184	44.9	--	757	.3	3	7.2	255	17.6
11...	0750	80513	184	50.0	--	757	.3	3	7.2	255	17.1
11...	0751	80513	184	60.2	--	757	.3	3	7.1	258	16.1
11...	0752	80513	184	70.0	--	757	.3	3	7.1	255	15.4
11...	0753	80513	184	80.1	--	757	.3	3	7.1	250	14.8
11...	0754	80513	184	89.9	--	757	.7	7	7.1	238	14.0
11...	0755	80513	184	100	--	757	1.6	16	7.1	225	13.2
11...	0756	80513	184	110	--	757	1.9	18	7.1	226	12.5
11...	0757	80513	184	120	--	757	2.1	19	7.1	228	11.7
11...	0758	80513	184	130	--	757	2.4	22	7.1	217	11.0
11...	0759	80513	184	140	--	757	3.1	28	7.0	206	10.4
11...	0800	80513	184	150	--	757	2.3	20	7.0	222	9.9
11...	0801	80513	184	170	--	757	.3	3	6.9	239	9.3
11...	0802	80513	184	170	--	757	.3	3	6.9	239	9.3
11...	0803	80513	184	180	--	757	.3	3	7.0	246	9.0
11...	0804	80513	184	184	--	757	.3	3	6.9	247	9.0

## WHITE RIVER BASIN

07053450 WHITE RIVER BELOW TABLE ROCK DAM NEAR BRANSON, MISSOURI

LOCATION.--Lat 36°35'40", long 93°18'33", in NW1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek and 6.1 mi southwest of Branson, Missouri.

DRAINAGE AREA.--4,020 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1978 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED, (PER- CENT SATUR- ATION) (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
OCT								
01...	1431	80513	758	11.1	113	8.0	542	15.6
NOV								
06...	1412	80513	763	8.2	--	6.7	--	9.6
DEC								
17...	1828	80513	753	5.6	--	7.1	--	9.5
JAN								
24...	0927	80513	763	9.6	79	7.4	246	7.1
MAR								
27...	1542	80513	756	12.0	100	7.9	242	7.4
JUN								
12...	0902	80513	758	8.2	72	8.0	239	9.7
JUL								
24...	0946	80513	765	10.1	92	7.4	240	11.4
AUG								
14...	1439	80513	758	10.9	105	8.1	238	13.2
SEP								
11...	0711	80513	763	6.0	55	7.0	238	12.0



WHITE RIVER BASIN

07054410 BEAR CREEK NEAR OMAHA--CONTINUED

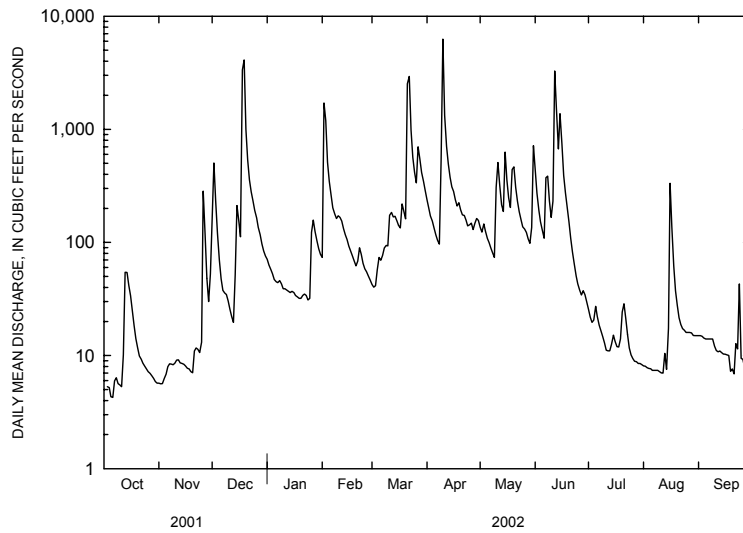
SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL TOTAL	68896.0	
ANNUAL MEAN	188.8	
HIGHEST DAILY MEAN	6270	Apr 8
LOWEST DAILY MEAN	4.3	Oct 3
ANNUAL SEVEN-DAY MINIMUM	5.3	Oct 1
MAXIMUM PEAK FLOW	<sup>1</sup> 15900	Jun 10
MAXIMUM PEAK STAGE	<sup>1</sup> 11.38	Jun 10
INSTANTANEOUS LOW FLOW	<sup>1</sup> 4.2	Oct 3-5
ANNUAL RUNOFF (AC-FT)	136700	
ANNUAL RUNOFF (CFSM)	1.42	
ANNUAL RUNOFF (INCHES)	19.27	
10 PERCENT EXCEEDS	364	
50 PERCENT EXCEEDS	48	
90 PERCENT EXCEEDS	7.6	

<sup>1</sup>Also peak for period of record

<sup>e</sup>Estimated



WHITE RIVER BASIN

07054500 BULL SHOALS LAKE NEAR FLIPPIN

LOCATION.--Lat 36°21'56", long 92°34'29", in NW1/4 sec.21, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, at dam on White River, 6.3 mi northeast of Flippin, 12.5 mi downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,051 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1954-60, 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (0010)	
OCT											
03...	1203	80513	170	.20	6.40	763	9.1	105	8.3	261	22.9
03...	1204	80513	170	10.0	--	763	8.8	103	8.3	261	22.9
03...	1205	80513	170	20.1	--	763	8.7	102	8.3	260	22.9
03...	1206	80513	170	30.1	--	763	8.7	101	8.3	261	22.9
03...	1207	80513	170	40.1	--	763	9.3	107	8.3	269	22.6
03...	1208	80513	170	41.0	--	763	10.0	113	8.1	310	21.4
03...	1209	80513	170	42.1	--	763	9.9	112	8.1	312	21.1
03...	1211	80513	170	43.0	--	763	9.9	110	8.1	331	20.6
03...	1212	80513	170	44.1	--	763	9.7	106	8.1	349	20.1
03...	1214	80513	170	45.0	--	763	9.5	104	8.1	356	19.6
03...	1215	80513	170	47.0	--	763	9.4	101	8.0	371	19.1
03...	1216	80513	170	50.1	--	763	7.3	78	7.8	402	18.1
03...	1218	80513	170	53.0	--	763	6.3	65	7.7	247	17.5
03...	1220	80513	170	57.0	--	763	5.2	53	7.5	249	16.9
03...	1221	80513	170	60.0	--	763	3.8	38	7.5	251	16.2
03...	1222	80513	170	64.8	--	763	3.3	33	7.4	250	15.3
03...	1223	80513	170	70.0	--	763	3.4	33	7.4	249	14.6
03...	1224	80513	170	76.9	--	763	3.5	34	7.4	250	13.7
03...	1225	80513	170	80.1	--	763	4.1	39	7.4	249	13.1
03...	1226	80513	170	90.0	--	763	4.9	44	7.4	245	11.3
03...	1227	80513	170	100	--	763	4.7	42	7.3	244	9.7
03...	1228	80513	170	110	--	763	4.6	39	7.3	247	8.7
03...	1229	80513	170	120	--	763	4.3	37	7.3	249	8.2
03...	1230	80513	170	130	--	763	4.2	35	7.3	248	7.8
03...	1231	80513	170	140	--	763	4.2	35	7.3	243	7.5
03...	1232	80513	170	150	--	763	4.0	33	7.3	244	7.3
03...	1233	80513	170	160	--	763	3.7	30	7.2	242	7.1
03...	1234	80513	170	170	--	763	1.3	11	7.2	241	7.1
NOV											
07...	1212	80513	173	.40	8.10	766	8.7	--	8.0	--	17.7
07...	1213	80513	173	10.1	--	766	8.5	--	8.0	--	17.6
07...	1214	80513	173	20.0	--	766	8.5	--	8.0	--	17.6
07...	1215	80513	173	30.0	--	766	8.2	--	8.0	--	17.6
07...	1216	80513	173	40.0	--	766	8.1	--	7.9	--	17.5
07...	1217	80513	173	50.0	--	766	7.7	--	7.9	--	17.4
07...	1219	80513	173	60.0	--	766	6.5	--	7.7	--	17.2
07...	1222	80513	173	67.2	--	766	2.8	--	7.3	--	16.2
07...	1223	80513	173	70.0	--	766	2.1	--	7.3	--	15.3
07...	1224	80513	173	74.0	--	766	2.1	--	7.2	--	14.3
07...	1225	80513	173	80.1	--	766	2.3	--	7.2	--	13.8
07...	1228	80513	173	84.0	--	766	2.5	--	7.2	--	12.7
07...	1229	80513	173	90.3	--	766	2.6	--	7.2	--	12.0
07...	1230	80513	173	97.2	--	766	3.1	--	7.2	--	11.2
07...	1231	80513	173	110	--	766	3.1	--	7.2	--	9.7
07...	1232	80513	173	120	--	766	2.8	--	7.1	--	8.6
07...	1233	80513	173	130	--	766	2.8	--	7.1	--	8.3
07...	1234	80513	173	140	--	766	2.5	--	7.1	--	7.9
07...	1235	80513	173	150	--	766	2.9	--	7.1	--	7.6
07...	1236	80513	173	160	--	766	2.4	--	7.1	--	7.4
07...	1237	80513	173	170	--	766	1.4	--	7.0	--	7.3
07...	1238	80513	173	173	--	766	.5	--	7.0	--	7.4
DEC											
18...	1038	80513	176	.40	9.80	766	8.8	--	7.7	--	12.4
18...	1039	80513	176	10.0	--	766	8.6	--	7.6	--	12.7
18...	1040	80513	176	20.2	--	766	8.5	--	7.6	--	12.7
18...	1041	80513	176	30.0	--	766	8.3	--	7.6	--	12.8
18...	1042	80513	176	40.2	--	766	8.3	--	7.6	--	12.8
18...	1043	80513	176	50.1	--	766	8.2	--	7.5	--	12.8
18...	1044	80513	176	60.2	--	766	8.2	--	7.5	--	12.9
18...	1045	80513	176	70.1	--	766	8.2	--	7.5	--	12.8
18...	1046	80513	176	80.2	--	766	8.0	--	7.5	--	12.9
18...	1047	80513	176	90.2	--	766	7.9	--	7.5	--	12.9
18...	1048	80513	176	99.9	--	766	4.1	--	7.2	--	12.5
18...	1049	80513	176	105	--	766	.9	--	7.0	--	11.8
18...	1050	80513	176	110	--	766	.8	--	7.0	--	11.5
18...	1051	80513	176	117	--	766	.7	--	7.0	--	10.7
18...	1052	80513	176	120	--	766	.4	--	6.9	--	10.2
18...	1053	80513	176	130	--	766	.5	--	6.9	--	9.3
18...	1054	80513	176	140	--	766	.2	--	6.9	--	8.6
18...	1055	80513	176	150	--	766	.3	--	6.9	--	8.1
18...	1056	80513	176	160	--	766	.3	--	6.8	--	7.8
18...	1057	80513	176	170	--	766	.2	--	6.8	--	7.5
18...	1058	80513	176	176	--	766	.1	--	6.8	--	7.5

## WHITE RIVER BASIN

## 07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JAN											
23...	1233	80513	171	.40	5.20	755	8.1	70	7.8	265	8.6
23...	1234	80513	171	10.0	--	755	7.9	68	7.8	265	8.4
23...	1235	80513	171	20.0	--	755	7.9	68	7.7	265	8.3
23...	1236	80513	171	30.0	--	755	7.8	67	7.6	265	8.3
23...	1237	80513	171	40.0	--	755	7.9	68	7.7	265	8.3
23...	1238	80513	171	50.0	--	755	7.8	67	7.8	265	8.3
23...	1239	80513	171	60.0	--	755	7.8	67	7.8	265	8.3
23...	1240	80513	171	70.0	--	755	7.8	67	7.8	265	8.3
23...	1241	80513	171	80.0	--	755	7.7	66	7.8	265	8.3
23...	1242	80513	171	90.0	--	755	7.6	65	7.8	265	8.3
23...	1243	80513	171	100	--	755	7.2	62	7.7	266	8.3
23...	1244	80513	171	110	--	755	5.8	49	7.5	269	8.2
23...	1245	80513	171	120	--	755	2.4	20	7.2	275	8.0
23...	1246	80513	171	130	--	755	1.4	12	7.2	276	7.9
23...	1247	80513	171	140	--	755	.7	6	7.2	278	7.8
23...	1248	80513	150	150	--	755	.1	0	7.1	280	7.8
23...	1249	80513	171	160	--	755	.0	0	7.2	283	7.7
23...	1250	80513	171	170	--	755	.0	0	7.2	284	7.5
23...	1251	80513	171	171	--	755	.0	0	7.2	294	7.5
MAR											
28...	0852	80513	179	.50	7.00	755	11.4	98	7.9	258	8.4
28...	0853	80513	179	9.90	--	755	11.4	98	8.0	258	8.1
28...	0854	80513	179	19.9	--	755	11.4	98	8.0	259	8.1
28...	0855	80513	179	29.9	--	755	11.3	97	8.0	259	8.1
28...	0856	80513	179	40.0	--	755	11.2	96	6.2	260	8.0
28...	0857	80513	179	50.0	--	755	11.1	95	8.0	259	8.0
28...	0858	80513	179	60.0	--	755	11.1	95	8.0	258	8.0
28...	0859	80513	179	70.0	--	755	11.0	94	8.0	259	8.0
28...	0900	80513	179	80.0	--	755	11.0	93	8.0	258	8.0
28...	0901	80513	179	90.0	--	755	10.8	91	7.9	261	7.6
28...	0902	80513	179	100	--	755	10.6	88	7.8	261	7.2
28...	0903	80513	179	110	--	755	10.4	87	7.8	262	7.1
28...	0904	80513	179	120	--	755	10.3	86	7.8	262	7.0
28...	0905	80513	179	130	--	755	10.2	84	7.8	262	7.0
28...	0906	80513	179	140	--	755	10.2	84	7.8	262	7.0
28...	0907	80513	179	150	--	755	10.1	83	7.8	262	6.9
28...	0908	80513	179	160	--	755	9.9	82	7.8	262	6.9
28...	0909	80513	179	170	--	755	9.6	80	7.7	262	6.8
28...	0910	80513	179	179	--	755	9.6	80	7.7	262	6.8
JUN											
11...	1333	80513	201	.10	4.30	755	10.4	124	8.9	241	23.8
11...	1334	80513	201	10.0	--	755	10.4	116	9.0	262	20.2
11...	1335	80513	201	15.0	--	755	9.9	108	8.9	261	19.3
11...	1336	80513	201	16.9	--	755	9.5	103	8.8	262	18.7
11...	1337	80513	201	20.1	--	755	9.0	95	8.7	263	17.8
11...	1338	80513	201	24.1	--	755	8.7	90	8.5	262	16.8
11...	1339	80513	201	28.1	--	755	8.1	83	8.4	263	15.9
11...	1340	80513	201	30.0	--	755	8.1	82	8.3	263	15.6
11...	1341	80513	201	35.0	--	755	7.8	78	8.1	262	14.9
11...	1342	80513	201	40.0	--	755	7.6	75	8.0	262	14.3
11...	1343	80513	201	50.0	--	755	7.5	73	7.9	258	13.6
11...	1344	80513	201	60.2	--	755	8.0	75	7.9	262	12.5
11...	1345	80513	201	70.1	--	755	8.6	80	7.9	258	11.7
11...	1346	80513	201	80.1	--	755	9.0	83	7.9	261	11.1
11...	1347	80513	201	90.0	--	755	8.9	81	7.9	264	10.5
11...	1348	80513	201	100	--	755	9.0	81	7.8	261	10.0
11...	1349	80513	201	110	--	755	8.8	78	7.8	264	9.7
11...	1350	80513	201	120	--	755	8.9	78	7.8	264	9.1
11...	1351	80513	201	130	--	755	8.9	77	7.7	262	8.6
11...	1352	80513	201	140	--	755	8.8	75	7.7	266	8.3
11...	1353	80513	201	150	--	755	8.6	73	7.7	266	7.9
11...	1354	80513	201	160	--	755	8.3	71	7.6	264	7.8
11...	1355	80513	201	170	--	755	8.0	68	7.6	264	7.7
11...	1356	80513	201	180	--	755	7.6	64	7.6	267	7.5
11...	1357	80513	201	190	--	755	7.1	60	7.6	264	7.4
11...	1358	80513	201	200	--	755	6.8	57	7.5	265	7.4
11...	1359	80513	201	201	--	755	6.7	56	7.6	267	7.4
JUL											
16...	1222	80513	204	.40	4.90	765	8.0	104	8.4	266	29.3
16...	1223	80513	204	9.90	--	765	8.1	104	8.4	266	28.8
16...	1225	80513	204	16.1	--	765	9.5	122	8.5	263	28.2
16...	1226	80513	204	17.0	--	765	10.2	128	8.4	261	27.5
16...	1227	80513	204	18.0	--	765	11.5	142	8.5	259	26.0
16...	1228	80513	204	19.2	--	765	11.9	144	8.5	258	25.0
16...	1229	80513	204	20.0	--	765	11.1	130	8.4	261	23.1
16...	1230	80513	204	20.9	--	765	10.5	120	8.3	263	22.1
16...	1231	80513	204	22.0	--	765	9.8	110	8.2	264	21.2
16...	1232	80513	204	24.0	--	765	9.0	99	8.1	265	20.3
16...	1233	80513	204	25.9	--	765	8.1	88	7.9	265	19.2
16...	1235	80513	204	27.9	--	765	7.3	77	7.8	266	18.1
16...	1236	80513	204	30.2	--	765	6.6	69	7.7	265	17.4
16...	1237	80513	204	35.1	--	765	4.9	50	7.5	266	16.5



WHITE RIVER BASIN

07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION) (00301)	PH WATER WHOLE FIELD STAND- ARD (UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL											
16...	1238	80513	204	40.1	--	765	4.7	47	7.4	266	15.8
16...	1239	80513	204	50.0	--	765	4.7	47	7.4	264	14.8
16...	1240	80513	204	60.0	--	765	4.8	46	7.4	263	14.0
16...	1241	80513	204	70.1	--	765	5.0	47	7.3	263	13.4
16...	1242	80513	204	79.8	--	765	5.6	52	7.3	261	12.5
16...	1244	80513	204	90.0	--	765	6.4	58	7.3	260	11.5
16...	1245	80513	204	100	--	765	6.8	61	7.4	262	11.0
16...	1246	80513	204	110	--	765	7.2	64	7.4	262	10.5
16...	1247	80513	204	120	--	765	7.5	66	7.5	264	10.0
16...	1248	80513	204	130	--	765	7.6	67	7.5	265	9.6
16...	1249	80513	204	140	--	765	7.7	66	7.5	266	9.1
16...	1250	80513	204	150	--	765	7.6	65	7.5	267	8.7
16...	1251	80513	204	160	--	765	7.2	61	7.4	267	8.0
16...	1252	80513	204	170	--	765	6.7	56	7.4	267	7.8
16...	1253	80513	204	180	--	765	6.1	51	7.3	267	7.6
16...	1254	80513	204	190	--	765	5.8	48	7.3	268	7.5
16...	1255	80513	204	200	--	765	5.0	41	7.2	268	7.4
16...	1256	80513	204	204	--	765	6.0	50	7.2	268	7.4
AUG											
14...	0842	80513	194	1.00	4.40	764	7.8	99	8.3	270	27.4
14...	0843	80513	194	10.1	--	764	7.7	97	8.3	270	27.4
14...	0845	80513	194	15.1	--	764	9.4	117	8.3	272	26.7
14...	0846	80513	194	17.1	--	764	9.2	112	8.2	274	25.5
14...	0847	80513	194	19.0	--	764	10.0	120	8.3	270	24.9
14...	0848	80513	194	20.0	--	764	10.3	124	8.3	270	24.5
14...	0849	80513	194	22.0	--	764	10.4	123	8.3	269	23.6
14...	0850	80513	194	24.1	--	764	10.2	118	8.3	268	22.9
14...	0851	80513	194	27.0	--	764	9.5	108	8.2	269	21.9
14...	0852	80513	194	28.0	--	764	8.9	101	8.1	270	21.2
14...	0853	80513	194	30.1	--	764	8.1	90	7.9	271	20.5
14...	0854	80513	194	32.0	--	764	7.5	83	7.8	271	20.1
14...	0855	80513	194	35.0	--	764	5.9	63	7.5	272	19.0
14...	0900	80513	194	38.8	--	764	4.4	46	7.4	272	18.0
14...	0901	80513	194	40.1	--	764	3.5	37	7.3	272	17.5
14...	0903	80513	194	45.1	--	764	2.9	29	7.2	271	16.5
14...	0904	80513	194	50.1	--	764	2.3	23	7.2	270	16.0
14...	0905	80513	194	60.1	--	764	2.2	22	7.1	269	15.4
14...	0906	80513	194	70.1	--	764	2.6	26	7.2	268	14.8
14...	0907	80513	194	80.1	--	764	3.2	31	7.2	266	14.0
14...	0908	80513	194	89.9	--	764	3.8	36	7.1	265	13.2
14...	0909	80513	194	100	--	764	4.3	40	7.2	264	12.5
14...	0910	80513	194	110	--	764	4.9	45	7.2	265	11.7
14...	0911	80513	194	120	--	764	5.4	49	7.2	266	11.2
14...	0912	80513	194	130	--	764	5.8	52	7.3	268	10.5
14...	0913	80513	194	140	--	764	6.1	53	7.3	270	9.9
14...	0914	80513	194	150	--	764	5.9	52	7.2	271	9.3
14...	0915	80513	194	160	--	764	5.2	44	7.2	273	8.7
14...	0916	80513	194	170	--	764	4.4	37	7.2	274	8.4
14...	0917	80513	194	180	--	764	3.5	30	7.1	275	8.1
14...	0918	80513	194	190	--	764	2.5	21	7.1	276	7.9
14...	0919	80513	194	194	--	764	2.1	18	7.0	276	7.8
SEP											
10...	1227	80513	184	.50	3.80	765	7.0	91	8.2	271	29.2
10...	1228	80513	184	10.1	--	765	7.1	91	8.2	271	28.6
10...	1229	80513	184	20.1	--	765	6.7	85	8.0	274	28.1
10...	1230	80513	184	22.1	--	765	6.9	87	8.0	272	27.4
10...	1231	80513	184	24.1	--	765	7.3	91	8.0	271	26.4
10...	1232	80513	184	26.0	--	765	7.4	90	8.0	270	25.7
10...	1233	80513	184	28.0	--	765	7.4	89	7.9	269	24.9
10...	1234	80513	184	30.0	--	765	7.1	84	7.8	270	24.0
10...	1235	80513	184	32.1	--	765	6.8	80	7.8	270	23.1
10...	1236	80513	184	34.0	--	765	6.5	74	7.7	269	22.1
10...	1237	80513	184	36.0	--	765	6.0	67	7.6	268	21.4
10...	1238	80513	184	37.9	--	765	5.2	58	7.4	269	20.7
10...	1239	80513	184	39.9	--	765	4.6	51	7.4	268	20.1
10...	1240	80513	184	45.2	--	765	2.9	32	7.2	268	18.9
10...	1241	80513	184	50.1	--	765	2.2	24	7.1	267	17.9
10...	1242	80513	184	55.0	--	765	1.0	11	7.0	267	17.1
10...	1243	80513	184	60.1	--	765	.6	6	7.0	265	16.4
10...	1244	80513	184	70.1	--	765	1.8	18	7.0	261	15.7
10...	1245	80513	184	80.0	--	765	2.3	23	7.0	260	15.3
10...	1246	80513	184	89.9	--	765	3.0	30	7.0	260	14.8
10...	1247	80513	184	100	--	765	3.1	30	7.0	261	14.2
10...	1248	80513	184	110	--	765	3.2	31	7.0	261	13.6
10...	1249	80513	184	120	--	765	3.3	31	7.0	261	12.9
10...	1250	80513	184	130	--	765	3.6	34	7.0	261	12.2
10...	1251	80513	184	140	--	765	3.8	35	7.1	261	11.3
10...	1252	80513	184	150	--	765	3.2	28	7.0	263	10.3
10...	1253	80513	184	160	--	765	1.7	15	7.0	267	9.5
10...	1254	80513	184	170	--	765	.9	8	7.0	270	9.1
10...	1255	80513	184	180	--	765	.4	4	7.0	272	8.7
10...	1256	80513	184	184	--	765	.3	3	7.0	273	8.5

## WHITE RIVER BASIN

## 07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN

LOCATION.--Lat 36°21'56", long 92°34'29", in NW1/4 sec.21, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, at dam on White River, 11.9 mi upstream from gaging station, 6.3 mi northwest of Flippin, 12.5 mi downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,051 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1954 to September 1968, October 1970 to September 1971, December 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1954 to September 1964, May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

REMARKS.--Dissolved oxygen and water temperature collected continuously June through December.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE NUMBER (00027)	BARO-METRIC PRES-SURE OF HG (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
OCT	03...	1142	80513	769	9.1	78	7.6	246	9.1
NOV	07...	1508	80513	770	11.5	--	7.9	--	12.0
DEC	18...	1131	80513	766	6.0	--	7.0	--	9.4
JAN	23...	1359	80513	760	8.1	70	7.5	271	8.8
MAR	28...	0828	80513	760	11.3	95	7.8	260	7.4
JUN	11...	1437	80513	763	9.5	82	8.4	264	9.0

Date	Time	AGENCY COL-LECTING SAMPLE NUMBER (00027)	SAM-PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO-METRIC PRES-SURE OF HG (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	
JUL	16...	0804	80513	1.00	300	773	8.2	71	8.2	255	9.7	19.0
	16...	0805	80513	1.00	300	773	8.2	71	8.1	264	9.7	56.0
	16...	0806	80513	1.00	300	773	7.9	68	8.1	264	9.6	93.0
	16...	0807	80513	1.00	300	773	7.7	67	8.0	264	9.7	130
	16...	0808	80513	1.00	300	773	7.7	67	8.0	265	9.7	167
	16...	0809	80513	1.00	300	773	7.9	69	8.0	265	9.7	204
	16...	0810	80513	1.00	300	773	8.0	70	7.9	265	9.7	241
	16...	0811	80513	1.00	300	773	8.1	70	7.9	265	9.8	278
	16...	1045	80513	--	--	772	9.2	80	7.4	264	9.6	--

Date	Time	AGENCY COL-LECTING SAMPLE NUMBER (00027)	BARO-METRIC PRES-SURE OF HG (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
AUG	14...	1007	80513	762	7.2	64	7.4	268	10.6
SEP	10...	1207	80513	771	5.6	53	7.0	262	13.1

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.3	6.2	8.0	9.5	5.4	6.9	10.8	4.7	7.5	12.2	9.9	11.1
2	---	---	---	11.5	5.2	7.1	9.3	5.1	7.2	12.0	8.7	10.4
3	---	---	---	10.9	5.1	7.8	10.7	5.0	7.5	12.2	9.0	10.4
4	8.9	5.7	7.2	11.3	4.9	7.6	10.1	4.9	6.9	13.0	8.6	10.1
5	8.6	5.6	6.9	7.9	4.9	6.3	9.1	3.8	6.3	10.6	7.3	9.0
6	8.6	5.8	7.1	9.8	4.8	7.2	8.8	3.8	6.2	12.5	7.5	9.6
7	9.9	5.8	7.7	10.6	4.9	7.4	8.7	3.8	5.9	13.5	10.0	11.6
8	9.7	5.9	7.6	7.7	4.8	6.4	8.3	3.8	6.1	12.7	9.3	11.3
9	8.8	5.8	7.0	10.2	5.2	7.2	9.3	4.2	5.8	12.2	8.2	10.0
10	8.6	5.4	6.7	10.6	4.8	6.9	10.2	3.9	6.5	12.4	7.7	9.9
11	8.7	5.6	6.6	9.8	4.8	6.8	8.9	4.0	6.5	13.3	9.4	11.0
12	9.0	5.5	7.1	9.0	5.0	6.6	8.8	3.8	6.4	12.2	9.4	11.2
13	8.1	5.6	6.4	9.7	4.5	6.8	10.1	3.8	6.4	13.2	8.8	11.7
14	9.2	5.6	6.6	9.1	5.0	7.2	8.8	3.8	6.5	13.1	8.8	10.8
15	9.1	5.6	6.8	9.8	4.4	6.8	8.5	3.5	5.5	13.9	11.0	12.1
16	9.3	5.8	7.1	9.6	4.9	7.1	7.9	4.0	5.6	12.9	9.8	11.0
17	9.5	5.6	7.3	7.8	4.0	5.7	8.5	4.3	6.6	13.8	11.5	12.6
18	8.9	6.0	7.6	11.4	3.2	5.8	9.1	3.5	5.1	13.4	10.4	12.2
19	9.2	5.9	7.4	10.2	3.2	5.6	9.8	3.5	6.3	13.4	8.6	11.0
20	9.0	5.9	7.0	10.9	3.5	6.8	9.6	6.3	7.7	13.2	8.4	10.5
21	9.1	5.9	7.1	10.6	4.7	6.5	9.9	6.0	7.4	12.7	8.1	10.3
22	9.3	6.1	7.6	8.0	4.4	5.7	9.0	2.8	6.4	12.7	9.8	11.1
23	8.3	6.2	7.0	8.2	4.1	5.2	9.1	4.0	7.5	---	---	---
24	9.6	6.2	7.4	9.6	4.2	6.3	10.7	7.5	9.3	---	---	---
25	11.6	6.9	8.6	7.8	4.5	5.5	11.1	7.0	8.8	---	---	---
26	10.1	6.3	7.7	8.7	4.4	6.2	11.7	7.6	9.3	---	---	---
27	11.2	6.3	8.5	10.8	5.2	7.3	11.2	7.0	9.5	---	---	---
28	10.1	6.2	7.9	8.6	5.1	6.8	11.2	8.4	9.8	---	---	---
29	11.8	5.8	8.1	9.0	4.9	6.8	11.9	7.1	9.6	---	---	---
30	10.1	6.0	7.4	9.2	5.1	7.3	12.1	9.4	10.7	---	---	---
31	12.6	5.9	7.9	---	---	---	11.5	9.3	10.3	---	---	---
MONTH	---	---	---	11.5	3.2	6.7	12.1	2.8	7.3	---	---	---
		JUNE		JULY		AUGUST		SEPTEMBER				
1	---	---	---	11.2	9.1	9.8	9.7	7.2	7.9	8.3	5.3	6.3
2	---	---	---	10.8	9.1	9.7	9.4	7.0	7.9	7.8	5.2	6.3
3	---	---	---	11.2	9.1	9.8	---	---	---	9.0	5.2	6.1
4	---	---	---	11.2	9.2	9.9	---	---	---	8.8	5.0	6.4
5	---	---	---	11.1	9.1	9.8	---	---	---	8.8	5.1	5.9
6	---	---	---	10.6	9.0	9.5	9.5	6.4	7.5	8.5	5.0	6.1
7	---	---	---	10.8	9.0	9.7	9.0	6.3	7.2	9.5	5.0	6.1
8	---	---	---	10.9	9.0	9.8	8.9	6.3	7.3	9.5	4.9	6.4
9	---	---	---	11.0	8.8	9.5	9.3	6.3	7.2	9.5	5.0	5.5
10	---	---	---	10.8	8.8	9.4	8.9	6.3	7.0	6.6	4.8	5.4
11	11.3	8.7	9.9	9.7	8.6	9.1	9.0	6.2	7.0	7.4	4.6	5.3
12	11.4	8.7	10.0	9.7	8.7	9.0	7.9	6.2	6.6	7.1	4.5	5.3
13	11.7	9.8	10.6	9.9	8.5	9.0	9.2	6.2	7.3	7.5	4.5	5.4
14	11.1	8.8	10.0	10.5	8.5	9.2	9.1	6.2	6.9	6.7	4.4	5.1
15	11.9	8.4	10.1	10.7	8.4	9.4	9.2	6.3	7.5	7.4	4.3	5.1
16	12.1	8.5	10.1	10.4	8.5	9.1	9.1	6.1	7.3	6.6	4.2	4.6
17	11.9	8.5	10.0	11.2	8.4	9.7	8.2	6.1	6.7	6.6	4.2	4.8
18	12.9	8.6	10.1	10.6	8.2	9.2	9.0	6.1	6.9	5.8	4.1	4.6
19	12.0	8.9	9.9	11.2	8.7	10.0	9.0	6.2	7.0	7.6	4.1	5.1
20	12.7	9.8	10.5	11.9	8.9	10.3	9.1	5.8	7.1	9.2	3.9	5.7
21	11.8	9.8	10.5	12.2	8.6	9.6	8.7	5.6	6.4	7.3	4.2	5.0
22	11.0	9.7	10.1	10.6	7.8	8.9	8.2	5.6	6.2	7.0	4.3	5.4
23	11.0	9.8	10.1	---	---	---	8.2	5.5	6.0	8.0	4.0	5.3
24	11.5	9.9	10.6	10.8	7.9	9.1	6.8	5.5	5.9	7.6	3.8	5.2
25	11.8	9.8	10.5	10.5	7.8	8.5	8.3	5.5	6.4	7.6	4.0	5.1
26	11.8	9.3	10.3	10.3	7.4	8.2	9.9	5.5	7.0	7.6	3.9	5.0
27	10.8	9.3	9.8	10.2	7.7	8.4	10.0	5.8	6.8	8.4	3.9	6.0
28	11.2	9.4	10.0	9.8	7.6	8.3	10.0	5.5	6.9	8.6	4.2	5.9
29	10.8	9.2	9.6	9.8	7.5	8.0	9.1	5.4	6.4	8.9	4.5	6.9
30	10.6	9.2	9.7	8.7	7.3	7.6	8.6	5.3	6.3	9.0	3.5	6.0
31	---	---	---	9.7	7.3	8.0	9.4	5.3	6.1	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	9.5	3.5	5.6

## WHITE RIVER BASIN

## 07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

WATER TEMPERATURE C, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.7	7.9	9.2	9.2	7.8	8.5	10.4	8.0	9.4	10.2	9.2	9.9
2	10.2	7.6	8.7	10.2	8.2	9.1	10.2	8.3	9.3	9.8	8.6	9.4
3	10.4	7.5	8.6	10.3	8.5	9.6	10.8	8.6	9.9	9.7	8.7	9.4
4	10.6	7.7	8.8	10.3	8.0	9.5	11.0	8.7	10.0	9.6	8.5	9.2
5	9.9	8.0	8.8	10.4	8.1	10.1	10.8	8.9	10.0	9.3	8.7	9.0
6	9.6	7.6	8.7	10.2	9.2	9.9	10.8	8.9	9.9	9.2	8.3	8.7
7	9.4	7.5	8.5	10.1	9.2	9.8	10.8	8.9	9.6	9.5	8.3	9.1
8	10.1	7.4	9.1	11.0	8.1	9.9	11.3	8.5	9.5	9.8	8.3	9.1
9	9.5	7.8	8.6	10.8	8.2	9.9	10.8	8.2	9.1	9.2	8.4	8.9
10	9.6	8.2	8.8	10.4	8.3	9.6	11.0	8.0	10.0	9.4	8.4	8.8
11	10.0	8.1	8.7	10.4	8.0	9.2	10.8	8.3	9.9	9.3	8.1	8.7
12	9.7	8.2	8.9	10.3	7.8	9.2	10.6	8.8	9.8	9.0	8.4	8.7
13	9.8	7.8	8.6	10.2	7.9	9.0	11.0	9.0	10.2	9.5	8.1	8.8
14	10.0	7.7	8.6	10.2	8.2	9.3	11.2	9.0	10.3	9.1	8.1	8.7
15	10.4	7.4	8.6	10.4	8.1	9.6	10.5	8.7	9.3	9.4	7.9	8.7
16	9.7	7.4	8.5	10.6	8.2	9.4	10.6	8.7	9.3	9.2	8.4	8.7
17	10.0	7.2	8.7	10.4	8.0	9.4	11.3	9.8	10.6	8.8	8.6	8.7
18	9.8	7.4	8.7	10.6	8.2	9.1	10.4	8.6	9.5	8.6	8.5	8.6
19	10.1	7.6	8.7	11.0	8.4	9.9	11.5	8.4	9.7	8.6	7.6	8.3
20	10.0	7.8	8.5	10.9	8.3	10.2	10.9	9.8	10.6	8.8	7.5	8.2
21	10.1	7.8	8.4	10.6	8.6	10.2	10.9	10.2	10.7	9.1	7.6	8.3
22	9.9	7.8	8.8	9.5	7.8	8.3	10.7	8.9	10	8.7	7.6	8.2
23	9.9	9.1	9.6	9.8	8.1	8.8	11.4	9.2	10.6	---	---	---
24	10.8	8.2	9.8	9.6	8.3	8.9	11.5	9.8	10.7	---	---	---
25	11.7	8.7	10.3	9.6	7.9	8.7	11.2	9.7	10.4	---	---	---
26	11.2	7.4	9.8	10.4	7.9	9.3	10.9	9.1	10.3	---	---	---
27	10.4	7.4	9.2	11.4	8.0	10	10.7	9.6	10.5	---	---	---
28	9.9	7.4	8.6	11.4	8.5	10.5	10.6	10.1	10.3	---	---	---
29	10.4	7.5	9.0	11.2	8.5	10.3	10.5	8.8	9.9	---	---	---
30	10.3	7.8	9.2	11.5	8.1	10.2	10.6	9.7	10.3	---	---	---
31	9.8	7.7	8.4	---	---	---	10.3	10.0	10.2	---	---	---
MONTH	11.7	7.2	8.9	11.5	7.8	9.5	11.5	8.0	10.0	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.8	8.5	8.7	10.0	9.8	9.9	12.1	11.8	12.0
2	---	---	---	8.9	8.6	8.7	10.1	9.5	9.9	12.2	11.9	12.1
3	---	---	---	8.8	8.6	8.7	---	---	---	12.3	12.0	12.2
4	---	---	---	8.8	8.6	8.7	---	---	---	12.4	12.1	12.3
5	---	---	---	9.0	8.7	8.8	---	---	---	12.4	12.1	12.3
6	---	---	---	9.0	8.8	8.9	10.6	9.9	10.1	12.6	12.2	12.4
7	---	---	---	9.0	8.8	8.9	10.3	10.0	10.2	12.7	12.3	12.5
8	---	---	---	9.0	8.8	8.9	10.3	10.1	10.2	12.7	12.4	12.6
9	---	---	---	9.1	8.8	8.9	10.6	10.1	10.3	12.9	12.5	12.8
10	---	---	---	9.2	8.8	9.0	10.6	10.2	10.4	12.9	12.7	12.8
11	8.3	8.0	8.2	9.3	8.9	9.1	10.7	10.3	10.5	13.1	12.8	12.9
12	8.3	8.0	8.1	9.3	8.9	9.1	10.7	10.4	10.5	13.0	12.9	13.0
13	8.6	8.0	8.2	9.5	9.0	9.2	11.0	10.3	10.6	13.1	13.0	13.1
14	8.7	7.8	8.2	9.5	9.2	9.3	11.1	10.5	10.8	13.3	13.1	13.2
15	11.6	7.5	9.0	9.6	9.2	9.3	10.9	10.4	10.6	13.4	13.2	13.3
16	11.4	7.8	8.9	9.4	9.2	9.3	11.0	10.5	10.7	13.4	13.2	13.3
17	11.3	7.6	8.7	9.5	9.2	9.3	11.0	10.7	10.9	13.5	13.3	13.4
18	10.7	7.7	8.3	9.6	9.2	9.4	11.0	10.8	10.9	13.6	13.4	13.5
19	10.6	7.8	8.4	9.8	9.2	9.4	11.1	10.7	10.9	13.8	13.5	13.6
20	10.4	8.2	8.5	12.2	9.1	9.9	11.3	10.8	11.0	14.1	12.8	13.5
21	8.4	8.2	8.3	12.1	8.9	9.5	11.2	11.0	11.1	13.9	13.6	13.8
22	8.4	8.2	8.4	10.0	8.9	9.3	11.3	11.0	11.2	13.8	13.5	13.7
23	8.5	8.3	8.4	---	---	---	11.6	11.1	11.3	13.9	13.6	13.7
24	8.6	8.3	8.5	9.6	9.0	9.5	11.6	11.2	11.4	13.8	13.6	13.7
25	8.7	8.4	8.5	9.6	9.0	9.4	11.6	11.2	11.4	14.0	13.8	13.9
26	8.7	8.4	8.6	9.8	8.9	9.4	11.6	11.2	11.4	14.2	13.8	14.0
27	8.7	8.4	8.6	9.8	9.5	9.7	11.7	11.3	11.5	14.3	13.7	14.0
28	8.8	8.4	8.6	9.9	9.5	9.7	11.8	11.5	11.7	14.1	13.8	13.9
29	8.7	8.4	8.6	10.0	9.6	9.8	11.9	11.5	11.8	14.1	13.8	14.0
30	8.7	8.5	8.6	10.0	9.5	9.9	11.9	11.6	11.8	14.2	13.9	14.1
31	---	---	---	10.0	9.7	9.8	12.0	11.7	11.9	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	14.3	11.8	13.2

WHITE RIVER BASIN

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07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS

LOCATION.--Lat 36°21'44", long 92°23'11", in NW1/4SE1/4 sec.20, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, on White River, 11.8 mi upstream from gaging station, 3 mi southeast of Bull Shoals.

DRAINAGE AREA.--6,051 mi<sup>2</sup>.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1994 to current year.

DISSOLVED OXYGEN: May 1994 to current year.

REMARKS.--Dissolved oxygen and water temperature are collected continuously June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	SAMPLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, (PER-CENT) (MG/L) (00300)	OXYGEN, (PER-CENT) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
16...	0813	80513	1.00	300	773	8.1	70	7.8	265	9.7	278
16...	0814	80513	1.00	300	773	7.9	68	7.8	262	9.7	241
16...	0815	80513	1.00	300	773	7.7	67	7.8	265	9.6	204
16...	0816	80513	1.00	300	773	7.6	66	7.8	263	9.6	167
16...	0817	80513	1.00	300	773	7.6	66	7.8	264	9.6	130
16...	0818	80513	1.00	300	773	7.6	65	7.8	265	9.6	93.0
16...	0819	80513	1.00	300	773	7.5	65	7.8	264	9.6	56.0
16...	0820	80513	1.00	300	773	7.5	65	7.7	257	9.6	19.0

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.7	8.0	9.5	15.0	7.6	10.8	15.4	7.9	10.5	12.3	10.5	11.3
2	14.8	8.3	10.2	15.3	7.1	9.8	15.2	8.5	10.7	15.6	9.6	11.5
3	14.3	7.3	9.8	12.5	7.6	9.3	14.7	6.5	9.1	12.3	8.5	10.6
4	14.7	7.9	10.3	13.2	8.3	10.3	14.4	6.5	9.3	13.9	8.8	10.8
5	11.5	7.0	8.7	10.1	7.3	8.2	14.2	6.3	9.3	12.3	9.0	10.4
6	14.9	7.5	9.7	---	---	---	15.2	7.2	9.5	12.7	9.1	10.5
7	14.2	8.0	10.3	---	---	---	13.9	8.3	9.9	14.5	9.3	11.1
8	15.1	7.6	10.7	---	---	---	15.8	8.3	10.5	14.6	10.3	11.5
9	14.4	7.9	10.1	---	---	---	15.4	8.8	11.0	11.4	9.5	10.4
10	12.9	6.8	9.4	---	---	---	14.7	7.6	9.9	13.8	9.4	11.0
11	13.3	6.9	8.7	---	---	---	15.3	8.1	10.3	14.0	10.0	11.1
12	14.4	6.5	9.3	---	---	---	12.4	7.3	9.3	14.6	9.2	11.4
13	11.7	7.1	9.1	---	---	---	14.3	7.4	9.9	15.1	10.6	12.4
14	14.7	6.9	9.8	---	---	---	14.6	7.7	9.9	14.4	9.0	10.9
15	12.8	7.2	9.2	---	---	---	14.5	9.0	11.2	15.1	9.6	11.7
16	15.4	7.3	10.8	---	---	---	13.9	9.7	12.5	13.5	8.7	10.9
17	13.5	7.4	10.3	---	---	---	15.4	8.2	10.8	12.5	9.9	11.3
18	15.2	7.9	11.1	---	---	---	14.8	7.2	10.9	12.1	9.6	11.1
19	15.6	7.3	10.9	---	---	---	14.8	8.0	10.1	13.5	9.7	11.0
20	14.3	7.1	10.3	---	---	---	10.5	6.9	8.5	14.9	10.2	11.4
21	14.7	6.6	10.2	15.0	7.8	10.0	9.6	6.7	8.1	14.4	9.0	11.2
22	14.0	7.2	9.2	---	---	---	9.5	6.5	8.2	12.4	9.3	10.9
23	9.8	7.1	8.2	---	---	---	11.0	7.0	9.4	---	---	---
24	9.8	7.2	8.3	---	---	---	14.9	9.0	11.2	---	---	---
25	13.6	7.7	9.6	---	---	---	14.6	8.0	10.4	---	---	---
26	10.5	7.7	9.1	---	---	---	15.1	8.2	10.5	---	---	---
27	11.5	8.5	9.8	---	---	---	14.9	9.1	10.7	---	---	---
28	16.1	7.3	11.1	---	---	---	11.5	8.9	10.2	---	---	---
29	15.8	7.6	10.4	---	---	---	14.6	9.3	10.6	---	---	---
30	15.8	6.6	10	11.0	7.6	9.4	15.2	9.8	11.1	---	---	---
31	17.4	8.3	11.8	---	---	---	11.8	9.5	10.8	---	---	---
MONTH	17.4	6.5	9.9	---	---	---	15.8	6.3	10.1	---	---	---

## WHITE RIVER BASIN

## 07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS--CONTINUED

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	10.1	11.4	11.0	9.2	10.1	10.4	7.8	8.8	9.3	5.9	7.4
2	11.8	10.2	11.2	11.2	9.4	10.2	9.5	6.4	8.2	9.0	5.7	7.4
3	12.3	7.1	10.4	11.3	9.7	10.5	9.6	6.4	8.5	9.4	5.8	7.6
4	16.7	6.8	10.7	12.0	9.8	11.0	10.2	6.8	8.7	10.1	5.8	7.8
5	11.5	10.3	10.9	12.2	9.9	10.7	11.3	7.2	8.5	8.9	5.7	7.2
6	11.9	8.2	10.8	11.6	9.8	10.8	10.4	7.2	8.6	10.2	5.3	7.0
7	13.1	7.6	11.3	12.2	10.0	11.1	10.7	7.3	8.4	8.3	5.2	6.2
8	12.1	10.5	11.1	12.1	10.1	11.2	9.1	7.3	8.1	8.7	5.2	6.5
9	11.9	10.1	11.0	11.4	9.6	10.4	9.4	7.1	8.2	8.6	5.5	6.1
10	11.4	8.9	10.6	11.3	9.6	10.2	9.0	7.1	8.0	8.3	5.2	6.4
11	11.6	8.7	10.7	11.1	9.5	10.1	8.9	7.2	7.8	8.9	5.5	6.5
12	12.0	8.7	10.8	11.3	9.7	10.3	9.1	7.1	7.9	8.9	4.9	6.6
13	13.1	10.6	11.5	11.6	9.1	10.2	9.5	6.8	8.0	8.6	5.4	6.8
14	12.3	8.6	10.8	11.9	9.1	10.8	9.6	7.0	8.1	8.4	4.9	6.6
15	17.9	7.0	12.2	13.0	9.2	10.9	10.9	7.4	8.6	8.8	4.7	6.3
16	18.2	6.6	11.8	12.2	9.2	10.4	9.5	7.0	8.5	7.4	4.5	5.7
17	18.2	6.9	11.5	14.1	9.5	10.6	9.7	7.4	8.8	8.2	4.8	5.9
18	17.7	6.9	10.9	12.0	8.8	10.4	9.7	7.3	8.5	6.9	4.6	5.9
19	17.1	7.3	10.9	15.8	9.8	11.8	10.0	7.2	8.6	8.4	5.1	6.6
20	15.8	9.9	11.0	17.8	9.5	12.9	10.2	6.5	8.2	13.0	4.2	7.1
21	11.9	9.9	10.7	17.8	8.8	11.4	9.3	6.6	7.7	9.8	5.6	6.7
22	12.0	10.0	11.0	16.4	6.8	10	9.3	6.5	7.5	8.2	5.0	6.4
23	11.8	10.0	10.8	11.8	8.9	10.1	9.7	6.2	7.6	9.3	5.1	6.7
24	11.9	10.3	11.2	12.2	7.9	9.7	9.0	6.4	7.3	8.3	4.4	6.5
25	12.4	9.8	11.2	10.7	7.7	9.1	9.6	7.3	8.6	8.2	4.8	6.2
26	11.8	9.4	10.5	12.6	6.1	8.7	10.1	6.4	8.4	8.6	5.6	7.0
27	11.5	9.4	10.4	10.4	8.3	9.2	9.8	6.4	8.0	9.3	6.2	7.6
28	11.2	9.5	10.1	10.1	8.2	9.1	9.8	5.7	7.4	9.8	6.3	7.6
29	11.2	9.7	10.2	10.4	8.0	8.9	9.6	5.5	7.1	8.8	4.8	7.5
30	11.0	9.6	10.3	8.5	7.2	8.1	8.5	5.6	6.7	10.1	4.7	7.0
31	---	---	---	10.2	7.8	9.0	8.5	6.0	6.5	---	---	---
MONTH	18.2	6.6	10.9	17.8	6.1	10.3	11.3	5.5	8.1	13.0	4.2	6.8

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.6	9.5	10.1	11.8	9.0	10.3	13.6	8.1	10.4	10.1	8.5	9.5
2	15.1	9.4	10.7	13.2	9.5	11.0	13.6	8.4	10.3	10.0	6.0	8.8
3	15.8	8.7	10.7	12.0	10.3	10.8	12.8	9.2	10.8	9.8	6.1	8.8
4	15.9	9.5	11.2	12.8	10.2	11.2	13.9	10.0	11.4	10.9	6.2	9.0
5	11.4	9.9	10.7	11.5	9.8	10.5	13.1	10.4	11.1	9.1	8.2	8.6
6	13.5	8.9	10.2	---	---	---	12.1	10.4	11.2	9.2	6.9	8.3
7	12.0	8.5	9.8	---	---	---	11.0	10.2	10.7	10.8	6.5	8.7
8	15.9	8.9	11.4	---	---	---	11.3	9.7	10.7	11.8	6.9	9.2
9	12.6	9.4	10.4	---	---	---	12.4	7.1	9.3	9.7	7.4	8.7
10	12.8	9.9	11.2	---	---	---	12.9	6.7	10.2	10.2	8.0	8.9
11	12.0	10.4	10.8	---	---	---	12.6	8.4	10.6	11.4	7.1	8.9
12	12.7	10.2	11.0	---	---	---	10.8	10.2	10.5	10.9	8.1	8.9
13	12.4	10.1	11.0	---	---	---	11.5	10.4	10.9	10.8	7.5	9.0
14	15.6	9.3	11.4	---	---	---	11.3	9.8	10.9	11.2	7.2	8.9
15	11.0	8.3	9.6	---	---	---	10.8	9.5	10.0	12.0	6.2	8.8
16	14.9	8.2	11.0	---	---	---	11.0	9.9	10.5	9.7	7.6	8.6
17	14.7	7.6	10.5	---	---	---	12.3	10.3	11.0	8.6	8.3	8.5
18	14.9	8.7	11.1	---	---	---	13.7	8.9	10.5	9.0	8.0	8.4
19	15.3	9.4	11.6	---	---	---	12.3	8.5	10.0	8.6	6.8	8.0
20	14.2	9.4	11.3	---	---	---	11.0	8.3	10.0	9.7	6.1	7.8
21	15.0	9.2	11.2	12.4	10.1	10.8	11.1	9.8	10.5	12.0	6.0	8.5
22	12.8	9.1	10.2	11.0	7.6	9.2	10.7	9.7	10.1	9.2	6.3	8.1
23	10.8	10.1	10.3	---	---	---	11.1	8.2	10.2	---	---	---
24	11.3	9.8	10.6	---	---	---	11.8	7.6	9.9	---	---	---
25	13.1	9.9	11.1	---	---	---	12.1	7.4	10.1	---	---	---
26	11.8	8.5	10.6	---	---	---	10.7	9.5	10.2	---	---	---
27	11.6	7.8	10.2	---	---	---	12.4	9.9	10.6	---	---	---
28	13.8	7.6	10.0	11.6	9.1	10.8	10.8	9.7	10.2	---	---	---
29	14.6	8.2	10.7	11.4	9.2	10.7	11.3	7.9	9.9	---	---	---
30	15.0	9.2	11.2	11.9	9.2	10.7	10.4	9.5	10	---	---	---
31	12.9	8.4	10.3	---	---	---	10.3	9.2	9.8	---	---	---
MONTH	15.9	7.6	10.7	---	---	---	13.9	6.7	10.4	---	---	---

WHITE RIVER BASIN

07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS--CONTINUED

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	8.1	9.0	9.4	8.8	8.9	10.6	9.9	10.2	12.3	11.9	12.0
2	9.6	8.1	8.7	9.7	8.9	9.2	13.7	10.0	10.9	12.3	12.0	12.1
3	10.8	8.1	9.2	9.8	8.9	9.2	13.7	10.1	10.9	12.5	12.0	12.2
4	16.1	8.3	10.5	9.4	8.8	9.0	13.2	10.0	10.9	12.4	12.2	12.3
5	8.9	8.1	8.5	9.9	8.9	9.2	12.0	10.2	10.8	12.4	12.2	12.4
6	11.3	8.2	9.1	9.8	8.9	9.3	11.1	10.2	10.6	12.6	12.4	12.5
7	11.4	8.2	9.3	9.4	8.9	9.2	11.0	10.3	10.5	12.7	12.4	12.6
8	8.9	8.1	8.3	9.4	9.0	9.2	10.8	10.3	10.4	12.8	12.5	12.6
9	8.5	8.1	8.3	9.8	9.1	9.3	10.8	10.4	10.6	12.9	12.6	12.7
10	10.1	8.2	8.6	9.7	9.0	9.3	10.9	10.4	10.6	13.0	12.7	12.8
11	10.8	8.3	8.9	9.6	9.2	9.3	10.9	10.4	10.6	13.0	12.7	12.9
12	10.8	8.4	8.8	9.9	9.1	9.4	10.7	10.5	10.6	13.1	12.8	13.0
13	10.3	8.5	9.2	9.7	9.0	9.4	11.0	10.5	10.8	13.2	13.0	13.1
14	9.8	8.5	8.9	9.6	9.3	9.5	12.1	10.7	11.0	13.4	13.1	13.2
15	17.0	9.8	13.1	10.3	9.2	9.5	11.8	10.7	11.0	13.5	13.2	13.3
16	16.4	11.5	13.0	10.0	9.4	9.6	11.2	10.8	11.0	13.5	13.3	13.4
17	17.2	10.1	12.6	11.5	9.4	9.8	11.5	10.9	11.1	13.5	13.3	13.4
18	15.8	8.4	10.9	10.1	9.4	9.7	11.4	10.9	11.1	13.7	13.4	13.5
19	17.1	8.4	10.5	15.4	9.6	11.0	11.3	10.8	11.1	14.0	13.5	13.7
20	14.8	8.4	9.1	18.2	9.7	12.9	11.7	10.9	11.2	15.6	13.8	14.4
21	8.7	8.4	8.5	17.8	9.6	11.3	11.7	11.1	11.3	14.8	13.6	14.0
22	8.7	8.3	8.5	17.5	9.5	11.5	11.6	11.1	11.3	14.2	13.6	13.8
23	8.7	8.3	8.5	11.5	9.6	10.1	11.8	11.2	11.5	14.4	13.6	13.8
24	9.4	8.4	8.6	10.9	9.5	9.9	11.6	11.3	11.5	14.1	13.6	13.8
25	9.2	8.5	8.7	12.8	9.5	9.8	11.8	11.3	11.6	15.8	13.8	14.0
26	8.9	8.7	8.8	15.2	9.7	11.8	11.8	11.4	11.5	14.5	13.8	14.1
27	9.7	8.6	8.9	11.9	9.8	10.1	11.9	11.6	11.7	14.9	13.8	14.3
28	9.4	8.6	8.9	10.7	9.8	10.1	12.1	11.6	11.8	14.9	13.9	14.1
29	9.2	8.7	8.9	10.4	9.8	10.0	12.1	11.7	11.9	14.9	13.9	14.2
30	8.9	8.7	8.8	13.3	9.8	10.4	12.1	11.7	11.9	15.2	14.1	14.3
31	---	---	---	10.5	9.8	10.0	12.1	11.8	11.9	---	---	---
MONTH	17.2	8.1	9.4	18.2	8.8	9.9	13.7	9.9	11.1	15.8	11.9	13.3

WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW

LOCATION.--Lat 36°20'37", long 92°34'27", in SW1/4SE1/4SE1/4 sec.3, T.19 N., R.3 W., Marion County, Hydrologic Unit 11010003, 2.0 mi downstream from Bull Shoals Dam, and 4.0 mi east of Fairview.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1992 to current year.

DISSOLVED OXYGEN: June 1992 to current year.

REMARKS.--Dissolved oxygen and water temperature collected continuously June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	SAMPLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BAROMETRIC SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATURATION (PER-CENT) (00301)	PH WATER (FIELD-READ UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS-SECTION (FT FM L BANK) (00009)
JUL											
16...	0855	80513	1.00	300	773	8.2	71	8.0	265	9.9	15.0
16...	0856	80513	1.00	300	773	8.1	71	8.0	265	9.8	46.0
16...	0857	80513	1.00	300	773	8.1	70	8.0	265	9.8	71.0
16...	0858	80513	1.00	300	773	8.2	71	7.9	265	9.8	108
16...	0859	80513	1.00	300	773	8.2	72	7.9	265	9.7	139
16...	0900	80513	1.00	300	773	8.4	73	7.9	265	9.7	170
16...	0901	80513	1.00	300	773	8.5	74	7.9	265	9.8	201
16...	0902	80513	1.00	300	773	8.8	76	7.9	266	9.8	232

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.8	6.1	7.2	12.4	7.1	9.5	12.0	6.5	8.5	10.1	8.3	9.3
2	12.5	7.0	8.4	10.5	6.8	8.2	12.2	6.7	8.8	12.5	8.0	9.6
3	13.1	6.9	8.7	10.5	6.9	8.3	10.7	4.8	7.2	11.2	8.3	9.5
4	12.8	6.7	8.7	10.3	6.9	8.4	10.8	5.3	7.3	12.8	8.1	10.0
5	10.1	6.2	7.6	8.2	5.9	6.9	10.4	5.5	7.3	12.0	8.6	10.1
6	13.1	6.3	8.9	12.8	5.9	8.0	11.0	5.8	7.8	11.2	8.9	9.9
7	12.1	6.3	8.7	12.8	6.0	8.3	10.5	6.5	8.3	12.9	9.1	10.5
8	12.7	6.2	8.6	8.5	5.3	6.9	12.3	6.7	8.8	13.0	9.2	10.6
9	12.1	6.4	8.5	12.8	5.2	7.8	11.9	6.4	8.8	10.4	8.6	9.5
10	10.9	6.5	7.8	11.5	5.8	7.9	9.9	5.7	7.4	12.3	9.1	10.2
11	11.5	6.0	7.7	12.2	6.3	8.7	10.6	5.8	7.5	12.0	8.8	10.1
12	12.4	6.1	8.0	12.2	5.7	8.2	9.3	5.5	7.2	13.1	8.7	10.5
13	9.7	6.9	7.7	12.5	6.7	9.0	9.9	5.4	7.3	13.5	9.5	11.2
14	11.4	6.7	8.2	13.0	6.2	8.9	10.2	5.7	7.4	13.0	8.9	10.3
15	11.2	6.2	8.1	8.6	5.8	7.2	10.8	6.8	8.5	13.4	9.8	10.8
16	12.4	6.7	8.8	12.7	5.7	8.3	10.3	5.7	8.6	11.7	8.7	9.9
17	10.4	5.9	8.1	9.3	6.2	7.7	11.2	5.6	7.3	11.5	9.6	10.5
18	12.1	6.5	8.6	12.2	6.8	8.9	---	---	---	11.5	9.0	10.2
19	12.5	6.8	9.0	9.8	6.7	7.8	12.3	6.9	8.9	11.3	9.1	10.1
20	12.4	6.4	9.1	10.5	6.3	8.3	9.0	6.0	7.4	12.7	9.1	10.2
21	12.8	6.5	9.2	10.2	5.3	7.0	8.4	6.2	7.0	12.3	8.3	9.8
22	12.2	6.3	8.1	12.7	6.4	9.5	8.2	5.3	6.9	10.8	8.6	9.7
23	7.4	5.6	6.5	11.0	6.9	8.6	9.1	6.4	7.7	---	---	---
24	7.3	5.6	6.4	11.8	6.8	8.9	12.5	7.3	9.5	---	---	---
25	9.9	6.0	7.3	12.7	7.3	9.3	10.5	7.3	8.8	---	---	---
26	8.4	5.8	7.2	9.8	5.5	7.2	12.0	7.3	8.8	---	---	---
27	9.7	6.5	8.1	10.7	5.5	7.5	11.7	7.6	9.0	---	---	---
28	12.9	6.1	9.4	7.9	5.4	6.4	9.7	7.4	8.5	---	---	---
29	11.2	6.3	8.1	7.7	5.2	6.4	10.8	7.7	8.8	---	---	---
30	11.3	5.5	7.8	8.2	5.6	6.9	11.3	8.0	9.1	---	---	---
31	13.6	6.0	9.8	---	---	---	9.7	7.9	8.8	---	---	---
MONTH	13.6	5.5	8.2	13.0	5.2	8.0	---	---	---	---	---	---



WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW--CONTINUED

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.6	10.4	11.4	10.8	9.3	10	10.1	8.3	9.1	9.4	6.6	7.6
2	12.2	10.1	11.3	11.5	9.3	10	10.1	7.8	8.9	8.7	6.3	7.3
3	12.0	8.9	10.8	10.6	9.8	10.1	10.0	7.2	9.0	9.0	6.1	7.2
4	15.5	8.5	11.4	11.2	9.9	10.4	11.5	8.0	9.2	9.3	5.8	7.3
5	11.6	10.4	11.0	11.3	9.8	10.3	11.9	7.9	9.1	8.0	5.7	6.5
6	11.7	9.6	10.9	10.8	9.8	10.2	10.8	7.8	9.2	8.6	5.4	6.7
7	12.8	8.3	11.1	11.1	9.7	10.3	11.7	7.9	9.1	7.7	5.4	6.2
8	11.3	10.0	10.5	11.0	9.8	10.5	10.0	7.9	8.8	8.3	5.2	6.4
9	11.1	10.0	10.4	11.0	9.3	10.2	10.3	7.8	8.9	8.5	5.5	6.0
10	11.0	9.2	10.2	10.6	9.3	10	9.8	7.8	8.3	7.9	5.4	6.2
11	10.8	8.0	10.1	10.1	9.3	9.7	9.8	7.8	8.5	8.2	5.6	6.3
12	11.4	8.4	10.0	10.3	9.2	9.6	9.0	7.6	8.2	8.0	5.4	6.3
13	12.3	9.6	10.8	10.4	9.1	9.7	10.0	7.0	8.3	8.3	5.7	6.5
14	11.9	9.5	10.6	10.7	9.0	9.9	8.5	7.0	7.6	7.8	5.4	6.3
15	16.4	7.8	12.4	11.8	9.1	10.1	9.8	7.3	8.1	8.3	5.2	6.3
16	15.6	7.2	11.8	11.0	8.8	9.5	9.1	7.0	8.1	6.6	5.2	5.8
17	15.4	8.1	11.5	11.9	8.9	9.6	8.5	7.0	7.6	7.4	5.2	6.0
18	14.9	8.1	10.4	10.0	8.5	9.3	8.8	7.3	7.7	6.4	5.1	5.8
19	15.9	8.2	11.0	15.1	8.9	10.6	8.9	7.2	7.8	7.2	5.2	5.9
20	14.2	10.0	10.9	15.4	8.7	11.7	9.4	6.6	8.0	11.2	5.0	7.0
21	11.6	10.2	10.8	15.2	8.6	10.6	8.4	6.8	7.5	8.4	5.2	6.0
22	11.1	10.3	10.7	14.6	8.0	9.9	8.4	6.7	7.3	7.8	5.4	6.4
23	11.3	10.3	10.7	11.0	8.8	9.5	9.6	6.4	7.3	9.2	5.5	6.5
24	12.2	10.5	11.0	11.6	8.2	9.6	7.9	6.7	7.1	8.5	4.9	6.4
25	12.2	10.0	11.2	10.1	8.2	9.0	8.9	7.0	7.6	7.7	5.0	5.8
26	11.7	9.7	10.5	12.1	6.6	8.7	9.4	6.9	8.1	7.9	4.9	6.0
27	11.1	9.9	10.5	10.2	8.4	9.0	9.8	7.2	7.8	8.5	5.1	6.7
28	11.1	9.8	10.3	10.0	8.5	9.0	10.0	7.0	8.4	8.4	5.4	6.7
29	10.7	9.4	10.0	10.3	8.5	9.1	9.3	6.8	7.6	8.8	5.5	7.4
30	10.4	9.5	10.1	9.1	7.8	8.6	9.7	6.8	7.8	9.3	4.5	6.6
31	---	---	---	10.3	8.5	9.3	9.3	6.8	7.4	---	---	---
MONTH	16.4	7.2	10.8	15.4	6.6	9.8	11.9	6.4	8.2	11.2	4.5	6.5

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	10.1	11.1	13.4	11.1	12.4	13.1	9.3	10.8	10.2	8.7	9.7
2	17.6	10.7	12.2	12.9	10.4	12.1	13.3	9.8	11.1	9.9	6.8	9.1
3	17.6	10.6	12.3	13.1	10.9	11.9	12.5	10.5	11.1	10.1	6.7	9.0
4	17.8	10.6	12.6	12.9	10.8	11.7	13.6	10.7	11.6	10.3	6.8	9.0
5	13.2	10.3	11.9	12.2	10.3	11.1	13.1	10.4	11.4	9.2	8.3	8.7
6	15.9	10.4	11.9	14.9	10.5	11.5	12.1	10.8	11.5	9.1	7.3	8.3
7	15.1	10.1	11.7	14.9	10.4	11.6	11.5	10.8	11.0	10.2	6.5	8.6
8	16.3	9.6	12.1	11.8	10.2	11.0	11.6	10.1	11.1	10.9	7.3	9.2
9	14.4	10.7	11.9	14.1	10.2	11.5	11.8	8.8	10.2	9.6	7.7	8.8
10	15.3	11.6	13.1	13.6	10.8	11.7	12.1	8.7	10.6	9.6	8.1	8.8
11	14.0	10.8	12.4	14.3	10.5	12.2	12.2	9.5	10.8	10.4	7.5	8.8
12	14.9	11.1	12.5	14.4	9.4	11.5	11.0	10.2	10.6	10.3	8.3	8.9
13	13.2	11.3	12.1	14.6	9.7	11.9	11.4	10.6	11.0	10.3	8.2	9.1
14	14.9	11.2	12.8	14.7	10.6	12.0	11.5	10.7	11.1	10.4	7.7	8.8
15	13.1	10.7	11.6	12.7	10.4	11.1	11.0	10.2	10.4	11.1	6.7	8.8
16	15.2	10.0	12.3	15.0	10.3	11.9	10.7	10.2	10.5	9.3	8.0	8.7
17	14.3	9.9	11.8	12.6	10.3	11.3	11.8	10.7	11.1	8.7	8.3	8.5
18	15.6	9.6	11.9	14.0	10.3	12.2	12.8	9.6	10.7	9.1	8.1	8.4
19	16.3	9.9	12.9	12.8	11.0	11.6	11.3	8.9	10.2	8.5	7.2	8.1
20	16.2	11.8	13.9	12.1	10.2	11.2	11.5	9.0	10.4	9.1	6.3	7.8
21	16.6	11.7	14.0	12.2	10.4	11.0	11.1	10.2	10.7	10.8	6.5	8.4
22	14.6	10.5	12.3	11.5	9.2	10.3	11.0	9.9	10.3	9.0	6.7	8.1
23	11.2	10.2	10.6	12.9	10.0	11.4	11.1	8.9	10.3	---	---	---
24	11.8	10.4	10.8	13.0	11.3	12.1	11.1	8.5	10.1	---	---	---
25	12.3	10.7	11.4	13.9	10.0	11.6	11.5	8.3	10.2	---	---	---
26	12.4	10.3	11.4	12.1	10.0	10.8	10.5	9.1	10.2	---	---	---
27	12.6	10.0	11.1	11.9	9.7	11.0	11.6	10.1	10.5	---	---	---
28	14.2	9.5	11.4	11.6	10.0	11.1	11.0	9.8	10.3	---	---	---
29	13.7	9.9	11.3	11.3	10.4	11.0	10.7	8.3	9.8	---	---	---
30	14.8	9.9	11.9	11.7	10.1	11.0	10.3	9.4	10.0	---	---	---
31	13.6	10.1	11.8	---	---	---	10.4	9.2	9.9	---	---	---
MONTH	17.8	9.5	12.0	15.0	9.2	11.5	13.6	8.3	10.6	---	---	---

## WHITE RIVER BASIN

## 07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW--CONTINUED

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.5	8.1	9.1	9.4	8.8	9.1	10.6	10.0	10.2	12.5	12.0	12.2
2	9.7	8.1	8.7	9.4	8.8	9.1	11.9	10.1	10.6	12.5	12.1	12.3
3	10.6	8.2	9.1	9.2	8.9	9.0	12.3	10.2	10.7	12.7	12.2	12.4
4	17.5	8.2	10.4	9.3	8.8	9.0	11.6	10.2	10.7	12.7	12.3	12.5
5	9.1	8.2	8.6	9.5	8.9	9.2	11.9	10.3	10.7	12.7	12.5	12.6
6	9.5	8.2	8.9	9.4	9.0	9.2	10.9	10.1	10.5	12.9	12.5	12.6
7	11.9	8.3	9.8	9.5	9.0	9.2	10.8	10.1	10.5	13.0	12.6	12.8
8	8.9	8.2	8.4	9.5	9.0	9.2	10.7	10.3	10.5	13.1	12.7	12.9
9	8.8	8.2	8.4	9.5	9.1	9.3	10.9	10.5	10.7	13.2	12.8	13.0
10	9.3	8.2	8.5	9.5	9.1	9.4	10.8	10.6	10.7	13.3	12.9	13.0
11	10.1	8.5	8.9	9.5	9.1	9.4	11.0	10.6	10.8	13.3	12.9	13.1
12	10.1	8.6	9.0	9.6	9.2	9.4	10.9	10.6	10.8	13.4	13.0	13.2
13	10.7	8.6	9.3	9.7	9.2	9.4	11.1	10.6	10.9	13.5	13.1	13.3
14	9.3	8.5	8.9	9.7	9.3	9.5	11.2	10.8	11.0	13.6	13.3	13.4
15	19.0	8.9	13.6	9.9	9.4	9.6	11.4	10.9	11.1	13.8	13.4	13.5
16	17.6	11.4	14.3	10.1	9.4	9.7	11.3	10.9	11.1	13.6	13.5	13.5
17	17.9	10.5	13.4	10.9	9.4	9.8	11.3	11.0	11.2	13.8	13.5	13.6
18	16.2	8.5	11.0	10.1	9.4	9.7	11.4	11.0	11.2	14.0	13.6	13.7
19	16.7	8.5	10.3	13.6	9.6	10.5	11.4	10.9	11.2	14.1	13.7	13.9
20	13.9	8.5	9.3	18.4	10.1	13.3	11.6	11.1	11.3	16.7	14.0	14.7
21	8.9	8.4	8.7	18.2	9.6	11.4	11.5	11.2	11.4	15.3	13.9	14.3
22	8.9	8.4	8.6	15.6	9.6	10.9	11.7	11.2	11.5	14.4	13.8	14.0
23	8.9	8.5	8.7	10.6	9.6	10.0	12.0	11.4	11.6	14.4	13.8	14.0
24	9.3	8.5	8.7	10.7	9.7	9.9	11.8	11.4	11.6	14.4	13.8	14.0
25	9.2	8.6	8.8	10.5	9.7	9.9	11.9	11.4	11.7	14.4	13.9	14.1
26	9.2	8.7	8.9	13.3	9.8	10.8	11.9	11.5	11.7	14.8	14.0	14.3
27	9.8	8.7	9.0	10.4	9.8	10.1	12.1	11.6	11.8	15.1	14.0	14.5
28	9.6	8.7	9.0	10.5	9.9	10.2	12.2	11.7	11.9	15.2	14.2	14.5
29	9.3	8.8	9.0	10.4	9.9	10.1	12.2	11.9	12.0	15.3	14.3	14.6
30	9.2	8.8	8.9	11.6	9.9	10.4	12.3	11.9	12.0	15.8	14.2	14.6
31	---	---	---	10.2	9.9	10.0	12.4	11.9	12.1	---	---	---
MONTH	19.0	8.1	9.5	18.4	8.8	9.9	12.4	10.0	11.2	16.7	12.0	13.5

WHITE RIVER BASIN

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07055608 CROOKED CREEK AT YELLVILLE

LOCATION.--Lat 36°13'23", long 92°40'47", in NW1/4NE1/4 sec.9, T.18 N., R.16 W., Marion County, Hydrologic Unit 11010003, on left bank at bridge on State Highway 14 at Yellville.

DRAINAGE AREA.--406 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1988 to September 1994, October 2001 to current year. Annual maximum 1985-88, 1995-2001. Occasional measurements 1978-88.

GAGE.--Water-stage recorder. Datum of gage is 541.605 ft above NGVD of 1929. 1939 to 1984, non-recording gage at present site and location.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.7	e11	814	261	4050	85	905	1220	350	157	49	e4.5
2	e4.5	e12	591	239	2140	207	797	651	313	149	46	e4.7
3	e4.1	e13	448	222	1510	326	672	526	287	224	43	e4.7
4	e4.2	e18	347	206	1140	323	579	460	264	185	40	e4.5
5	e4.3	21	265	196	895	306	512	415	378	148	38	e4.2
6	e4.2	17	254	195	763	292	459	381	933	127	35	e3.1
7	e3.8	e15	295	182	652	277	730	359	519	112	34	e2.7
8	e3.6	e13	257	168	612	262	8930	343	415	100	32	e3.3
9	e3.5	e12	199	160	596	1940	3810	401	384	90	30	e2.2
10	e4.0	e12	145	154	576	1410	2410	415	1030	84	28	e2.0
11	17	e11	100	145	503	1120	1840	368	2480	83	27	e2.2
12	166	e11	114	134	448	1160	1510	348	1180	85	26	e1.9
13	156	e11	270	128	395	986	1310	1440	1110	234	27	e1.9
14	135	e9.8	326	120	339	831	1150	1120	822	149	e87	e1.9
15	132	e9.4	304	113	297	749	1010	806	649	158	122	e1.7
16	66	e9.3	1880	107	259	839	898	663	551	175	70	e1.7
17	36	e9.1	8040	105	218	703	889	624	509	106	51	e1.5
18	26	e9.2	3350	105	187	623	778	730	425	138	44	e2.2
19	e21	e8.6	2140	113	190	6110	703	606	374	209	39	e1.7
20	e18	e7.7	1550	113	228	11200	732	510	332	162	35	e7.9
21	e16	e7.6	1220	106	199	4550	680	446	302	125	33	e6.0
22	e15	e7.5	995	101	170	2940	609	410	265	99	29	197
23	e14	e9.7	827	127	152	2210	590	377	241	85	27	e4.3
24	e13	569	693	1150	139	1800	586	356	224	76	26	e3.3
25	e12	917	598	1020	128	2120	515	342	213	66	27	e3.3
26	e12	521	520	826	113	2980	493	319	242	58	26	e3.6
27	e12	333	458	720	97	2040	478	298	231	53	23	e3.8
28	e11	274	406	650	86	1690	478	330	205	48	18	e2.2
29	e11	443	358	594	---	1450	435	553	195	45	12	e2.7
30	e10	709	312	553	---	1220	512	532	176	50	4.7	e3.0
31	e11	---	283	2340	---	1050	---	400	---	50	e4.4	---
TOTAL	950.9	4030.9	28359	11353	17082	53799	36000	16749	15599	3630	1133.1	289.7
MEAN	30.7	134	915	366	610	1735	1200	540	520	117	36.6	9.66
MAX	166	917	8040	2340	4050	11200	8930	1440	2480	234	122	197
MIN	3.5	7.5	100	101	86	85	435	298	176	45	4.4	1.5
AC-FT	1890	8000	56250	22520	33880	106700	71410	33220	30940	7200	2250	575
CFSM	0.08	0.33	2.25	0.90	1.50	4.27	2.96	1.33	1.28	0.29	0.09	0.02
IN.	0.09	0.37	2.60	1.04	1.57	4.93	3.30	1.53	1.43	0.33	0.10	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988-94, 2002, BY WATER YEAR (WY)

MEAN	83.7	330	373	422	512	770	711	847	372	83.9	32.0	52.1
MAX	432	1050	892	1041	1586	1712	1200	2592	905	288	143	225
(WY)	1992	1992	2002	1993	1989	2002	2002	1990	2002	2002	1992	1992
MIN	0.000	0.000	0.000	88.4	1.16	147	124	135	104	6.59	0.000	2.23
(WY)	1995	1996	1990	1989	1996	1992	1992	1992	1989	1995	1995	1989

WHITE RIVER BASIN

07055608 CROOKED CREEK AT YELLVILLE--CONTINUED

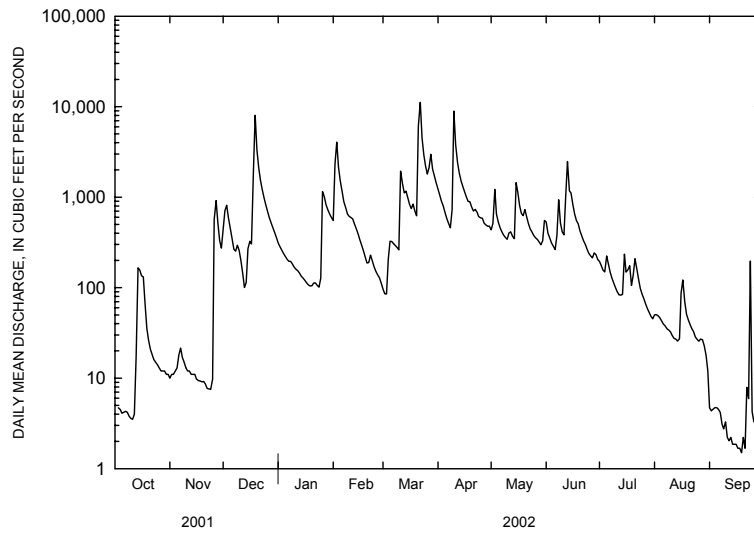
SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1988-94, 2002

ANNUAL TOTAL	188975.6		
ANNUAL MEAN	518		396
HIGHEST ANNUAL MEAN			580 2002
LOWEST ANNUAL MEAN			283 1989
HIGHEST DAILY MEAN	11200	Mar 20	22100 May 3 1990
LOWEST DAILY MEAN	1.5	Sep 17	0.00 Aug 17 1988
ANNUAL SEVEN-DAY MINIMUM	1.8	Sep 13	0.00 Oct 3 1989
MAXIMUM PEAK FLOW	14600	Mar 20	38700 May 3 1990
MAXIMUM PEAK STAGE	15.69	Mar 20	25.20 May 3 1990
ANNUAL RUNOFF (AC-FT)	374800		286600
ANNUAL RUNOFF (CFSM)	1.28		0.97
ANNUAL RUNOFF (INCHES)	17.32		13.24
10 PERCENT EXCEEDS	1150		1020
50 PERCENT EXCEEDS	209		167
90 PERCENT EXCEEDS	4.7		2.6

<sup>e</sup>Estimated



WHITE RIVER BASIN

179

07055646 BUFFALO RIVER NEAR BOXLEY

LOCATION.--Lat 35°56'43", long 93°59'42", in SW1/4SE1/4 sec.22, T.15 N., R.23 W., Newton County, Hydrologic Unit 11010005, on right bank 1.8 mi upstream from Highway 43 bridge, .8 mi upstream from Smith Creek, 2.6 mi south of Boxley, and at mi 108.

DRAINAGE AREA.--57 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, October 1998 to current year. Annual maximum water years 1996-98.

REVISED RECORDS.-WDR Ark. 1999: 1993 (M), 1994 (M), 1995 (M).

GAGE.-Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	5.9	279	19	1250	69	195	115	189	11	5.3	4.3
2	4.1	6.6	161	17	588	394	163	93	124	11	4.9	4.2
3	3.9	8.1	108	15	362	332	129	78	89	10	4.8	4.1
4	3.8	8.7	81	15	238	249	108	67	67	10	4.4	3.9
5	4.0	8.6	64	14	173	218	94	58	131	9.5	4.3	3.8
6	3.9	8.1	63	15	142	194	84	50	114	9.1	4.1	3.6
7	3.8	7.8	54	16	116	170	1220	44	72	8.7	4.1	3.4
8	3.8	7.7	52	14	114	152	4690	38	56	8.6	4.1	3.4
9	3.9	7.6	44	14	106	1410	1040	46	65	8.1	3.9	3.3
10	15	7.4	38	15	90	701	592	41	180	7.7	3.9	3.0
11	290	7.3	33	14	75	545	400	34	326	7.5	3.9	2.8
12	76	7.0	93	13	69	575	288	31	206	8.5	3.8	2.6
13	213	7.1	201	12	62	407	222	67	179	10	4.7	2.4
14	104	7.0	157	12	55	309	177	58	116	8.9	30	2.3
15	48	7.1	123	12	52	292	146	46	82	8.2	25	2.1
16	30	7.1	3590	12	47	343	330	41	66	8.0	15	1.9
17	22	7.1	2740	11	43	257	707	691	55	9.3	12	1.7
18	17	7.1	871	12	40	337	392	559	44	9.4	9.7	1.3
19	15	7.3	427	13	106	4330	291	282	35	21	8.1	1.3
20	12	7.4	235	14	250	3210	260	179	29	21	7.3	1.2
21	11	7.4	156	14	175	1050	203	129	28	12	6.7	0.83
22	9.6	7.3	117	15	141	608	158	96	23	7.9	6.2	0.82
23	8.6	7.7	87	32	124	421	699	75	20	6.3	5.9	0.93
24	8.1	1020	67	461	111	309	595	61	17	5.6	5.6	1.1
25	7.7	204	55	227	99	2430	355	54	15	5.9	5.6	1.3
26	6.8	99	46	155	85	1620	293	48	17	5.1	5.6	1.5
27	6.5	66	39	121	72	805	250	40	17	4.8	5.4	1.5
28	5.9	82	35	102	67	533	223	307	16	4.5	5.1	1.5
29	5.6	129	30	89	---	381	165	1010	14	4.5	4.8	1.4
30	5.8	273	25	98	---	293	134	654	12	4.5	4.5	1.3
31	5.6	---	21	2320	---	248	---	328	---	5.5	4.4	---
TOTAL	958.8	2043.4	10092	3913	4852	23192	14603	5420	2404	272.1	223.1	68.78
MEAN	30.93	68.11	325.5	126.2	173.3	748.1	486.8	174.8	80.13	8.777	7.197	2.293
MAX	290	1020	3590	2320	1250	4330	4690	1010	326	21	30	4.3
MIN	3.8	5.9	21	11	40	69	84	31	12	4.5	3.8	0.82
AC-FT	1900	4050	20020	7760	9620	46000	28970	10750	4770	540	443	136
CFSM	0.54	1.19	5.67	2.20	3.02	13.0	8.48	3.05	1.40	0.15	0.13	0.04
IN.	0.62	1.32	6.54	2.54	3.14	15.03	9.46	3.51	1.56	0.18	0.14	0.04

WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

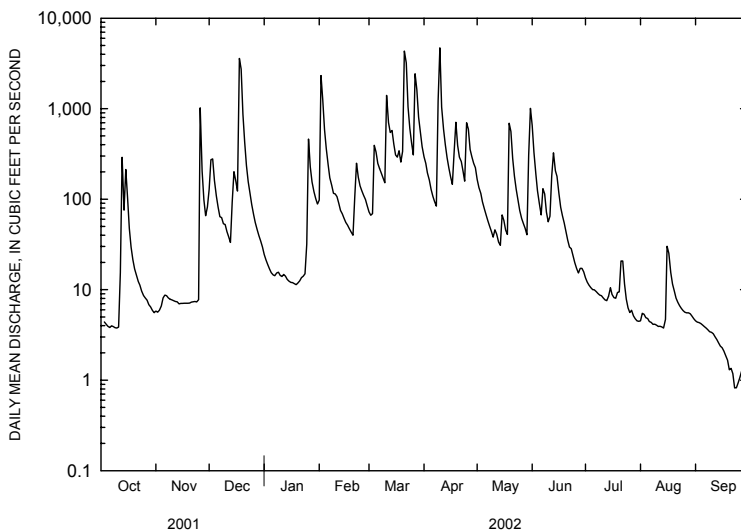
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993-95, 1999-02, BY WATER YEAR (WY)

MEAN	23.68	123.0	130.3	114.9	171.1	227.3	220.5	159.0	83.79	13.58	4.689	4.097
MAX	93.3	360	325	188	530	748	435	284	318	46.8	12.4	13.3
(WY)	1999	1995	2002	1995	2001	2002	2002	2000	2000	1999	1994	1993
MIN	0.096	1.71	23.1	30.2	23.8	75.2	50.0	24.4	4.27	3.05	0.57	0.027
(WY)	2000	2000	1996	2000	1996	2001	2001	2001	1994	1993	1993	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993-95, 1999-02	
ANNUAL TOTAL	38590.2		68042.18			
ANNUAL MEAN	105.7		186.4		115.7	
HIGHEST ANNUAL MEAN					181 2002	
LOWEST ANNUAL MEAN					80.4 2001	
HIGHEST DAILY MEAN	3590	Dec 16	4690	Apr 8	5260	May 27 2000
LOWEST DAILY MEAN	3.6	Sep 18	0.82	Sep 22	0.00	Sep 4 2000
ANNUAL SEVEN-DAY MINIMUM	3.9	Oct 3	1.1	Sep 18	0.00	Sep 4 2000
MAXIMUM PEAK FLOW			12500	Apr 8	<sup>1</sup> 29000	Sep 26 1996
MAXIMUM PEAK STAGE			10.96	Apr 8	<sup>2</sup> 14.79	Sep 26 1996
INSTANTANEOUS LOW FLOW			0.77	Sep 21-23	0.00	at times
ANNUAL RUNOFF (AC-FT)	76540		135000		83850	
ANNUAL RUNOFF (CFSM)	1.84		3.25		2.02	
ANNUAL RUNOFF (INCHES)	25.01		44.10		27.40	
10 PERCENT EXCEEDS	189		393		250	
50 PERCENT EXCEEDS	24		35		30	
90 PERCENT EXCEEDS	6.5		3.9		1.2	

<sup>1</sup>From rating curve extended above 1400 ft<sup>3</sup>/s

<sup>2</sup>From floodmarks



WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV 20...	1130	80020	80513	7.4	752	7.7	70	8.5	128	10.8	69
DEC 12...	1215	80020	80513	40	740	10.2	91	7.5	59	9.2	24
JAN 09...	1125	80020	80513	14	743	13.0	104	7.9	69	4.9	27
FEB 14...	0930	80020	80513	56	751	12.7	101	7.5	55	4.8	24
MAR 12...	1245	80020	80513	560	744	11.3	98	7.4	50	8.1	20
MAY 08...	1050	80020	80513	38	742	9.3	100	7.7	71	17.6	31
JUL 09...	1050	80020	80513	8.0	751	6.6	79	7.3	118	23.6	49
SEP 11...	0755	80020	80513	2.9	750	7.8	88	7.0	163	20.6	80
11...	1010	80020	80513	--	--	--	--	--	--	--	--

Date	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV 20...	84	0	1.54	3.6	<.04	.14	<.05	<.008	<.02	E.002
DEC 12...	30	0	1.32	2.6	<.04	<.10	<.05	<.008	<.02	E.004
JAN 09...	33	0	1.17	3.3	<.04	<.10	E.03	<.008	<.02	E.003
FEB 14...	29	0	1.28	2.6	<.04	E.08	<.05	<.008	<.02	.004
MAR 12...	24	0	1.27	2.6	<.04	E.08	.06	<.008	<.02	.011
MAY 08...	37	0	1.14	2.8	<.04	E.09	<.05	<.008	<.02	.005
JUL 09...	60	0	1.02	2.8	<.04	E.07	E.02	<.008	E.01	.004
SEP 11...	97	0	.89	3.0	<.04	E.08	E.04	<.008	<.02	.005
11...	--	--	--	--	--	--	--	--	--	--

Date	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI-PHYTON BIOMASS DRY WEIGHT (G/SQ M) (00573)	PERI-PHYTON BIOMASS ASH FREE DRY (G/SQ M) (49954)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 20...	--	--	--	--	<10	<16	<10	--	93	11	.22
DEC 12...	--	--	--	--	E87	66	66	--	99	6.0	.65
JAN 09...	--	--	--	--	E15	E3	E3	--	100	6.0	.23
FEB 14...	--	--	--	--	E1	E4	E2	--	83	6.0	.91
MAR 12...	--	--	--	--	21	21	E8	--	91	11	16.6
MAY 08...	--	--	--	--	E4	E6	48	--	88	10	1.0
JUL 09...	--	--	--	--	18	21	55	--	93	12	.26
SEP 11...	--	--	--	--	31	91	240	--	71	3.0	.02
11...	450	480.7	28.200	18	--	--	--	76.2	--	--	--

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## WHITE RIVER BASIN

## 07055875 RICHLAND CREEK NEAR WITTS SPRING

**LOCATION.**--Lat 35°47'49", long 92°55'43", in SE<sub>1/4</sub>SW<sub>1/4</sub>SW<sub>1/4</sub> sec.5, T.13 N., R.18 W., Searcy County, Hydrologic Unit 11010005, 50 ft upstream from bridge on county road, 1,800 ft downstream from Falling Water Creek and 3.9 mi northwest of Witts Spring.

**DRAINAGE AREA.**--67.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**--May 1995 to current year.

**REVISIONS.**--WRD Ark. 1999: 1996(M), 1997(M).

**GAGE.**--Water-stage recorder.

**REMARKS.**--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	11	220	42	1160	99	207	110	82	6.4	11	1.7
2	1.9	13	137	39	544	454	182	96	64	5.8	8.9	1.6
3	2.1	25	99	36	369	401	150	84	51	8.7	7.5	1.4
4	2.2	28	81	34	273	299	126	75	41	9.0	6.0	1.3
5	2.9	24	67	35	221	244	110	65	46	6.9	4.8	1.1
6	4.2	24	78	43	195	205	100	58	42	4.9	4.0	0.98
7	5.9	22	84	42	169	176	281	52	33	3.7	3.6	0.94
8	5.9	21	304	40	169	203	2600	50	27	2.8	2.8	0.91
9	6.0	21	195	39	170	2700	711	179	26	2.4	2.2	0.89
10	7.4	21	136	39	152	677	431	146	39	2.1	1.9	0.84
11	22	19	102	37	132	472	316	131	40	1.9	1.7	0.77
12	32	19	189	36	123	423	247	111	34	2.2	1.5	0.69
13	59	18	317	35	108	328	201	282	37	3.2	1.9	0.61
14	55	18	247	34	98	268	168	213	43	2.6	217	0.59
15	36	18	190	33	94	226	141	155	36	53	76	0.55
16	28	18	2920	32	87	192	130	118	29	63	46	0.50
17	23	17	2440	32	80	164	229	208	24	40	33	0.49
18	21	16	716	31	74	224	185	210	20	921	25	0.53
19	19	17	402	35	142	3930	161	156	17	372	19	0.69
20	18	17	268	33	270	2630	145	121	19	165	15	1.5
21	17	16	200	34	210	747	127	98	21	98	12	1.7
22	15	15	160	36	174	451	108	81	14	68	9.6	1.9
23	15	16	125	352	150	333	181	68	11	49	7.7	2.0
24	15	372	102	1060	131	264	211	58	9.5	40	6.4	1.7
25	13	104	88	418	116	1480	179	53	9.6	32	5.5	1.6
26	13	68	79	279	101	1260	178	48	9.3	25	4.6	1.4
27	12	52	71	208	89	576	181	44	12	20	3.9	1.3
28	12	100	65	164	83	396	166	313	11	16	3.2	1.2
29	12	211	58	134	---	303	138	261	13	13	2.6	1.1
30	11	341	51	123	---	256	122	165	7.8	16	2.3	1.0
31	11	---	46	3800	---	245	---	111	---	15	1.9	---
TOTAL	499.2	1682	10237	7335	5684	20626	8412	3920	868.2	2068.6	548.5	33.48
MEAN	16.10	56.07	330.2	236.6	203.0	665.4	280.4	126.5	28.94	66.73	17.69	1.116
MAX	59	372	2920	3800	1160	3930	2600	313	82	921	217	2.0
MIN	1.7	11	46	31	74	99	100	44	7.8	1.9	1.5	0.49
AC-FT	990	3340	20310	14550	11270	40910	16690	7780	1720	4100	1090	66
CFSM	0.24	0.84	4.93	3.53	3.03	9.93	4.19	1.89	0.43	1.00	0.26	0.02
IN.	0.28	0.93	5.68	4.07	3.16	11.45	4.67	2.18	0.48	1.15	0.30	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	22.05	129.6	134.7	155.5	219.9	261.8	187.4	92.46	76.43	16.06	2.871	18.59
MAX	64.5	658	341	313	451	665	280	236	403	66.7	17.7	139
(WY)	1999	1997	2002	1998	2001	2002	2002	2000	2000	2002	2002	1996
MIN	0.000	1.19	30.9	25.1	37.8	88.5	68.6	27.8	6.35	0.26	0.11	0.000
(WY)	2000	2000	2001	2000	1996	2000	2000	1997	1998	1998	1998	2000

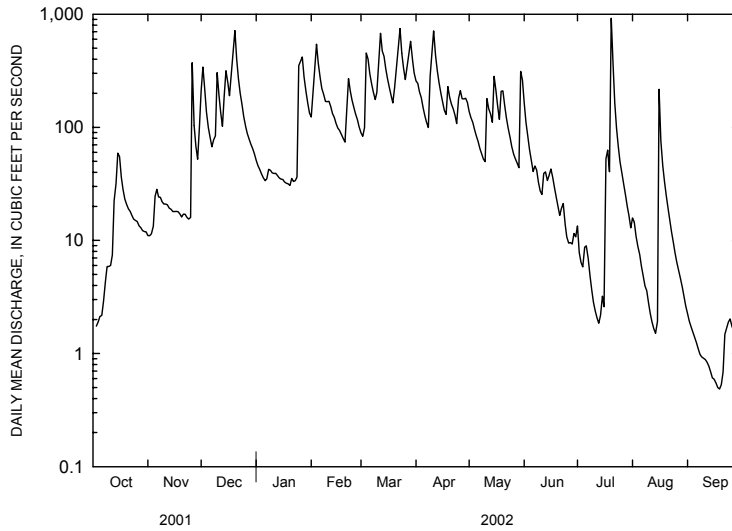


WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1995 - 2002	
ANNUAL TOTAL	35616.49		61913.98			
ANNUAL MEAN	97.58		169.6		109.4	
HIGHEST ANNUAL MEAN					172	2002
LOWEST ANNUAL MEAN					74.2	2001
HIGHEST DAILY MEAN	3490	Feb 16	3930	Mar 19	4970	Nov 7 1996
LOWEST DAILY MEAN	0.54	Sep 7	0.49	Sep 17	0.00	Aug 22 1995
ANNUAL SEVEN-DAY MINIMUM	0.72	Aug 25	0.57	Sep 12	0.00	Aug 22 1995
MAXIMUM PEAK FLOW			<sup>1</sup> 14900	Jan 31	<sup>1</sup> 14900	Jan 31 2002
MAXIMUM PEAK STAGE			11.69	Jan 31	11.69	Jan 31 2002
INSTANTANEOUS LOW FLOW			0.45	Sep 17	0.00	at times
ANNUAL RUNOFF (AC-FT)	70650		122800		79220	
ANNUAL RUNOFF (CFSM)	1.46		2.53		1.63	
ANNUAL RUNOFF (INCHES)	19.78		34.38		22.18	
10 PERCENT EXCEEDS	189		314		236	
50 PERCENT EXCEEDS	25		46		30	
90 PERCENT EXCEEDS	1.6		1.9		0.20	

<sup>1</sup>From rating curve extended above 5300 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow



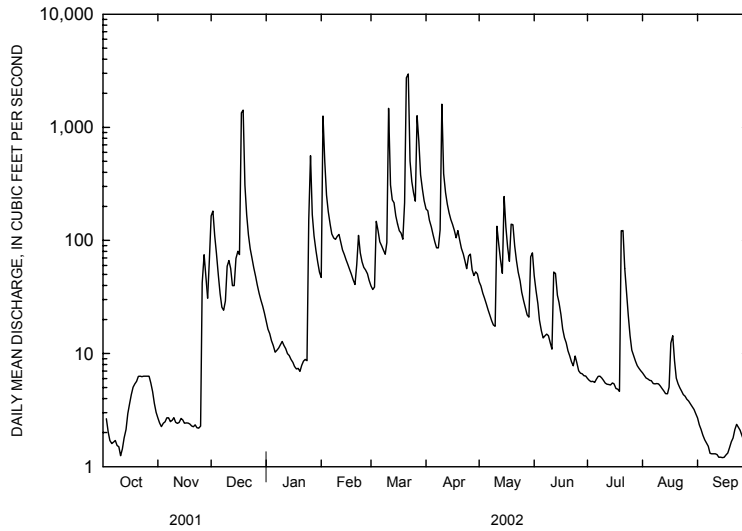


WHITE RIVER BASIN

07055893 CALF CREEK NEAR SILVER HILL--CONTINUED

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	33118.4			
ANNUAL MEAN	90.74		90.74	
HIGHEST ANNUAL MEAN			90.7	2002
LOWEST ANNUAL MEAN			90.7	2002
HIGHEST DAILY MEAN	2970	Mar 20	2970	Mar 20 2002
LOWEST DAILY MEAN	1.2	Oct 9	1.2	Oct 9 2001
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 8	1.2	Sep 8 2002
MAXIMUM PEAK FLOW	4910	Mar 9	4910	Mar 9 2002
MAXIMUM PEAK STAGE	10.06	Mar 9	10.06	Mar 9 2002
INSTANTANEOUS LOW FLOW	1.1	at times	1.1	at times
ANNUAL RUNOFF (AC-FT)	65690		65730	
10 PERCENT EXCEEDS	165		165	
50 PERCENT EXCEEDS	15		15	
90 PERCENT EXCEEDS	2.1		2.1	

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07055893 CALF CREEK NEAR SILVER HILL--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2000 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)
OCT											
17...	1040	80020	80513	6.7	776	8.8	84	7.5	389	13.8	171
NOV											
14...	0915	80020	80513	1.9	765	9.4	89	7.5	365	13.0	178
DEC											
06...	0930	80020	80513	23	764	10.0	100	7.7	327	15.6	144
17...	1615	80020	80513	824	743	8.3	80	8.2	200	12.7	97
JAN											
23...	1055	80020	80513	2.7	748	11.4	106	7.5	309	11.3	137
24...	1815	80020	80513	137	765	10.9	94	7.7	163	8.7	63
FEB											
01...	1410	80020	80513	420	760	11.5	103	7.3	185	10.2	89
21...	1145	80020	80513	77	766	15.8	140	7.6	244	10.1	105
MAR											
21...	1515	80020	80513	459	773	7.3	66	7.8	217	11.5	98
APR											
08...	1715	80020	80513	--	759	9.8	95	7.8	172	13.8	80
24...	0745	80020	80513	80	759	8.3	84	7.8	332	15.8	162
JUN											
11...	1615	80020	80513	45	754	11.4	139	7.8	246	24.6	108
19...	1100	80020	80513	10	752	7.5	85	7.5	271	20.8	129
JUL											
09...	1245	80020	80513	5.8	770	12.8	154	7.8	332	24.9	148
AUG											
13...	1130	80020	80513	4.2	765	9.8	115	7.7	307	23.7	138
SEP											
11...	1240	80020	80513	1.1	764	10.4	121	7.6	319	22.9	148

Date	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
OCT											
17...	208	<.04	E.08	E.07	--	.52	<.008	--	.077	.030	.03
NOV											
14...	200	<.04	E.06	E.08	--	.28	<.008	--	--	.024	E.01
DEC											
06...	188	<.04	E.08	.10	--	.94	<.008	1.0	.077	.032	.03
17...	124	<.04	.14	.29	.34	.21	<.008	.50	.080	.032	.03
JAN											
23...	172	<.04	<.10	<.10	--	.51	<.008	--	.077	.026	.03
24...	98	<.04	.19	.34	.69	.50	<.008	.84	.086	.040	.03
FEB											
01...	--	E.02	.12	.22	.78	.66	<.008	.88	.083	.034	.03
21...	140	<.04	<.10	E.10	--	.32	<.008	--	.061	.023	.02
MAR											
21...	129	<.04	E.07	.15	--	.60	<.008	.75	.074	.031	.02
APR											
08...	95	<.04	.19	.21	.33	.14	<.008	.35	.058	.025	.02
24...	189	<.04	E.08	E.06	--	.32	<.008	--	.055	.017	.02
JUN											
11...	139	E.03	E.10	.16	--	.25	<.008	.41	.058	.028	.02
19...	153	<.04	E.06	E.05	--	.16	<.008	--	.055	.027	.02
JUL											
09...	173	<.04	E.07	E.08	--	.20	<.008	--	.074	.026	.02
AUG											
13...	185	<.04	E.10	E.07	--	.27	<.008	--	.067	.027	.02
SEP											
11...	181	<.04	E.09	.11	--	.29	<.008	.40	.074	.029	.02

WHITE RIVER BASIN

07055893 CALF CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT 17...	.030	12	1.0	20	39	190	71	110	2.0
NOV 14...	.024	11	.7	27	29	160	95	96	.49
DEC 06...	.036	5.7	1.2	26	46	98	70	75	4.7
17...	.053	1.3	4.0	330	290	550	96	29	64.5
JAN 23...	.025	8.2	.7	E5	E3	E3	89	55	.40
24...	.093	2.4	3.6	490	510	3200	97	46	17.0
FEB 01...	.082	8.2	2.3	340	620	330	89	45	51.0
21...	.033	4.6	1.3	77	100	55	99	28	5.8
MAR 21...	.060	2.9	1.5	E62	E80	E47	74	28	34.7
APR 08...	E.05	2.6	3.1	580	490	1000	94	35	--
24...	.020	5.0	1.1	380	350	210	80	27	5.8
JUN 11...	.037	3.5	1.5	<1	120	130	81	5.0	.61
19...	.031	7.9	.9	25	E16	28	100	21	.57
JUL 09...	.031	4.9	.8	E10	E18	36	49	30	.47
AUG 13...	.031	5.4	.8	>84	<16	>120	20	23	.26
SEP 11...	.033	7.9	.6	31	65	160	34	20	.06

Remark codes used in this report:

- < -- Less than
- > -- Greater than
- E -- Estimated value

## WHITE RIVER BASIN

## 07056000 BUFFALO RIVER NEAR ST. JOE

**LOCATION.**--Lat 35°59'00", long 92°44'47", in SW<sub>1</sub>/4SW<sub>1</sub>/4 sec.36, T.16 N., R.17 W., Searcy County, Hydrologic Unit 11010005, near right bank on downstream side of bridge on U.S. Highway 65, 1.2 mi downstream from Mill Creek, 4.0 mi upstream from Bear Creek, 4.5 mi southeast of St. Joe, and at mile 58.3.

**DRAINAGE AREA.**--829 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

**REVISED RECORDS.**--WSP 1211: 1945(M), 1949(M). WRD Ark. 1973: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 560.35 ft above NGVD of 1929. Prior to Mar. 1, 1940, nonrecording gage at present site and datum. Prior to Nov. 6, 1990, at site 300 ft downstream at same datum.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage, 50.5 ft in August 1915, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	85	1970	659	19000	749	2580	1210	1310	217	114	66
2	69	88	1490	617	6580	1220	2250	1100	993	209	116	62
3	64	94	1100	581	4340	2520	1970	971	784	221	116	59
4	60	85	871	551	3170	2100	1700	870	636	297	110	54
5	69	86	724	530	2460	1810	1520	789	602	260	102	49
6	59	92	636	527	2110	1660	1380	713	1330	227	95	47
7	55	88	606	519	1870	1530	1460	646	1040	204	90	43
8	55	88	724	527	1790	1420	29500	595	750	187	87	40
9	54	86	831	508	1840	12900	13300	816	626	174	84	39
10	55	83	740	493	1780	6740	6020	1030	809	162	80	37
11	75	81	635	480	1550	4390	4300	888	1100	154	77	36
12	150	79	620	471	1400	4320	3410	758	1190	151	75	35
13	549	77	1180	458	1270	3650	2880	1600	1080	147	76	34
14	684	75	1580	444	1140	2960	2490	1960	1090	143	115	33
15	734	70	1340	428	1050	2470	2150	1370	879	145	260	32
16	514	68	6170	413	972	2540	1890	1080	705	142	342	31
17	390	66	33700	403	892	2420	2270	1050	596	135	271	35
18	313	62	10700	398	827	2130	2390	2910	511	672	220	32
19	257	62	5480	405	822	26200	1920	2100	417	1270	186	34
20	218	57	3580	412	1370	45800	1730	1500	349	554	164	42
21	195	55	2610	423	1620	13200	1610	1200	310	374	142	35
22	175	53	2090	427	1350	6990	1430	1000	295	276	128	35
23	161	54	1750	466	1190	5090	1350	857	269	232	118	35
24	148	538	1460	5240	1090	4120	2300	732	248	203	109	34
25	136	1580	1260	3930	1010	7510	2010	657	233	186	101	33
26	126	881	1110	2530	931	20100	1620	579	225	171	95	32
27	115	605	999	1950	844	7980	1640	539	229	157	89	32
28	105	552	913	1620	778	5430	1610	678	229	143	85	29
29	97	970	839	1400	---	4260	1500	2460	223	131	80	28
30	90	2120	770	1260	---	3440	1310	2750	221	123	77	27
31	87	---	708	10300	---	2990	---	1890	---	119	71	---
TOTAL	5936	8980	89186	39370	65046	210639	103490	37298	19279	7786	3875	1160
MEAN	191.5	299.3	2877	1270	2323	6795	3450	1203	642.6	251.2	125.0	38.67
MAX	734	2120	33700	10300	19000	45800	29500	2910	1330	1270	342	66
MIN	54	53	606	398	778	749	1310	539	221	119	71	27
AC-FT	11770	17810	176900	78090	129000	417800	205300	73980	38240	15440	7690	2300
CFSM	0.23	0.36	3.47	1.53	2.80	8.20	4.16	1.45	0.78	0.30	0.15	0.05
IN.	0.27	0.40	4.00	1.77	2.92	9.45	4.64	1.67	0.87	0.35	0.17	0.05

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

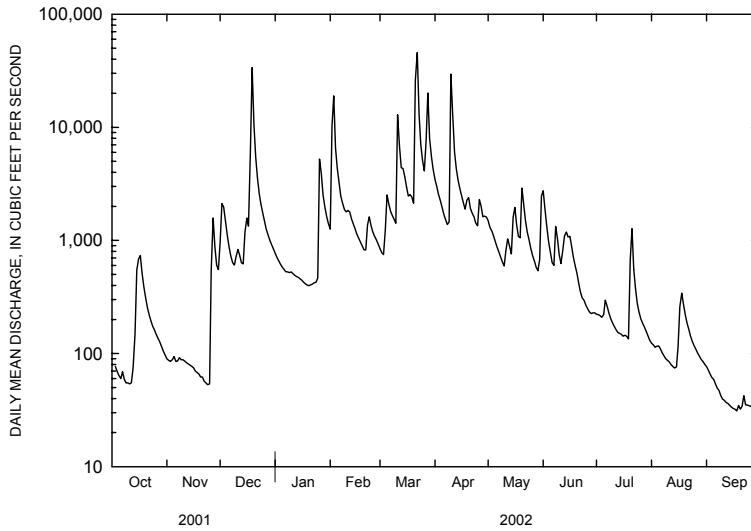
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	306.8	993.6	1218	1167	1616	2036	2159	1826	798.4	234.5	162.2	170.6
MAX	3357	6549	8516	6934	5455	8897	9584	6975	5468	1134	1569	2025
(WY)	1942	1997	1983	1949	1989	1945	1945	1990	1945	1950	1950	1996
MIN	14.2	19.7	30.4	32.4	114	236	237	201	67.6	29.6	15.0	10.2
(WY)	1964	1964	1990	1964	1963	1972	1963	2001	1977	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	293747		592045			
ANNUAL MEAN	804.8		1622		1053	
HIGHEST ANNUAL MEAN					2619 1945	
LOWEST ANNUAL MEAN					316 1963	
HIGHEST DAILY MEAN	33700	Dec 17	45800	Mar 20	124000	Dec 3 1982
LOWEST DAILY MEAN	20	Sep 6	27	Sep 30	7.0	Sep 17 1954
ANNUAL SEVEN-DAY MINIMUM	21	Sep 1	31	Sep 24	7.4	Sep 11 1954
MAXIMUM PEAK FLOW			54200	Mar 20	158000	Dec 3 1982
MAXIMUM PEAK STAGE			31.36	Mar 20	53.75	Dec 3 1982
INSTANTANEOUS LOW FLOW			27	Sep 30	6.6	2 Sep 16 1954
ANNUAL RUNOFF (AC-FT)	582600		1174000		763200	
ANNUAL RUNOFF (CFSM)	0.97		1.96		1.27	
ANNUAL RUNOFF (INCHES)	13.18		26.57		17.27	
10 PERCENT EXCEEDS	1430		2930		2320	
50 PERCENT EXCEEDS	218		602		317	
90 PERCENT EXCEEDS	55		59		44	

<sup>1</sup>From rating curve extended above 91,000 ft<sup>3</sup>/s

<sup>2</sup>Also Sept. 17, 20, 1954



WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-57, April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-WATER (DEG C) (00010)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	
OCT	17...	1140	80020	80513	388	776	9.2	90	7.7	237	15.3	108	136
NOV	13...	1515	80020	80513	77	763	11.6	115	7.8	253	15.2	125	142
DEC	06...	0845	80020	80513	639	764	9.3	91	7.4	191	14.4	92	108
	17...	1730	80020	80513	35000	743	10.2	95	8.0	88	11.4	41	62
JAN	23...	1130	80020	80513	268	748	11.7	104	7.5	226	9.2	101	132
	25...	0900	80020	80513	3800	764	9.8	82	8.0	140	7.7	61	82
FEB	01...	1325	80020	80513	15900	760	9.8	85	6.9	100	9.1	50	--
	22...	0845	80020	80513	1380	771	11.4	97	7.6	172	8.9	80	92
MAR	20...	0810	80020	80513	51500	765	8.5	76	7.5	89	10.8	5	62
APR	08...	1500	80020	80513	44200	759	11.2	102	7.6	81	10.8	33	49
	23...	1445	80020	80513	1360	767	10.2	109	8.3	177	18.8	87	105
JUN	12...	1000	80020	80513	1190	757	8.0	95	7.9	203	23.2	103	117
	19...	1145	80020	80513	407	753	7.4	84	8.1	209	21.0	107	119
JUL	10...	0715	80020	80513	139	769	5.7	72	7.9	231	27.6	109	130
AUG	13...	1015	80020	80513	70	766	6.8	84	7.9	225	26.6	103	135
SEP	11...	1040	80020	80513	36	765	7.3	88	7.7	232	25.0	111	122

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT	17...	<.04	E.08	.12	--	.08	<.008	.20	--	E.004
NOV	13...	<.04	E.06	E.06	--	E.03	<.008	--	--	<.004
DEC	06...	<.04	E.07	E.08	--	.20	<.008	--	--	.005
	17...	<.04	.18	1.0	--	.41	<.008	1.2	--	.025
JAN	23...	<.04	<.10	<.10	--	.21	<.008	--	--	E.003
	25...	<.04	.18	.29	--	.44	<.008	.55	--	.010
FEB	01...	E.02	.20	.49	--	.44	<.008	.73	--	.013
	22...	.09	<.10	E.06	.11	--	<.008	--	--	.004
MAR	20...	<.04	.14	.98	--	.28	<.008	1.1	.055	.023
APR	08...	<.04	.21	1.2	--	.32	<.008	1.3	.071	.029
	23...	<.04	E.07	E.05	--	--	<.008	--	--	<.004
JUN	12...	E.03	E.10	.12	--	--	<.008	.23	--	.007
	19...	<.04	E.08	E.07	--	--	<.008	--	--	E.003
JUL	10...	<.04	E.09	.12	--	--	E.04	<.008	--	E.003
AUG	13...	<.04	E.10	E.09	--	--	E.03	<.008	--	.005
SEP	11...	<.04	E.07	.12	--	--	<.05	<.008	--	E.004



WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	CARBON ORGANIC DIS-SOLVED (MG/L AS C) (00681)	E COLI, MTEC MF (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, DISCHARGE, SUS-PENDEDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUS-PENDEDED (T/DAY) (80155)
OCT 17...	<.02	.007	4.3	1.8	28	51	29	97	24	25.1
NOV 13...	<.02	E.003	3.5	.9	E2	E1	E3	89	24	5.0
DEC 06...	<.02	.012	7.1	1.2	E17	26	53	100	23	39.7
DEC 17...	E.01	.23	.8	4.8	1300	5800	1200	82	231	21800
JAN 23...	<.02	.004	6.2	.7	E3	E1	E3	99	25	18.1
JAN 25...	<.02	.058	1.3	3.5	190	E230	1000	90	54	554
FEB 01...	<.02	.128	11	3.4	290	780	880	81	136	5840
FEB 22...	<.02	.010	3.7	.9	E15	E15	E14	95	19	70.8
MAR 20...	.02	.33	.3	3.3	780	1300	1300	61	430	59800
APR 08...	.02	.40	1.5	4.2	2000	100	2200	68	478	57000
APR 23...	<.02	.008	.9	1.0	7	13	21	77	25	91.8
JUN 12...	E.02	.015	2.6	1.8	40	60	E17	80	10	32.1
JUN 19...	<.02	.009	1.5	1.2	E19	E9	30	93	20	22.0
JUL 10...	<.02	.014	2.9	1.3	E13	E10	32	69	5.0	1.9
AUG 13...	<.02	.017	2.7	1.0	<6	29	<12	78	3.0	.57
SEP 11...	<.02	.011	4.1	1.1	5	7	27	52	3.0	.29

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## WHITE RIVER BASIN

## 07056515 BEAR CREEK NEAR SILVER HILL

**LOCATION.**--Lat 35°56'23", long 92°42'48", in SW<sub>1</sub>/4SW<sub>1</sub>/4 sec.17, T.15 N., R.16 W., Searcy County, Hydrologic Unit 11010005, on left bank 40 ft upstream of U.S. Highway 65, 1.5 mi upstream from Holder Creek, and 2.7 mi southeast of Silver Hill.

**DRAINAGE AREA.**--77.9 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--January 1999 to current year.

**GAGE.**--Water-stage recorder. Datum of gage is 638.7 ft above NGVD of 1929. Prior to Oct. 3, 2001, water-stage recorder, 1.5 mi downstream at datum 20 ft lower. Prior to Aug. 8, 2002, water-stage recorder 150 ft downstream at same datum.

**REMARKS.**--Water-discharge records fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	7.7	20	50	1340	84	226	71	52	12	11	8.2
2	6.2	7.3	11	46	772	555	175	64	46	11	11	7.9
3	e6.2	7.4	8.6	44	543	411	137	59	42	11	11	7.8
4	e6.3	7.9	7.7	43	380	282	120	55	38	11	11	7.4
5	e6.4	8.0	8.0	43	306	201	107	52	36	11	11	7.3
6	e6.5	8.5	13	49	292	148	97	48	48	11	11	6.9
7	e6.6	8.1	15	56	295	152	260	45	41	11	11	6.7
8	e6.7	8.0	114	53	303	164	2710	44	35	10	e11	6.4
9	e6.7	e8.1	44	51	308	2510	794	403	32	10	e10	6.4
10	e6.8	e8.1	30	50	239	676	560	144	70	10	e10	6.2
11	e6.9	e8.2	22	48	186	518	430	133	79	10	e10	6.0
12	e7.0	e8.2	33	45	162	520	325	107	60	11	e10	5.8
13	e7.1	e8.2	69	45	134	352	314	453	54	12	e10	5.5
14	e7.2	e8.2	61	44	121	221	269	217	46	12	e10	5.3
15	6.9	e8.2	47	42	109	148	179	129	38	11	e30	5.3
16	7.3	e8.2	2910	41	101	126	228	105	31	11	e36	5.0
17	6.2	e8.3	2970	40	88	104	596	288	26	11	e20	4.9
18	6.6	e8.3	775	40	81	254	353	215	22	303	e15	4.9
19	6.8	e8.3	426	45	220	4130	238	117	21	153	e12	5.0
20	6.3	e8.2	278	50	435	2740	180	95	20	67	e12	5.0
21	6.3	8.3	209	47	233	832	148	83	18	50	e11	4.7
22	6.9	9.1	171	46	164	554	131	73	16	38	11	4.7
23	6.7	8.7	138	940	136	412	220	64	15	29	11	4.8
24	6.9	8.9	116	1840	122	308	166	58	14	24	9.9	4.6
25	6.9	11	100	609	103	2290	118	54	13	22	9.7	4.6
26	6.9	12	89	404	91	1300	103	51	13	20	9.2	4.3
27	6.5	11	80	306	78	662	112	48	12	17	8.9	4.3
28	6.9	27	74	253	69	490	103	150	13	15	8.7	4.1
29	7.1	43	67	217	---	363	88	102	13	14	8.7	4.1
30	7.6	67	60	196	---	288	78	72	13	13	8.5	4.1
31	8.0	---	54	4200	---	311	---	61	---	12	8.3	---
TOTAL	209.6	367.4	9020.3	9983	7411	22106	9565	3660	977	963	377.9	168.2
MEAN	6.761	12.25	291.0	322.0	264.7	713.1	318.8	118.1	32.57	31.06	12.19	5.607
MAX	8.0	67	2970	4200	1340	4130	2710	453	79	303	36	8.2
MIN	6.2	7.3	7.7	40	69	84	78	44	12	10	8.3	4.1
AC-FT	416	729	17890	19800	14700	43850	18970	7260	1940	1910	750	334
CFSM	0.08	0.15	3.50	3.88	3.19	8.58	3.84	1.42	0.39	0.37	0.15	0.07
IN.	0.09	0.16	4.04	4.47	3.32	9.90	4.28	1.64	0.44	0.43	0.17	0.08

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

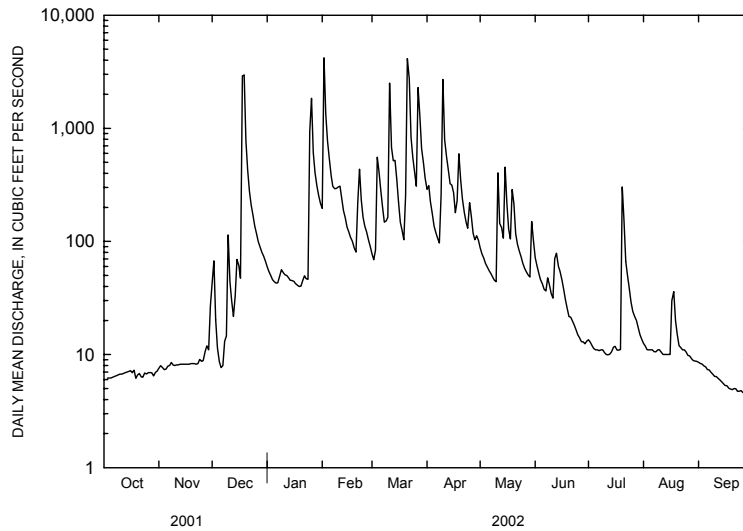
MEAN	6.187	34.97	128.3	143.5	234.7	247.3	146.9	107.9	64.58	26.14	9.222	5.968
MAX	8.28	87.8	291	322	516	689	316	257	170	35.2	12.2	8.50
(WY)	2001	2001	2002	2002	2001	2002	2002	2000	2000	1999	2002	2001
MIN	3.52	4.98	18.2	22.9	77.9	62.2	46.1	21.4	14.3	17.3	5.94	3.50
(WY)	2000	2000	2001	2000	2000	2000	2000	2001	2001	2000	1999	1999

WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	33299.3		64808.4			
ANNUAL MEAN	91.23		177.6		104.1	
HIGHEST ANNUAL MEAN					175 2002	
LOWEST ANNUAL MEAN					62.7 2000	
HIGHEST DAILY MEAN	3850	Feb 16	4200	Jan 31	4200	Jan 31 2002
LOWEST DAILY MEAN	4.9	Sep 2	4.1	Sep 28	2.7	Oct 3 1999
ANNUAL SEVEN-DAY MINIMUM	5.1	Sep 1	4.3	Sep 24	2.8	Oct 1 1999
MAXIMUM PEAK FLOW			13600	Jan 31	13600	Jan 31 2002
MAXIMUM PEAK STAGE			14.07	Jan 31	14.07	Jan 31 2002
INSTANTANEOUS LOW FLOW			4.0	Sep 27-30	2.3	Oct 4 1999
ANNUAL RUNOFF (AC-FT)	66050		128500		75400	
ANNUAL RUNOFF (CFSM)	1.10		2.14		1.25	
ANNUAL RUNOFF (INCHES)	14.91		29.01		17.02	
10 PERCENT EXCEEDS	137		370		192	
50 PERCENT EXCEEDS	17		42		21	
90 PERCENT EXCEEDS	6.9		6.7		5.5	

<sup>e</sup>Estimated



WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)
OCT												
17..	0945	80020	80513	--	7.0	774	6.5	62	7.5	301	13.9	125
NOV												
13..	1405	80020	80513	--	10	763	7.8	80	7.3	337	17.0	147
DEC												
06..	1100	80020	80513	--	61	764	8.8	87	7.7	221	15.1	79
16..	2230	80020	80513	--	--	740	10.5	97	8.2	63	10.6	28
JAN												
23..	1000	80020	80513	--	76	747	11.2	103	7.1	234	10.7	96
24..	1900	80020	80513	--	917	765	10.6	88	7.7	113	7.7	44
31..	1350	80020	80513	--	--	744	11.5	107	7.3	69	11.2	43
FEB												
21..	0945	80020	80513	--	164	764	11.0	96	7.3	166	9.6	67
MAR												
19..	1500	80020	80513	--	4430	757	9.1	83	7.2	84	11.2	35
APR												
08..	1320	80020	80513	--	1530	759	11.8	110	7.5	99	12.0	40
24..	0915	80020	80513	--	227	763	8.7	90	7.9	179	16.7	81
JUN												
11..	1500	80020	80513	--	97	754	8.9	104	6.9	187	22.4	77
19..	0935	80020	80513	--	11	750	7.2	82	7.3	262	21.2	125
JUL												
09..	1100	80020	80513	--	10	770	6.5	82	7.2	311	27.8	139
AUG												
13..	1315	80020	80513	10	--	765	5.0	53	7.2	328	18.5	144
SEP												
11..	1330	80020	80513	--	6.0	763	8.6	91	7.2	350	18.5	154
Date		SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846) (00602)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
OCT												
17..	172	<.04	E.08	.13	--	--	.87	<.008	--	--	1.0	.098
NOV												
13..	196	<.04	E.07	E.06	--	--	.79	<.008	--	--	--	.074
DEC												
06..	120	<.04	E.07	E.09	--	--	.69	<.008	--	--	--	.083
16..	48	<.04	.32	2.7	--	.63	.31	<.008	--	--	3.0	.319
JAN												
23..	132	E.02	<.10	E.07	--	--	.51	<.008	--	--	--	.074
24..	66	<.04	.18	.33	--	.63	.45	<.008	--	--	.77	.064
31..	--	.04	.37	6.1	.05	.60	.22	E.004	.33	6.1	6.3	.343
FEB												
21..	86	<.04	<.10	.13	--	--	.40	<.008	--	--	.52	.055
MAR												
19..	61	<.04	.24	.78	--	.48	.24	<.008	--	--	1.0	.178
APR												
08..	56	E.03	.19	.33	--	.43	.23	<.008	--	--	.56	.104
24..	87	<.04	.11	.13	--	.36	.25	<.008	--	--	.38	--
JUN												
11..	103	E.02	.12	.18	--	.45	.34	E.004	--	--	.51	.061
19..	147	<.04	E.06	<.10	--	--	.55	<.008	--	--	--	.061
JUL												
09..	178	<.04	<.10	<.10	--	--	.81	<.008	--	--	--	.086
AUG												
13..	190	<.04	E.07	E.07	--	--	.90	<.008	--	--	--	.092
SEP												
11..	189	<.04	E.06	E.06	--	--	1.00	<.008	--	--	--	.092

WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF WATER (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)
OCT											
17...	.044	.03	.047	7.6	1.6	E81	51	680	100	27	.51
NOV											
13...	.038	.02	.040	14	.7	50	E12	E22	76	81	2.2
DEC											
06...	.033	.03	.043	3.0	1.3	160	E270	290	99	26	4.3
16...	.126	.10	.98	.3	7.1	6800	E11100	7900	74	818	--
JAN											
23...	.024	.02	.026	16	.8	E12	39	E13	98	29	5.9
24...	.031	.02	.081	1.7	3.1	580	470	2300	93	43	106
31...	.139	.11	2.98	4.4	7.1	26000	36000	E8000	68	3010	--
FEB											
21...	.022	.02	.041	6.3	1.4	250	125	77	95	24	10.6
MAR											
19...	.070	.06	.32	4.5	4.3	1900	3900	1600	70	266	3180
APR											
08...	.043	.03	.13	2.2	2.9	960	490	1300	79	69	285
24...	.019	E.01	.035	2.1	1.7	360	380	680	94	27	16.5
JUN											
11...	.024	.02	.046	20	1.6	8	260	170	94	9.0	2.4
19...	.029	.02	.038	13	.8	E17	E19	31	91	14	.42
JUL											
09...	.031	.03	.038	15	.6	50	36	55	55	11	.30
AUG											
13...	.036	.03	.041	18	.7	68	E18	E130	17	29	.78
SEP											
11...	.036	.03	.041	18	.5	14	20	57	40	10	.16

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## WHITE RIVER BASIN

## 07056545 HUGHES SPRING NEAR ZACK

LOCATION.--Lat 35°58'33", long 92°40'36", in SW1/4NW1/4 sec.3, T.15 N., R.16 W., Searcy County, Hydrologic Unit 11010005, 0.1 mi upstream from Brush Creek, 1.4 mi northwest of Zack and 5.2 mi northwest of Marshall.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.80	1.90	---	6.40	9.60	8.70	2.80	2.00	1.00	0.80	0.70
2	---	1.60	1.50	---	4.50	9.60	7.30	2.70	2.10	1.00	0.70	0.80
3	---	1.30	1.30	---	3.70	9.60	6.40	2.70	2.00	1.30	0.60	0.80
4	---	1.20	1.30	---	3.30	9.60	5.50	2.70	1.90	1.00	0.60	0.70
5	---	0.60	1.30	---	3.00	9.60	5.50	3.10	1.70	1.40	0.50	0.70
6	---	0.60	1.20	---	3.00	9.40	5.20	3.10	1.70	1.30	0.90	0.80
7	0.50	0.80	1.10	---	2.80	9.40	5.20	3.30	1.60	1.00	1.10	0.50
8	0.60	0.80	1.10	---	2.70	9.20	4.70	3.10	1.60	1.00	1.10	0.60
9	0.70	0.80	1.00	---	3.00	8.80	4.60	2.80	1.60	1.00	1.10	2.50
10	0.50	2.60	1.00	---	3.90	8.10	4.40	2.50	1.40	0.90	1.50	1.60
11	0.50	7.10	0.90	---	3.60	7.70	4.50	2.30	1.30	1.00	1.60	1.10
12	1.20	5.80	0.90	---	2.70	7.60	4.70	2.80	1.30	0.90	1.20	1.00
13	1.20	3.60	0.90	---	6.00	7.00	4.50	2.60	1.30	1.10	1.60	0.80
14	1.20	2.10	1.00	---	11.3	6.40	4.40	2.50	1.30	1.00	1.40	0.70
15	1.30	1.70	0.60	---	13.5	6.80	4.40	2.30	2.60	1.00	1.20	0.60
16	1.00	2.60	2.00	---	14.0	7.10	4.50	2.20	2.20	0.90	1.20	0.60
17	1.00	2.30	1.50	---	11.2	6.40	3.80	2.10	1.80	0.80	1.20	0.60
18	1.00	2.10	2.10	---	10.7	5.90	3.70	2.10	1.60	0.80	1.20	1.00
19	0.50	0.70	1.30	3.40	10.4	5.80	3.70	1.90	1.50	1.10	1.20	3.90
20	1.30	0.70	1.30	3.60	10.1	5.60	3.70	1.90	1.40	3.20	0.90	2.30
21	1.30	1.00	1.30	3.50	10.1	5.50	3.60	2.80	1.50	2.20	0.90	1.50
22	1.30	1.00	0.60	3.20	10.0	5.30	3.60	2.70	1.40	1.50	1.00	1.20
23	1.30	1.00	0.70	3.00	9.90	5.00	3.50	2.50	1.30	1.10	0.80	1.30
24	1.30	2.30	0.70	3.00	10.7	4.90	3.70	1.90	1.10	1.00	0.80	1.60
25	1.00	8.20	0.60	2.80	10.4	4.60	3.40	1.90	1.10	1.10	0.80	1.20
26	1.00	7.60	0.60	2.70	10.0	4.50	3.20	1.70	1.10	0.80	0.80	1.10
27	1.00	4.30	0.60	2.60	9.90	4.40	3.10	1.80	1.00	1.40	0.60	1.00
28	1.00	2.90	---	2.50	9.60	4.20	3.10	1.70	1.00	3.70	0.60	0.80
29	1.20	2.40	---	5.20	---	4.80	3.00	1.70	1.00	2.20	0.60	0.80
30	2.50	2.10	---	10.8	---	7.90	2.80	2.10	1.00	1.50	0.70	0.70
31	2.30	---	---	9.50	---	9.40	---	2.50	---	1.30	0.60	---
TOTAL	---	73.60	---	---	210.40	219.70	132.40	74.80	45.40	40.50	29.80	33.50
MEAN	---	2.453	---	---	7.514	7.087	4.413	2.413	1.513	1.306	0.961	1.117
MAX	---	8.20	---	---	14.0	9.60	8.70	3.30	2.60	3.70	1.60	3.90
MIN	---	0.600	---	---	2.70	4.20	2.80	1.70	1.00	0.800	0.500	0.500
AC-FT	---	146	---	---	417	436	263	148	90	80	59	66







WHITE RIVER BASIN

07058980 BENNETTS RIVER AT VIDETTE--CONTINUED

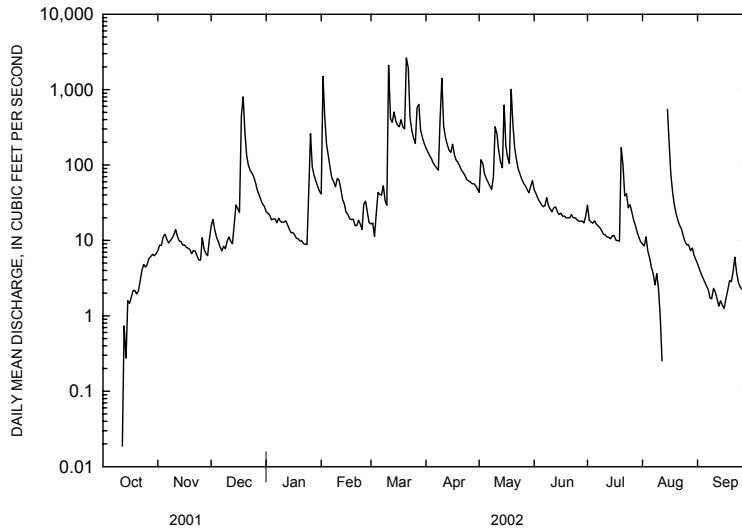
SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL TOTAL	32883.64	
ANNUAL MEAN	90.1	
HIGHEST DAILY MEAN	2620	Mar 19
LOWEST DAILY MEAN	0.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1
MAXIMUM PEAK FLOW	4950	Mar 9
MAXIMUM PEAK STAGE	10.90	Mar 9
INSTANTANEOUS LOW FLOW	<sup>1</sup> 0.00	at times
ANNUAL RUNOFF (AC-FT)	65220	
ANNUAL RUNOFF (CFSM)	1.32	
ANNUAL RUNOFF (INCHES)	17.94	
10 PERCENT EXCEEDS	198	
50 PERCENT EXCEEDS	19	
90 PERCENT EXCEEDS	2.3	

<sup>1</sup>Also period of record

<sup>e</sup>Estimated





WHITE RIVER BASIN

07059450 BIG CREEK NEAR ELIZABETH--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 2002 - 2002

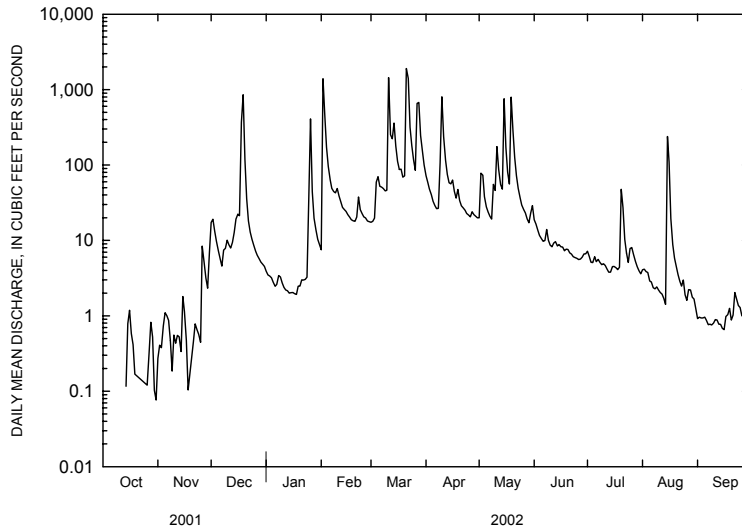
ANNUAL TOTAL	20873.92		
ANNUAL MEAN	57.19		57.19
HIGHEST ANNUAL MEAN			57.2 2002
LOWEST ANNUAL MEAN			57.2 2002
HIGHEST DAILY MEAN	1910	Mar 19	1910 Mar 19 2002
LOWEST DAILY MEAN	0.00	Oct 1	0.00 Aug 26 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00 Aug 26 2001
MAXIMUM PEAK FLOW	3470	Jan 31	1
MAXIMUM PEAK STAGE	14.92	Jan 31	<sup>2</sup> 15.15 Nov 5 1994
INSTANTANEOUS LOW FLOW	0.00	at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	41400		43260
10 PERCENT EXCEEDS	91		95
50 PERCENT EXCEEDS	6.8		7.6
90 PERCENT EXCEEDS	0.47		0.31

e Estimated

<sup>1</sup>Not determined

<sup>2</sup>Occurred during period of annual maximum only, water years 1995-2001

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07059500 NORFORK LAKE NEAR NORFORK

LOCATION.--Lat 36°14'57", long 92°14'16", in SE1/4 sec.2, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, at dam on North Fork River, 4.3 mi northeast of Norfork.

DRAINAGE AREA.--1,808 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1968-69, 1971-72, December 1973 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, (PER- DIS- SOLVED CENT (MG/L) (00300)	OXYGEN, (PER- DIS- SOLVED CENT (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
03...	0835	80513	154	.20	5.60	767	8.6	100	8.4	311	22.9
03...	0836	80513	154	9.90	--	767	8.6	100	8.3	303	23.1
03...	0837	80513	154	20.1	--	767	8.4	97	8.3	305	23.1
03...	0838	80513	154	30.2	--	767	8.3	97	8.3	303	23.2
03...	0839	80513	154	40.0	--	767	8.3	97	8.3	307	23.1
03...	0841	80513	154	46.0	--	767	8.2	95	8.2	311	23.0
03...	0842	80513	154	47.1	--	767	6.6	74	8.0	368	21.5
03...	0843	80513	154	48.1	--	767	6.4	71	7.8	393	20.7
03...	0844	80513	154	49.1	--	767	6.3	70	7.8	399	20.4
03...	0845	80513	154	50.2	--	767	6.2	67	7.7	396	20.0
03...	0848	80513	154	52.0	--	767	5.9	63	7.6	300	19.1
03...	0849	80513	154	54.0	--	767	5.8	61	7.6	300	18.1
03...	0850	80513	154	55.9	--	767	5.7	59	7.6	299	17.4
03...	0851	80513	154	57.9	--	767	5.5	56	7.6	303	16.3
03...	0852	80513	154	59.9	--	767	5.6	55	7.5	302	15.4
03...	0854	80513	154	62.0	--	767	5.6	54	7.5	302	14.4
03...	0855	80513	154	65.0	--	767	4.9	46	7.5	301	13.3
03...	0856	80513	154	69.9	--	767	4.4	41	7.5	300	12.4
03...	0857	80513	154	75.0	--	767	3.9	35	7.4	302	11.2
03...	0858	80513	154	80.1	--	767	3.3	30	7.4	304	10.8
03...	0859	80513	154	90.0	--	767	2.4	21	7.3	307	9.6
03...	0900	80513	154	100	--	767	1.5	13	7.3	311	9.2
03...	0902	80513	154	110	--	767	1.0	8	7.2	312	8.9
03...	0903	80513	154	120	--	767	.9	8	7.2	310	8.7
03...	0904	80513	154	130	--	767	.5	4	7.2	310	8.6
03...	0905	80513	154	140	--	767	.2	2	7.2	310	8.4
03...	0906	80513	154	150	--	767	.1	0	7.2	309	8.3
03...	0908	80513	154	154	--	767	.1	0	7.2	312	8.2
NOV											
07...	0936	80513	154	.60	5.00	772	9.1	--	8.0	--	17.4
07...	0937	80513	154	10.1	--	772	9.0	--	8.0	--	17.5
07...	0938	80513	154	20.0	--	772	9.0	--	8.0	--	17.4
07...	0939	80513	154	30.0	--	772	8.8	--	8.0	--	17.5
07...	0940	80513	154	40.0	--	772	8.7	--	8.0	--	17.5
07...	0941	80513	154	50.0	--	772	8.7	--	8.0	--	17.5
07...	0943	80513	154	60.0	--	772	6.0	--	7.7	--	17.2
07...	0945	80513	154	62.9	--	772	2.7	--	7.4	--	16.3
07...	0946	80513	154	65.0	--	772	1.1	--	7.2	--	15.7
07...	0948	80513	154	68.0	--	772	1.1	--	7.2	--	14.5
07...	0949	80513	154	70.1	--	772	1.9	--	7.2	--	13.6
07...	0950	80513	154	73.0	--	772	1.7	--	7.2	--	12.7
07...	0951	80513	154	77.1	--	772	1.5	--	7.2	--	11.8
07...	0952	80513	154	80.0	--	772	1.2	--	7.2	--	11.3
07...	0953	80513	154	86.0	--	772	.4	--	7.1	--	10.5
07...	0954	80513	154	100	--	772	.1	--	7.1	--	9.7
07...	0955	80513	154	110	--	772	.1	--	7.1	--	9.3
07...	0956	80513	154	120	--	772	.1	--	7.1	--	9.1
07...	0957	80513	154	130	--	772	.1	--	7.1	--	8.9
07...	0959	80513	154	140	--	772	.1	--	7.1	--	8.8
07...	1000	80513	154	154	--	772	.1	--	7.0	--	8.6
DEC											
18...	1537	80513	152	.30	5.50	760	8.9	--	7.4	--	13.0
18...	1539	80513	152	10.0	--	760	8.8	--	7.5	--	12.8
18...	1540	80513	152	20.3	--	760	8.6	--	7.6	--	12.7
18...	1541	80513	152	30.1	--	760	8.5	--	7.5	--	12.7
18...	1542	80513	152	40.0	--	760	8.4	--	7.6	--	12.7
18...	1543	80513	152	50.2	--	760	8.3	--	7.5	--	12.7
18...	1544	80513	152	60.2	--	760	8.4	--	7.6	--	12.6
18...	1545	80513	152	70.1	--	760	8.3	--	7.6	--	12.6
18...	1546	80513	152	80.2	--	760	8.2	--	7.5	--	12.6
18...	1547	80513	152	85.1	--	760	1.1	--	7.2	--	12.0
18...	1548	80513	152	90.3	--	760	.2	--	7.0	--	11.6
18...	1549	80513	152	100	--	760	.2	--	7.0	--	10.8
18...	1550	80513	152	110	--	760	.2	--	6.9	--	10.1
18...	1551	80513	152	120	--	760	.1	--	6.9	--	9.7
18...	1552	80513	152	130	--	760	.1	--	6.9	--	9.2
18...	1553	80513	152	140	--	760	.1	--	6.9	--	9.1
18...	1554	80513	152	150	--	760	.1	--	6.9	--	9.0
18...	1555	80513	152	152	--	760	.2	--	6.9	--	9.0
JAN											
23...	0947	80513	155	1.00	4.50	760	8.4	71	7.9	321	7.9
23...	0948	80513	155	10.0	--	760	8.3	70	7.9	321	7.8
23...	0949	80513	155	20.0	--	760	8.2	69	7.8	321	7.8
23...	0950	80513	155	30.0	--	760	8.1	68	7.8	321	7.8
23...	0951	80513	155	40.0	--	760	8.0	67	6.5	322	7.8
23...	0952	80513	155	50.0	--	760	8.0	67	7.4	322	7.8
23...	0953	80513	155	60.0	--	760	7.8	66	7.9	322	7.8
23...	0954	80513	155	70.0	--	760	8.0	67	7.9	322	7.7
23...	0955	80513	155	80.0	--	760	7.8	65	7.9	322	7.7
23...	0956	80513	155	90.0	--	760	7.7	65	7.9	326	7.7

WHITE RIVER BASIN

07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
JAN											
23...	0957	80513	155	100	--	760	7.7	65	7.9	326	7.7
23...	0958	80513	155	110	--	760	7.6	64	7.9	327	7.6
23...	0959	80513	150	120	--	760	7.5	63	7.9	327	7.6
23...	1000	80513	155	130	--	760	7.5	63	7.9	327	7.6
23...	1001	80513	155	140	--	760	7.5	63	7.9	327	7.5
23...	1002	80513	155	150	--	760	7.4	62	7.9	328	7.5
23...	1005	80513	155	155	--	760	7.0	59	7.8	328	7.5
MAR											
28...	1039	80513	167	.60	4.00	757	11.7	101	8.1	302	8.6
28...	1040	80513	167	10.0	--	757	11.7	100	8.1	303	8.4
28...	1041	80513	167	20.2	--	757	11.4	98	8.0	305	8.3
28...	1042	80513	167	30.0	--	757	11.4	98	6.6	306	8.3
28...	1043	80513	167	40.1	--	757	11.4	97	6.1	307	8.2
28...	1044	80513	167	50.0	--	757	11.3	97	8.1	308	8.2
28...	1045	80513	167	60.0	--	757	11.3	97	8.1	308	8.2
28...	1046	80513	167	70.0	--	757	11.3	96	8.1	307	8.2
28...	1047	80513	167	79.8	--	757	11.3	96	8.0	308	8.1
28...	1048	80513	167	90.0	--	757	11.2	95	8.0	310	7.9
28...	1049	80513	167	100	--	757	11.1	94	8.0	312	7.7
28...	1050	80513	167	110	--	757	10.9	92	8.0	312	7.6
28...	1051	80513	167	120	--	757	10.8	91	8.0	313	7.5
28...	1052	80513	167	130	--	757	10.7	90	8.0	314	7.4
28...	1053	80513	167	140	--	757	10.6	89	8.0	314	7.3
28...	1054	80513	167	150	--	757	10.6	88	8.0	315	7.3
28...	1055	80513	167	160	--	757	10.6	88	8.0	316	7.3
28...	1056	80513	167	167	--	757	10.4	87	7.9	317	7.2
JUN											
11...	0850	80513	178	2.00	3.70	760	9.0	108	8.4	282	24.1
11...	0851	80513	178	10.0	--	760	8.4	98	8.3	281	22.8
11...	0852	80513	178	11.0	--	760	8.0	92	8.1	281	22.0
11...	0853	80513	178	14.0	--	760	7.2	81	8.0	281	21.0
11...	0854	80513	178	17.0	--	760	5.7	63	7.9	276	20.0
11...	0855	80513	178	20.0	--	760	4.9	54	7.8	273	19.4
11...	0856	80513	178	30.0	--	760	4.0	43	7.8	274	18.4
11...	0857	80513	178	36.9	--	760	3.5	36	7.7	263	17.4
11...	0858	80513	178	40.1	--	760	3.4	35	7.7	258	16.8
11...	0859	80513	178	50.0	--	760	3.7	37	7.7	260	15.7
11...	0900	80513	178	55.0	--	760	4.1	41	7.7	280	14.7
11...	0901	80513	178	60.0	--	760	4.7	46	7.7	288	14.1
11...	0902	80513	178	63.0	--	760	5.3	51	7.7	292	13.3
11...	0903	80513	178	65.9	--	760	6.3	59	7.8	291	12.2
11...	0904	80513	178	70.0	--	760	6.6	61	7.8	290	11.6
11...	0905	80513	178	80.0	--	760	7.6	69	7.9	300	10.7
11...	0906	80513	178	90.0	--	760	8.0	71	7.9	303	10.1
11...	0907	80513	178	99.9	--	760	8.0	71	7.9	310	9.8
11...	0908	80513	178	110	--	760	7.7	68	7.9	308	9.5
11...	0909	80513	178	120	--	760	7.7	67	7.9	306	9.2
11...	0910	80513	178	130	--	760	7.3	63	7.8	316	9.0
11...	0911	80513	178	140	--	760	7.0	61	7.8	315	8.9
11...	0912	80513	178	150	--	760	7.0	60	7.8	312	8.8
11...	0913	80513	178	160	--	760	6.6	57	7.8	314	8.7
11...	0914	80513	178	170	--	760	5.8	50	7.8	316	8.6
11...	0915	80513	178	178	--	760	5.7	49	7.7	317	8.6
JUL											
15...	1427	80513	170	.70	3.40	766	7.7	103	8.4	276	30.6
15...	1428	80513	170	10.1	--	766	7.7	101	8.5	275	30.1
15...	1430	80513	170	15.2	--	766	7.6	100	8.5	275	29.8
15...	1431	80513	170	16.9	--	766	7.7	100	8.4	274	29.2
15...	1434	80513	170	18.2	--	766	8.1	102	8.3	271	27.7
15...	1435	80513	170	19.1	--	766	8.0	97	8.2	271	25.5
15...	1436	80513	170	20.2	--	766	7.4	88	8.0	271	24.5
15...	1437	80513	170	21.1	--	766	6.1	72	7.8	272	23.5
15...	1438	80513	170	22.0	--	766	5.1	59	7.7	271	22.9
15...	1439	80513	170	24.0	--	766	3.9	44	7.5	271	22.1
15...	1440	80513	170	26.1	--	766	1.2	13	7.3	271	21.0
15...	1441	80513	170	28.1	--	766	.4	5	7.2	270	20.2
15...	1442	80513	170	30.1	--	766	.3	3	7.2	269	19.5
15...	1443	80513	170	35.1	--	766	.2	2	7.2	264	18.7
15...	1444	80513	170	40.0	--	766	.2	2	7.2	262	17.9
15...	1445	80513	170	50.1	--	766	.4	4	7.2	256	16.6
15...	1446	80513	170	60.2	--	766	1.0	10	7.2	253	15.7
15...	1447	80513	170	69.9	--	766	1.8	18	7.2	262	14.7
15...	1448	80513	170	80.0	--	766	2.8	26	7.2	276	13.1
15...	1449	80513	170	85.0	--	766	4.4	41	7.3	285	12.4
15...	1450	80513	170	90.1	--	766	5.3	49	7.4	291	11.5
15...	1451	80513	170	98.3	--	766	5.9	53	7.4	290	10.7
15...	1452	80513	170	100	--	766	6.3	56	7.4	293	10.5
15...	1453	80513	170	110	--	766	6.3	56	7.4	299	9.9
15...	1454	80513	170	120	--	766	6.3	55	7.4	300	9.5
15...	1455	80513	170	130	--	766	5.7	49	7.4	305	9.2
15...	1456	80513	170	140	--	766	5.1	44	7.4	308	9.1
15...	1457	80513	170	150	--	766	4.5	38	7.3	311	8.9
15...	1458	80513	170	160	--	766	4.1	35	7.3	311	8.8
15...	1459	80513	170	170	--	766	3.1	26	7.2	315	8.7

## WHITE RIVER BASIN

## 07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD) UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
AUG											
13...	0713	80513	173	.70	2.70	761	6.6	85	8.2	288	28.1
13...	0714	80513	173	10.0	--	761	6.6	85	8.2	288	28.2
13...	0715	80513	173	18.0	--	761	6.5	83	8.1	287	27.9
13...	0716	80513	173	20.0	--	761	5.8	73	7.9	285	27.0
13...	0717	80513	173	23.0	--	761	4.9	61	7.8	287	26.4
13...	0718	80513	173	24.0	--	761	4.2	52	7.7	287	25.7
13...	0719	80513	173	26.0	--	761	3.4	40	7.5	286	24.7
13...	0720	80513	173	28.0	--	761	2.2	26	7.4	284	23.8
13...	0721	80513	173	30.0	--	761	1.9	22	7.3	285	23.5
13...	0722	80513	173	31.0	--	761	.9	11	7.3	283	22.9
13...	0723	80513	173	32.1	--	761	.2	3	7.2	278	20.9
13...	0724	80513	173	35.9	--	761	.2	2	7.2	275	19.9
13...	0725	80513	173	37.0	--	761	.2	2	7.1	274	19.0
13...	0726	80513	173	40.1	--	761	.2	2	7.1	268	17.8
13...	0727	80513	173	44.2	--	761	.2	2	7.1	265	17.1
13...	0728	80513	173	50.0	--	761	.2	2	7.1	257	16.6
13...	0729	80513	173	60.0	--	761	.2	2	7.1	258	16.1
13...	0730	80513	173	70.1	--	761	.2	2	7.0	258	15.6
13...	0731	80513	173	80.0	--	761	.7	7	7.1	263	14.8
13...	0733	80513	173	90.0	--	761	1.9	18	7.1	278	13.3
13...	0734	80513	173	100	--	761	3.9	36	7.2	294	11.4
13...	0735	80513	173	110	--	761	4.6	41	7.3	299	10.8
13...	0736	80513	173	120	--	761	4.1	37	7.2	305	10.2
13...	0737	80513	173	130	--	761	3.4	30	7.2	312	9.7
13...	0738	80513	173	140	--	761	2.3	20	7.2	314	9.4
13...	0739	80513	173	150	--	761	1.9	17	7.2	313	9.2
13...	0740	80513	173	160	--	761	.9	8	7.1	320	9.0
13...	0741	80513	173	170	--	761	.4	3	7.1	327	8.8
13...	0742	80513	173	173	--	761	.2	2	7.2	332	8.8
SEP											
09...	1353	80513	165	.70	2.60	770	7.0	91	8.3	280	29.6
09...	1354	80513	165	10.1	--	770	7.0	91	8.3	280	29.2
09...	1355	80513	165	20.0	--	770	6.8	87	8.3	280	29.0
09...	1356	80513	165	21.0	--	770	5.6	72	8.0	283	28.7
09...	1357	80513	165	23.0	--	770	4.3	55	7.7	285	27.5
09...	1358	80513	165	25.0	--	770	3.2	39	7.5	285	26.8
09...	1359	80513	165	29.0	--	770	.5	6	7.2	287	25.0
09...	1400	80513	165	30.0	--	770	.4	4	7.2	287	24.6
09...	1401	80513	165	34.0	--	770	.3	4	7.1	284	23.1
09...	1402	80513	165	36.1	--	770	.3	3	7.1	282	22.5
09...	1403	80513	165	40.1	--	770	.3	3	7.1	283	21.7
09...	1404	80513	165	44.0	--	770	.3	3	7.1	274	20.6
09...	1405	80513	165	50.0	--	770	.3	3	7.0	265	19.4
09...	1406	80513	165	55.0	--	770	.3	3	7.0	263	18.6
09...	1407	80513	165	60.0	--	770	.3	3	7.0	261	17.9
09...	1408	80513	165	70.1	--	770	.3	3	7.0	253	16.7
09...	1409	80513	165	80.0	--	770	.3	3	7.0	244	16.0
09...	1410	80513	165	90.0	--	770	.3	3	7.0	245	15.4
09...	1411	80513	165	100	--	770	.3	3	7.0	249	14.5
09...	1412	80513	165	110	--	770	.3	3	7.0	259	13.6
09...	1413	80513	165	120	--	770	.3	3	7.0	272	12.4
09...	1414	80513	165	130	--	770	.3	3	7.0	285	10.9
09...	1415	80513	165	140	--	770	.3	2	7.0	310	10.5
09...	1416	80513	165	150	--	770	.3	2	7.1	308	10.0
09...	1417	80513	165	160	--	770	.2	2	7.1	316	9.5
09...	1418	80513	165	165	--	770	.3	2	7.1	319	9.4

WHITE RIVER BASIN

07059998 NORTH FORK RIVER AT BASE OF NORFORK DAM NEAR NORFORK

LOCATION.--Lat 36°14'54", long 92°14'24", in NE1/4NW1/4 sec.11, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, 300 ft below Norfork Dam, 3.9 mi northeast of Norfork.

DRAINAGE AREA.--1,808 mi<sup>2</sup>.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Water years 1967-71, May 1991 to current year. Prior to October 1998, published as "07060000 North Fork River at Norfork Dam, near Norfork".

DISSOLVED OXYGEN: May 1991 to current year. Prior to October 1998, published as "07060000 North Fork River at Norfork Dam, near Norfork".

REMARKS.--Flow completely regulated by Norfork Reservoir. Dissolved oxygen and water temperature collected continuously June through December.

OXYGEN DISSOLVED, MG/L, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.6	3.2	6.1	8.4	1.9	4.4	9.0	1.1	3.3	---	---	---
2	9.3	2.8	6.1	7.5	1.5	4.0	8.5	1.1	3.3	10.7	9.4	9.9
3	8.6	2.5	5.5	8.7	1.3	4.0	9.0	1.7	5.0	11.2	10.7	10.9
4	8.5	2.4	5.2	7.0	2.1	4.0	9.9	1.7	4.2	11.0	10.3	10.6
5	8.6	2.0	4.4	8.8	1.6	3.9	9.6	1.5	4.1	10.5	10.2	10.4
6	9.0	2.4	6.2	7.7	1.9	5.0	8.4	1.9	3.8	10.8	10.3	10.5
7	8.7	2.6	5.9	8.1	2.1	5.5	8.8	1.0	3.5	13.0	10.4	11.3
8	9.2	2.9	6.4	8.7	1.7	5.5	8.3	0.8	2.8	12.3	11.0	11.5
9	9.1	2.3	6.0	9.3	1.4	4.4	8.8	0.8	3.0	12.0	10.9	11.3
10	9.4	2.0	5.7	8.6	1.6	4.0	7.8	1.2	4.0	11.8	11.0	11.3
11	9.4	2.5	5.5	8.6	1.6	4.1	7.3	0.9	3.4	12.0	11.2	11.4
12	9.1	4.4	6.7	8.6	2.0	4.2	7.1	0.3	1.9	12.4	11.4	11.7
13	9.3	2.5	5.4	7.9	1.5	4.0	9.5	0.4	5.0	12.4	11.4	11.9
14	8.7	3.2	5.9	8.2	1.4	3.7	8.6	3.5	5.5	12.5	11.6	11.9
15	9.3	2.5	5.6	7.8	1.9	3.9	9.1	3.2	4.9	12.8	11.7	12.2
16	9.0	2.2	5.4	8.6	1.6	4.8	10.3	3.0	4.7	12.5	11.7	12.1
17	8.5	1.5	4.6	8.7	2.3	4.4	8.2	3.0	5.4	12.0	11.8	11.9
18	8.7	1.9	5.1	8.0	2.2	4.2	6.5	3.2	4.3	12.9	11.8	12.2
19	8.9	2.4	6.3	9.3	1.9	4.2	9.8	3.8	5.3	12.3	11.9	12.0
20	8.7	2.5	5.8	8.9	1.8	4.7	10.5	4.0	6.5	12.3	11.8	12.0
21	10.4	2.3	6.4	8.4	1.5	4.0	10.5	3.9	6.2	12.6	11.8	12.0
22	9.4	2.8	5.8	8.7	1.4	4.1	4.5	3.7	3.9	13.0	11.8	12.1
23	8.0	1.4	4.3	8.5	1.1	3.1	4.7	3.6	4.1	---	---	---
24	8.0	1.7	4.2	8.1	1.5	3.7	6.5	3.8	4.8	---	---	---
25	8.3	1.8	4.5	8.0	1.3	3.6	7.1	6.3	6.7	---	---	---
26	9.0	2.1	4.9	8.7	1.0	3.3	7.4	5.6	6.7	---	---	---
27	9.0	2.1	5.0	8.4	1.5	3.8	7.0	5.1	6.1	---	---	---
28	8.2	1.5	4.5	9.6	1.9	4.0	7.1	5.8	6.2	---	---	---
29	8.8	1.5	4.1	9.6	1.6	4.1	9.7	6.1	8.4	---	---	---
30	8.1	1.6	4.3	8.9	1.2	3.4	8.9	7.5	8.2	---	---	---
31	8.8	2.2	4.7	---	---	---	---	---	---	---	---	---
MONTH	10.4	1.4	5.4	9.6	1.0	4.1	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.3	8.9	9.6	9.4	6.8	7.3	8.0	4.7	5.7	6.2	4.0	4.5
2	10.2	8.9	9.6	9.0	6.9	7.6	9.8	5.2	6.1	7.6	4.0	4.5
3	10.8	8.8	9.4	10.0	7.1	7.8	8.5	5.2	6.0	7.6	3.9	4.4
4	11.8	8.7	9.5	8.9	6.7	7.6	8.3	5.0	5.8	7.9	3.9	4.6
5	9.3	8.6	8.8	8.9	6.8	7.7	7.7	4.9	5.8	7.9	3.8	4.5
6	10.9	8.5	8.7	8.9	6.6	7.5	9.7	5.0	6.0	7.6	3.8	4.4
7	8.7	8.6	8.6	---	---	---	9.9	5.1	7.5	7.2	3.9	4.3
8	11.0	8.3	8.9	8.9	6.7	7.5	9.8	5.0	6.7	4.3	4.1	4.2
9	8.4	8.0	8.2	8.8	6.6	7.7	7.0	4.7	5.6	4.4	4.1	4.3
10	8.2	8.0	8.1	8.5	6.4	7.3	8.7	4.6	5.3	4.5	4.1	4.4
11	8.4	8.0	8.2	8.6	6.1	6.6	8.9	4.5	5.4	5.3	4.3	4.5
12	8.3	8.2	8.3	8.1	6.3	6.8	7.7	4.4	5.0	5.8	4.3	4.4
13	8.4	8.0	8.2	8.8	6.0	6.8	8.5	4.4	5.4	5.9	4.3	4.6
14	10.1	8.0	8.4	8.4	6.3	7.0	6.6	4.6	5.4	5.8	4.3	4.6
15	10.1	7.4	8.5	7.3	6.1	6.5	5.9	4.6	4.9	5.4	4.3	4.7
16	10.4	7.3	8.4	9.4	5.8	7.0	4.8	4.5	4.6	5.4	4.2	4.5
17	10.9	7.3	8.5	8.3	5.8	6.5	4.7	4.4	4.5	5.8	4.2	4.9
18	9.6	7.2	8.2	8.2	5.6	6.5	4.6	4.3	4.4	5.8	4.3	4.7
19	11.7	7.4	8.2	8.3	5.7	6.8	4.6	3.8	4.2	6.1	1.0	4.3
20	8.2	7.9	8.0	10.5	5.7	7.8	---	---	---	7.4	0.5	3.2
21	8.0	7.7	7.9	10.4	5.8	6.9	---	---	---	7.3	4.2	4.5
22	7.9	7.7	7.8	10.8	5.3	6.5	---	---	---	5.2	4.4	4.6
23	7.8	7.6	7.7	9.3	5.2	6.0	---	---	---	4.9	4.0	4.7
24	7.8	7.6	7.7	7.9	5.2	5.8	---	---	---	5.6	4.0	4.8
25	7.8	7.3	7.6	8.1	5.1	6.1	---	---	---	5.6	3.9	4.7
26	8.9	7.3	8.0	9.2	5.6	6.7	---	---	---	4.6	3.9	4.5
27	9.0	7.3	7.9	8.0	5.4	6.2	---	---	---	6.2	3.8	4.5
28	9.0	7.2	7.6	7.7	5.0	5.8	---	---	---	6.2	0.3	1.8
29	8.7	7.2	7.7	10.0	5.2	6.3	6.6	4.2	4.7	6.2	0.3	1.8
30	8.7	7.0	7.5	9.3	5.2	6.0	6.3	4.2	4.6	6.3	0.8	3.8
31	---	---	---	9.3	5.2	5.9	6.6	4.0	4.5	---	---	---
MONTH	11.8	7.0	8.3	---	---	---	---	---	---	7.9	0.3	4.3

## WHITE RIVER BASIN

## 07059998 NORTH FORK RIVER AT BASE OF NORFORK DAM NEAR NORFORK--CONTINUED

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.1	8.8	9.5	10.4	9.3	9.6	10.6	9.3	9.7	---	---	---
2	10.5	8.9	9.4	11.1	9.3	9.7	10.8	9.4	9.8	9.6	9.2	9.4
3	10.2	8.8	9.4	10.9	9.2	9.8	11.0	9.6	10.2	9.5	8.9	9.2
4	10.5	9.0	9.5	11.1	9.4	10.0	11.0	9.8	10.1	9.4	8.9	9.1
5	10.5	8.8	9.2	10.6	9.2	9.7	10.7	9.6	10	9.0	8.9	9.0
6	10.2	8.7	9.5	11.4	9.2	10.3	11.0	9.6	10.1	9.1	8.8	9.0
7	9.8	8.7	9.3	11.2	9.2	10.3	11.2	9.7	10.2	9.1	8.6	8.8
8	10.2	8.8	9.4	11.5	9.3	10.3	11.2	9.4	10	9.4	8.6	8.8
9	10.3	9.0	9.6	10.9	9.4	9.9	11.1	9.4	10	9.3	8.6	8.8
10	10.5	9.1	9.7	10.8	9.4	9.7	11.0	9.4	10.2	8.9	8.6	8.7
11	11.5	9.2	9.9	10.6	9.3	9.7	10.8	9.2	10.0	9.3	8.3	8.7
12	10.9	9.4	9.9	11.2	9.2	9.9	10.7	9.6	9.9	8.6	8.2	8.3
13	10.4	9.0	9.5	10.9	9.3	9.9	10.9	9.7	10.1	8.3	7.9	8.2
14	10.8	9.0	9.6	10.9	9.4	9.9	10.9	9.8	10.2	8.5	7.9	8.1
15	11.3	8.9	9.6	11.3	9.4	10.0	10.9	9.7	10.0	8.6	7.8	8.2
16	10.1	9.0	9.5	11.1	9.4	10.1	10.8	9.7	10	8.3	7.8	8.0
17	10.2	8.8	9.5	11.0	9.5	10	10.9	9.7	10.2	8.1	7.8	7.9
18	10.1	8.9	9.4	10.8	9.3	9.9	10.8	9.6	10.1	8.3	7.7	7.9
19	10.4	9.0	9.7	10.9	9.2	9.8	11.0	9.6	10.2	7.8	7.7	7.7
20	11.2	9.4	10.2	11.1	9.3	9.9	10.9	9.5	10.2	7.9	7.5	7.7
21	10.4	9.3	9.7	11.0	9.1	9.6	10.8	9.5	10.1	8.4	7.5	7.7
22	10.8	9.1	9.9	10.7	9.1	9.6	9.9	9.6	9.7	8.0	7.5	7.7
23	10.3	9.1	9.6	10.7	9.3	9.6	10.1	9.4	9.8	---	---	---
24	10.2	9.0	9.6	10.8	9.3	9.7	10.5	9.5	10.0	---	---	---
25	10.7	9.0	9.7	11.0	9.4	9.9	10.5	9.9	10.2	---	---	---
26	10.6	9.0	9.7	11.0	9.5	9.8	10.3	9.6	10	---	---	---
27	10.7	9.0	9.7	11.5	9.2	9.9	10.2	9.4	9.8	---	---	---
28	10.8	8.8	9.6	11.9	9.2	10	10.2	9.5	9.8	---	---	---
29	10.4	9.0	9.5	11.5	9.2	10	10.4	9.8	10.0	---	---	---
30	10.8	9.3	9.8	10.8	9.3	9.6	10.0	9.6	9.8	---	---	---
31	10.9	9.3	9.8	---	---	---	---	---	---	---	---	---
MONTH	11.5	8.7	9.6	11.9	9.1	9.9	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.8	8.6	8.7	10.0	9.3	9.7	11.0	9.9	10.6	13.3	13.1	13.3
2	8.9	8.6	8.8	9.9	9.5	9.7	11.1	10.0	10.5	13.4	13.2	13.3
3	9.1	8.6	8.8	9.9	9.6	9.8	11.2	10.1	10.7	13.6	13.2	13.5
4	9.2	8.7	8.8	9.9	9.4	9.8	11.2	10.1	10.7	13.6	13.4	13.5
5	9.1	8.8	8.9	10.0	9.5	9.8	11.3	10.1	10.9	13.6	13.4	13.5
6	9.0	8.8	8.9	10.1	9.8	10	11.3	10.0	10.7	13.8	13.4	13.6
7	9.0	8.9	8.9	---	---	---	11.3	10.6	11.1	13.9	13.6	13.8
8	9.5	8.8	9.0	10.1	9.8	10	11.4	10.2	11.0	14.0	13.8	13.9
9	9.1	9.0	9.1	10.1	9.6	9.9	11.4	10.1	11.0	14.1	13.9	14.0
10	9.2	9.0	9.1	10.3	9.4	9.9	11.9	10.2	11.1	14.1	14.0	14.0
11	9.3	9.0	9.1	10.3	9.5	9.9	11.6	10.2	11.2	14.2	13.9	14.1
12	9.4	9.2	9.3	10.4	9.5	10	11.7	10.2	11.2	14.2	14.0	14.1
13	9.5	9.2	9.3	10.4	9.6	10.1	11.9	10.5	11.5	14.3	14.1	14.2
14	9.5	9.0	9.2	10.5	9.4	10.1	11.9	11.2	11.6	14.6	14.3	14.4
15	9.7	8.8	9.2	10.6	9.5	10.1	11.8	11.6	11.7	14.6	14.4	14.5
16	9.6	8.9	9.1	10.5	9.6	10.1	12.0	11.6	11.8	14.6	14.4	14.5
17	9.9	8.9	9.2	10.5	9.6	10.1	12.2	11.9	12.0	14.5	14.4	14.5
18	9.6	8.9	9.1	10.7	9.7	10.3	12.2	12.0	12.1	14.8	14.5	14.6
19	9.6	8.9	9.2	10.7	9.7	10.1	12.3	12.0	12.1	14.9	13.6	14.5
20	9.5	9.3	9.4	10.3	9.7	9.9	12.3	10.9	12.1	15.1	13.4	14.2
21	9.5	9.3	9.4	10.3	9.6	10.0	12.5	11.0	12.0	15.1	14.7	14.9
22	9.5	9.3	9.4	10.6	9.6	10.2	12.5	11.4	12.4	15.0	14.5	14.8
23	9.5	9.4	9.4	10.8	9.9	10.3	12.7	12.1	12.6	15.0	14.8	14.9
24	9.5	9.3	9.5	10.8	9.9	10.4	12.8	11.1	12.3	15.1	14.9	15.0
25	9.6	9.4	9.6	10.7	9.8	10.3	12.8	10.9	12.3	15.2	15.0	15.1
26	9.7	9.4	9.5	10.8	9.9	10.6	12.8	12.5	12.7	15.4	15.1	15.2
27	9.7	9.3	9.6	10.9	9.9	10.4	13.0	12.7	12.9	15.4	15.1	15.2
28	9.8	9.3	9.6	11.0	9.8	10.4	13.1	12.8	13.0	15.1	13.7	14.0
29	9.8	9.3	9.6	11.0	9.8	10.4	13.1	13.0	13.1	15.2	13.9	14.3
30	9.8	9.1	9.6	11.1	9.9	10.5	13.2	13.0	13.1	15.4	14.0	15.1
31	---	---	---	10.9	9.9	10.5	13.2	13.0	13.1	---	---	---
MONTH	9.9	8.6	9.2	---	---	---	13.2	9.9	11.8	15.4	13.1	14.3



WHITE RIVER BASIN

207

07060000 NORTH FORK RIVER AT NORFORK DAM NEAR NORFORK

LOCATION.--Lat 36°14'18", long 92°14'18", in SE1/4SW1/4 sec.2, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, at Norfolk Dam, 3.9 mi northeast of Norfolk, and at mile 4.8.

DRAINAGE AREA.--1,808 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1946-71, 1974-89, November 1990 to current year.

REMARKS.--Flow completely regulated by Norfolk Reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)
OCT 03...	0810	80513	770	8.8	77	7.2	310	9.7
NOV 07...	0906	80513	774	8.9	--	6.7	--	9.6
DEC 18...	1628	80513	760	10.7	--	7.6	--	12.7
JAN 23...	1033	80513	763	10.7	93	8.0	334	9.4
MAR 28...	1011	80513	762	11.3	97	8.0	314	8.3
JUN 11...	0945	80513	760	9.0	81	8.3	303	10.7
JUL 15...	1530	80513	766	7.5	68	7.6	295	10.9
AUG 13...	0811	80513	765	8.2	75	7.4	296	11.6
SEP 09...	1439	80513	773	9.6	90	7.5	288	13.0

## WHITE RIVER BASIN

## 07060500 WHITE RIVER AT CALICO ROCK

**LOCATION.**--Lat 36°06'58", long 92°08'35", in SE1/4NE1/4 sec.22, T.17 N., R.11 W., IZARD COUNTY, Hydrologic Unit 11010004, on left bank at Calico Rock, 200 ft upstream from bridge on State Highway 5, 700 ft upstream from Calico Creek, 3.2 mi downstream from Cataract Creek, 6.0 mi upstream from Piney Creek, and at mile 359.1.

**DRAINAGE AREA.**--9,978 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1939 to current year. Gage-height records collected at same site since 1904 are contained in reports of National Weather Service.

**REVISED RECORDS.**--WDR Ark. 1973: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 316.38 ft above NGVD of 1929. Prior to Jan. 26, 1940, nonrecording gage at same site and Jan. 27 to Aug. 13, 1940, nonrecording gage at site 500 ft downstream, both at datum 2.07 ft higher. Aug. 14, 1940, to Dec. 5, 1966, water-stage recorder at datum 1.00 ft higher.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station. Flow regulated since 1943 by Norfork Lake, capacity, 1,983,000 acre-ft, since July 24, 1951, by Bull Shoals Lake, 59.5 mi upstream, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1904, 52.9 ft Jan. 31, 1916, present datum, from records of National Weather Service, discharge, 350,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2170	1500	7780	6300	40400	9590	11800	13300	11400	13900	16400	19800
2	3380	801	4520	5310	26500	7680	11500	12900	11500	15400	13300	20300
3	1840	1490	3720	4670	14800	7740	16100	12400	10100	15700	11100	20700
4	1550	1540	7020	6870	12800	13500	15700	13300	9630	17500	11200	18600
5	1740	2900	4280	5660	27600	10400	23900	13400	11200	16600	10900	19300
6	2010	5760	4740	2320	25500	7460	29700	13700	14500	16000	15000	19700
7	1640	4360	4820	2360	28100	8850	30900	12700	13000	17000	17300	19800
8	1580	3460	3520	4590	26400	10700	44600	12200	9860	15900	16900	20100
9	2510	4830	2440	4270	24200	30100	52600	8250	16200	15900	16000	20800
10	2110	5640	3080	4000	18700	27100	22200	8470	19000	15500	17000	19800
11	1290	2040	8140	1680	22000	24300	16000	8800	16500	15900	16700	20700
12	2590	1720	5870	3420	17300	14800	14400	8030	16700	16000	16700	21200
13	2040	2020	6610	3170	19400	12600	13800	9760	14600	17300	19700	21000
14	1670	1570	7130	2600	16900	20400	12100	11600	12800	18600	19300	20500
15	1890	1280	8030	4630	15800	20800	11300	10400	9610	16600	19700	20400
16	2350	3460	6800	6060	10400	18800	10300	9670	3390	13400	15600	21300
17	2070	1930	38300	5600	3310	18700	10300	11600	2720	13300	17600	21000
18	2170	1700	43600	7090	3250	18800	10300	10200	3050	13200	17800	20400
19	2320	1370	16000	6330	10100	36800	11000	11000	6340	13200	18300	19900
20	1880	1760	13100	2190	15100	76900	9980	9410	16300	6210	17500	12400
21	1600	3340	15900	2030	13300	59400	9410	8550	17900	3400	18500	11700
22	1180	4220	12000	3940	13200	23900	9280	8620	21400	6720	18800	12600
23	1890	1600	7900	5730	9030	17300	8850	10100	21600	11500	18700	14400
24	6030	944	6700	9510	6670	15100	9110	8540	21700	11900	19100	15700
25	7120	839	4870	13700	7730	16800	9860	7640	19000	13600	19600	16700
26	4710	1770	4870	10100	12800	40500	9390	7850	16400	13600	17800	15300
27	3470	3530	6580	6040	16500	32100	9490	7770	16300	12000	16800	13900
28	2150	5640	5990	4250	13500	19200	9320	8250	13800	13700	17300	9140
29	1470	9360	6440	4400	---	15800	9860	9340	14800	14800	17800	6880
30	1890	8480	4750	5120	---	14000	11100	10200	14300	16200	18900	7790
31	2130	---	5580	14100	---	12800	---	11300	---	18700	18800	---
TOTAL	74440	90854	281080	168040	471290	662920	474150	319250	405600	439230	526100	521810
MEAN	2401	3028	9067	5421	16830	21380	15800	10300	13520	14170	16970	17390
MAX	7120	9360	43600	14100	40400	76900	52600	13700	21700	18700	19700	21300
MIN	1180	801	2440	1680	3250	7460	8850	7640	2720	3400	10900	6880
AC-FT	147700	180200	557500	333300	934800	1315000	940500	633200	804500	871200	1044000	1035000

WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

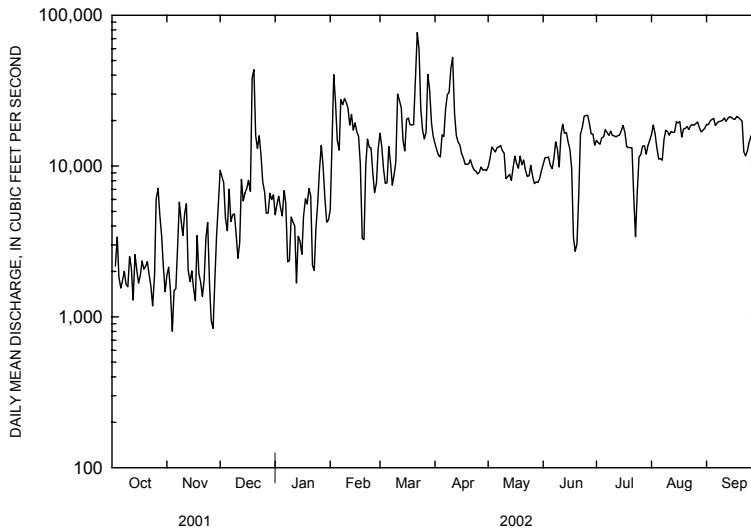
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	5359	7161	9923	10610	12550	14430	15820	13950	10150	9196	7738	5955
MAX	19280	26560	31170	34700	39600	62300	86320	64400	44330	29410	25390	25180
(WY)	1942	1947	1997	1950	1949	1945	1945	1943	1945	1957	1957	1957
MIN	584	892	1359	1680	2204	3468	1610	2137	3095	1545	1210	678
(WY)	1955	1982	1982	1955	1964	2000	1981	2001	2001	1944	1943	1943

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	1991684		4434764			
ANNUAL MEAN	5457		12150		10220	
HIGHEST ANNUAL MEAN					22890 1945	
LOWEST ANNUAL MEAN					3482 1981	
HIGHEST DAILY MEAN	43600	Dec 18	76900	Mar 20	292000	Apr 16 1945
LOWEST DAILY MEAN	801	Nov 2	801	Nov 2	310	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	1240	May 28	1550	Oct 29	412	Sep 23 1954
MAXIMUM PEAK FLOW			82600	Mar 20	310000	Apr 16 1945
MAXIMUM PEAK STAGE			22.54	Mar 20	<sup>1</sup> 49.84	Apr 16 1945
INSTANTANEOUS LOW FLOW			622	Nov 3	<sup>2</sup> 305	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	3951000		8796000		7407000	
10 PERCENT EXCEEDS	11300		20600		21600	
50 PERCENT EXCEEDS	3920		11300		6920	
90 PERCENT EXCEEDS	1550		2090		1970	

<sup>1</sup>At present datum

<sup>2</sup>Observed



WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1966 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Water years 1967-1981, 1991 to current year.

DISSOLVED OXYGEN: May 1991 to December 1994.

REMARKS.--Flow regulated by upstream reservoirs.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHAR INST CUBIC FEET PER SECOND (00061)	BARO-METRIC SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
OCT	16...	1240	81213	80513	1700	781	9.3	90	8.1	322	14.7	160
DEC	05...	1315	81213	80513	3780	769	10.0	94	7.7	273	12.9	130
FEB	22...	1315	81213	80513	13900	775	13.3	113	7.6	279	9.1	130
APR	23...	1100	81213	80513	6380	771	11.6	107	8.3	260	12.4	140
JUN	20...	0900	81213	80513	19200	764	8.1	89	7.4	298	20.0	150
AUG	12...	1415	81213	80513	13300	774	9.9	94	7.8	282	13.6	130

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
OCT	16...	37.0	17.0	1.50	.1	2.3	3	158	4.70	5.90
DEC	05...	37.0	9.70	1.50	.1	3.0	5	123	5.20	6.90
FEB	22...	35.0	10.0	1.60	.1	3.9	6	126	6.30	7.60
APR	23...	36.0	11.0	1.40	.1	2.9	4	135	5.10	6.60
JUN	20...	37.0	14.0	1.70	.1	3.2	4	156	5.40	6.40
AUG	12...	34.0	11.0	1.90	.1	3.7	6	140	6.10	6.70

Date	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	
OCT	16...	.23	785	171	164	<.01	.30	--	.18	<.010
DEC	05...	.20	1500	147	138	.03	<.20	.04	.25	<.010
FEB	22...	.21	5890	157	141	<.01	.40	--	.19	<.010
APR	23...	.21	2640	153	145	<.01	<.20	--	.22	<.010
JUN	20...	.22	8240	159	163	.01	.50	.01	.33	<.010
AUG	12...	.21	5530	154	149	<.01	<.20	--	.44	<.010

WHITE RIVER BASIN  
07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)
OCT 16...	--	.48	--	.02	<.01	.02	2.7	E11
DEC 05...	--	--	--	.03	<.01	.06	5.3	E8
FEB 22...	--	.59	.092	.04	.03	.05	6.1	E3
APR 23...	--	--	--	<.02	<.01	<.02	1.4	19
JUN 20...	.49	.83	--	<.02	<.01	.04	12	340
AUG 12...	--	--	--	<.02	<.01	.02	4.5	<2

Date	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)
OCT 16...	E10	E5	88	29	133
DEC 05...	E12	24	94	35	357
FEB 22...	E8	E5	93	32	1200
APR 23...	12	16	96	30	517
JUN 20...	280	1600	72	83	4300
AUG 12...	<11	<1	44	5.0	180

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DEPTH BOTTOM AT SAMPLE LOC- TION, (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SAM- PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD CENT (PER- CENT SATUR- ATION) (00301)	SPE- CIFIC CON- DUCT- ANCE UNITS (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
AUG	12.. 1503	80513	80513	6.00	146.0	2.50	510	774	9.7	93	8.6	272	14.2
	12.. 1508	80513	80513	6.00	197.0	2.70	510	774	9.4	90	8.6	272	14.1
	12.. 1510	80513	80513	7.00	248.0	3.30	510	774	9.4	90	8.3	275	14.0
	12.. 1512	80513	80513	6.00	299.0	2.80	510	774	9.4	90	8.1	275	13.9
	12.. 1514	80513	80513	7.00	350.0	3.60	510	774	9.4	89	7.9	276	13.9
	12.. 1516	80513	80513	8.00	401.0	3.70	510	774	9.3	89	7.8	277	13.9
	12.. 1517	80513	80513	9.00	452.0	4.40	510	774	9.3	88	7.8	279	13.8
	12.. 1519	80513	80513	8.00	503.0	4.20	510	774	9.3	88	7.7	280	13.8
	12.. 1521	80513	80513	8.00	554.0	4.30	510	774	9.2	88	7.7	281	13.8
	12.. 1522	80513	80513	7.00	605.0	3.10	510	774	9.3	88	7.7	281	13.8

Remark codes used in this report:  
< -- Less than  
E -- Estimated value

## WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX  
(Hydrologic benchmark station)

**LOCATION.**--Lat 35°59'30", long 92°12'50", in SW1/4NW1/4 sec.25, T.16 N., R.12 W., Stone County, Hydrologic Unit 11010004, on right bank 30 ft upstream from bridge on Ozark National Forest service road, 200 ft downstream from Gunner Creek, 2.7 mi north of Fifty-Six, and 7.0 mi upstream from South Sylamore Creek.

**DRAINAGE AREA.**--58.1 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--December 1965 to current year.

**REVISED RECORDS.**--WRD Ark. 1973: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 434.99 ft above NGVD of 1929.

**REMARKS.**--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.1	3.6	77	33	636	25	73	46	20	5.2	8.5	2.0
2	e1.8	4.1	44	31	240	59	61	41	18	5.7	6.7	1.8
3	e1.6	5.0	29	30	144	112	50	32	16	6.4	6.8	1.9
4	e2.3	5.0	22	29	101	98	38	27	15	6.6	5.0	1.8
5	e1.8	4.5	19	31	70	78	32	23	16	7.1	4.1	1.6
6	e1.6	4.0	23	39	56	67	29	22	17	5.3	6.6	1.5
7	e1.6	3.8	37	42	47	62	31	21	14	4.8	15	1.4
8	e1.4	3.7	96	40	57	56	774	23	13	4.2	11	1.4
9	e1.4	3.7	73	38	68	1250	276	76	13	4.0	6.9	1.7
10	e1.4	3.7	53	37	69	282	169	102	18	4.9	4.8	1.6
11	e1.6	3.6	42	36	55	218	130	70	24	7.0	3.9	1.5
12	e1.8	3.7	45	34	48	411	107	48	17	6.4	3.4	1.5
13	e2.1	3.5	84	32	43	225	93	144	15	8.0	3.9	1.4
14	e26	3.7	89	31	43	154	87	123	14	8.3	20	1.6
15	e19	3.9	87	30	38	118	77	78	12	6.2	20	2.2
16	e12	3.8	1310	29	32	90	67	56	12	5.1	11	2.1
17	e9.2	3.8	1490	29	29	68	90	716	20	7.8	8.3	4.1
18	e7.3	3.8	351	29	25	55	96	375	15	16	6.2	3.8
19	6.5	4.1	193	34	34	1800	86	180	12	37	5.1	4.1
20	4.3	4.5	134	35	109	1420	72	111	9.8	19	4.3	12
21	4.1	4.2	100	35	91	435	61	74	8.8	11	3.8	9.4
22	4.0	4.0	80	36	66	247	48	54	8.0	e9.6	3.5	5.5
23	3.9	4.0	67	92	52	184	49	41	7.4	e9.0	3.2	3.7
24	4.4	14	58	683	44	169	50	32	6.9	6.6	3.0	e2.6
25	4.2	20	52	235	38	2440	41	27	7.1	5.9	3.6	e2.1
26	3.9	14	48	152	32	1260	38	27	7.3	5.3	4.1	e1.8
27	3.7	13	45	113	27	345	36	24	6.6	5.1	3.3	e2.6
28	3.6	67	43	91	24	214	35	23	6.3	4.7	2.8	2.9
29	3.5	170	40	77	---	152	29	26	7.4	4.5	2.5	2.5
30	3.6	144	37	69	---	116	31	36	6.5	8.4	2.4	2.4
31	3.5	---	35	1550	---	95	---	24	---	11	2.2	---
TOTAL	149.2	533.7	4903	3802	2318	12305	2856	2702	383.1	256.1	195.9	86.5
MEAN	4.813	17.79	158.2	122.6	82.79	396.9	95.20	87.16	12.77	8.261	6.319	2.883
MAX	26	170	1490	1550	636	2440	774	716	24	37	20	12
MIN	1.4	3.5	19	29	24	25	29	21	6.3	4.0	2.2	1.4
AC-FT	296	1060	9730	7540	4600	24410	5660	5360	760	508	389	172
CFSM	0.08	0.31	2.72	2.11	1.42	6.83	1.64	1.50	0.22	0.14	0.11	0.05
IN.	0.10	0.34	3.14	2.43	1.48	7.88	1.83	1.73	0.25	0.16	0.13	0.06

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

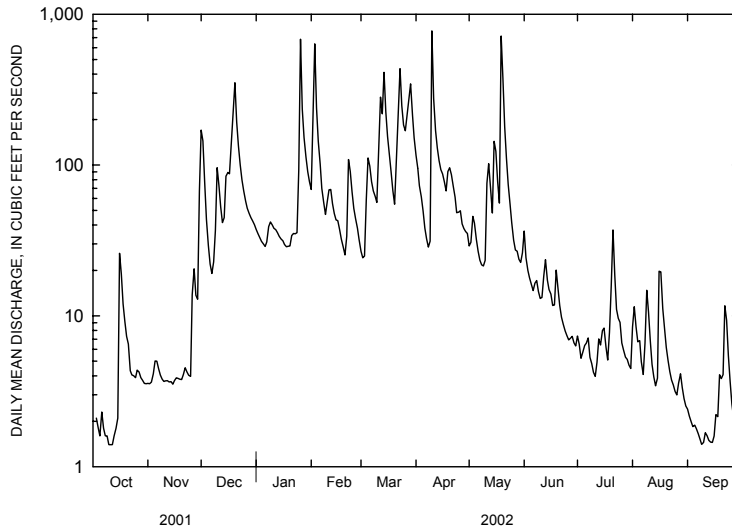
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	16.69	46.86	70.83	44.72	65.81	100.4	103.2	69.35	22.24	9.934	6.254	11.12
MAX	99.3	232	501	171	295	397	493	230	102	32.8	16.6	56.7
(WY)	1974	1997	1983	1993	1989	2002	1973	1990	1974	1992	1981	1968
MIN	3.84	4.10	3.57	4.43	9.16	9.15	12.9	7.40	6.45	3.89	3.06	2.45
(WY)	1967	1990	1990	1981	1972	1972	1971	2001	1966	1980	1987	1987

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	13002.5		30490.5			
ANNUAL MEAN	35.62		83.54		46.67	
HIGHEST ANNUAL MEAN					102	1973
LOWEST ANNUAL MEAN					15.8	1967
HIGHEST DAILY MEAN	1490	Dec 17	2440	Mar 25	11500	Dec 3 1982
LOWEST DAILY MEAN	1.4	Oct 8	1.4	Oct 8	1.3	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	1.5	Oct 5	1.5	Sep 7	1.4	Sep 1 2000
MAXIMUM PEAK FLOW			11200	Mar 25	<sup>1</sup> 25200	Dec 3 1982
MAXIMUM PEAK STAGE			14.46	Mar 25	20.60	Dec 3 1982
INSTANTANEOUS LOW FLOW			1.0 at times		1.0	at times
ANNUAL RUNOFF (AC-FT)	25790		60480		33810	
ANNUAL RUNOFF (CFSM)	0.61		1.44		0.80	
ANNUAL RUNOFF (INCHES)	8.33		19.52		10.91	
10 PERCENT EXCEEDS	52		144		88	
50 PERCENT EXCEEDS	7.7		23		12	
90 PERCENT EXCEEDS	2.9		2.6		3.9	

<sup>1</sup>From rating curve extended above 3,700 ft<sup>3</sup>/s

<sup>e</sup>Estimated



WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV 21...	0830	80020	80513	4.5	768	10.2	84	8.3	307	7.3
DEC 13...	0930	80020	80513	91	765	10.4	92	7.5	281	10.2
JAN 10...	0930	80020	80513	39	765	13.2	106	7.9	281	6.1
FEB 13...	1130	80020	80513	45	775	12.7	104	7.9	244	7.5
MAR 13...	0915	80020	80513	235	762	10.7	92	7.7	188	8.8
MAY 09...	0925	80020	80513	55	765	9.4	98	8.2	268	17.2
JUL 10...	0900	80020	80513	3.8	769	6.3	75	7.8	284	24.5
SEP 10...	1310	80020	80513	1.4	767	9.5	115	7.5	272	25.5
12...	1100	80020	80513	--	--	--	--	--	--	--

Date	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (004582)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 21...	110	134	0	2.21	4.6	<.04	.15	--	E.04
DEC 13...	138	168	0	1.83	5.1	<.04	<.10	--	.10
JAN 10...	139	169	0	1.92	5.4	<.04	<.10	--	.10
FEB 13...	111	135	0	1.42	5.4	.04	.17	.05	.06
MAR 13...	88	107	0	1.25	5.2	<.04	E.08	--	.07
MAY 09...	127	155	0	1.69	4.6	<.04	.10	--	.07
JUL 10...	141	172	0	1.66	3.8	<.04	E.09	--	.08
SEP 10...	134	163	0	1.80	3.4	<.04	E.08	--	.07
12...	--	--	--	--	--	--	--	--	--

Date	NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI-PHYTON BIOMASS DRY WEIGHT (G/SQ M) (00573)
NOV 21...	<.008	--	--	<.02	E.002	--	--
DEC 13...	<.008	--	--	<.02	E.002	--	--
JAN 10...	<.008	--	--	<.02	E.002	--	--
FEB 13...	<.008	.13	.23	<.02	.005	--	--
MAR 13...	<.008	--	--	<.02	.006	--	--
MAY 09...	<.008	--	.17	<.02	.004	--	--
JUL 10...	<.008	--	--	<.02	.004	--	--
SEP 10...	<.008	--	--	<.02	.004	--	--
12...	--	--	--	--	--	780	839.4



WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PERI-PHYTON BIOMASS ASH FREE DRY G/SQ M (49954)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	CHLOR-A PERI-PHYTON GRAPHIC FLUOROM (MG/M2) (70957)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DISCHARGE, SUS-PENDED (T/DAY) (80155)
NOV 21...	--	--	E2	E1	31	--	89	63	.77
DEC 13...	--	--	7	E8	35	--	85	23	5.7
JAN 10...	--	--	E4	E3	E14	--	88	43	4.5
FEB 13...	--	--	E3	E2	E11	--	43	42	5.1
MAR 13...	--	--	E7	E6	20	--	200	--	--
MAY 09...	--	--	120	117	840	--	67	42	6.2
JUL 10...	--	--	22	34	190	--	73	31	.32
SEP 10...	--	--	E7	E8	38	--	35	21	.08
12...	54.900	43	--	--	--	142	--	--	--

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value



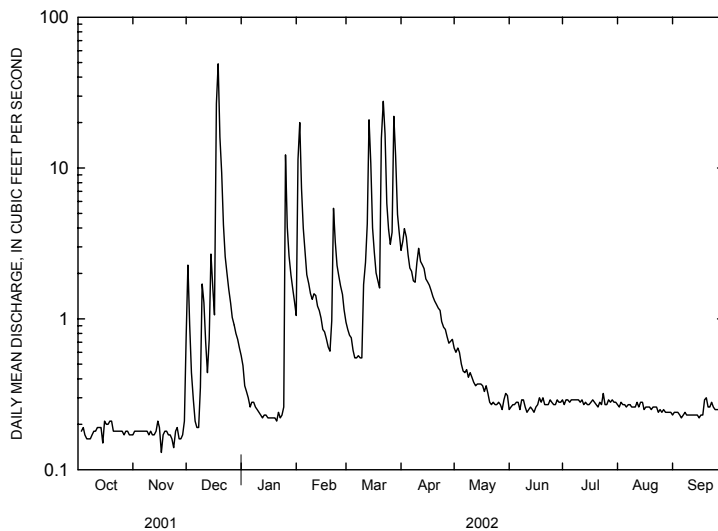


WHITE RIVER BASIN

07060896 STARK SPRING NEAR BATESVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	300.45		532.38			
ANNUAL MEAN	0.823		1.46		1.46	
HIGHEST ANNUAL MEAN					1.46	2002
LOWEST ANNUAL MEAN					1.46	2002
HIGHEST DAILY MEAN	49.1	Dec 17	49.1	Dec 17	49.1	Dec 17 2001
LOWEST DAILY MEAN	0.10	Jan 14	0.13	Nov 15	0.10	Jan 14 2001
ANNUAL SEVEN-DAY MINIMUM	0.13	Jan 9	0.17	Nov 20	0.13	Jan 9 2001
MAXIMUM PEAK FLOW			1		1	
MAXIMUM PEAK STAGE			1		1	
ANNUAL RUNOFF (AC-FT)	596		1060		1060	
10 PERCENT EXCEEDS	0.93		2.7		2.7	
50 PERCENT EXCEEDS	0.21		0.28		0.28	
90 PERCENT EXCEEDS	0.17		0.18		0.18	

<sup>1</sup>Not determined  
<sup>e</sup>Estimated



WHITE RIVER BASIN

219

07061000 WHITE RIVER AT BATESVILLE

LOCATION.--Lat 35°45'35", long 91°38'28", in NE1/4NW1/4 sec.21, T.13 N., R.6 W., Independence County, Hydrologic Unit 11010004, at bridge on U.S. Highway 167 in Batesville.

DRAINAGE AREA.--11,070 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1937 to September 1958, October 1986 to September 1994, October 2000 to current year. Stage only station 1995-2000. Gage-height records collected at lower lock gage since 1904 are published in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 237.72 ft above NGVD of 1929. Prior to Jan. 28, 1939, staff gage on upper lock wall of dam no. 1, 0.3 mi downstream at same datum.

REMARKS.--Water-discharge records good. Flow regulated since 1943 by Norfork Lake, capacity 1,983,000 acre-ft; since July 24, 1951, by Bull Shoals Lake, 59.5 mi upstream, capacity 5,408,000 acre-ft; since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity 3,567,500 acre-ft; and since Dec. 26, 1963, by Beaver Lake, capacity 1,951,500 acre ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 31.1 ft, Feb. 1, 1916, at former site, observed by U.S. Army Corps of Engineers (discharge 382,000 ft<sup>3</sup>/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2630	2220	10100	6120	45500	13300	15500	12900	11400	15700	19800	20900
2	2470	1720	7060	6550	44900	10900	13900	14700	11200	15800	15900	21600
3	3190	1060	4710	5720	23300	8280	15700	12300	11500	16800	13200	22200
4	2190	1300	4180	5640	17800	11300	19200	14200	9740	17700	12100	21400
5	1810	1570	6620	7120	23200	15100	22000	13900	9750	18800	11300	20700
6	2010	2880	4550	5810	29800	10300	29400	14200	13700	17800	13600	21000
7	2100	5390	5300	2920	31200	8200	32500	13900	15200	17200	18900	21700
8	1950	4470	6180	3020	31800	11800	43300	12200	11700	18300	18200	22000
9	1710	3400	4370	5440	30400	23600	60000	12000	12600	17700	18300	21300
10	2560	4520	3150	4250	24300	39800	40700	8160	17300	17000	17000	21500
11	2450	5540	4520	4170	22400	29000	20800	9390	21100	17000	18900	21800
12	1940	2220	7770	2300	23600	33100	18300	8740	18400	17600	18100	22300
13	3120	1660	7230	3630	20200	19300	17400	9160	16600	17500	19700	22900
14	3170	1700	7960	3580	21500	21000	16400	12100	14300	19100	22600	22100
15	2210	1570	8220	3010	19300	25300	15100	11900	12800	19400	21300	22000
16	2160	1200	25500	4800	15000	24000	12600	10500	7540	17600	18900	22500
17	2520	2740	61700	6270	9810	22300	11500	11200	3530	13600	17400	23200
18	2300	1870	64100	6500	4290	22000	11500	13600	2860	14500	19700	22100
19	2300	1460	34600	6970	6320	36100	11800	11600	3670	15300	20100	22400
20	2520	1190	17700	6370	19200	88600	11200	11600	9060	11400	19200	19400
21	2110	1270	19000	2680	16900	100000	11400	10000	18600	5660	19600	9990
22	1880	2970	17200	2460	15100	45600	9760	8510	20600	e4450	20200	13900
23	1230	3540	11500	4940	14100	25700	10100	9490	22200	e9990	20500	14100
24	2150	1820	8720	13800	10000	18900	9280	9780	22600	12700	19400	16300
25	6710	769	7740	17400	7200	18800	9680	8220	20900	14100	21100	17100
26	7050	665	5950	15300	11700	57500	10300	7950	19200	15600	20500	18100
27	4630	1160	6290	10800	15300	50800	10100	7890	17500	12300	19400	15500
28	3690	3690	7300	7090	18100	29800	10200	8150	15400	15300	18100	13400
29	2460	9360	6690	5630	---	22200	10000	9290	16100	15300	18900	8220
30	1860	11200	6870	5450	---	18600	10600	9540	15400	16100	19900	6970
31	1800	---	5620	11300	---	18000	---	11300	---	19000	19800	---
TOTAL	82880	86124	398400	197040	572220	879180	540220	338370	422450	476300	571600	568580
MEAN	2674	2871	12850	6356	20440	28360	18010	10920	14080	15360	18440	18950
MAX	7050	11200	64100	17400	45500	100000	60000	14700	22600	19400	22600	23200
MIN	1230	665	3150	2300	4290	8200	9280	7890	2860	4450	11300	6970
AC-FT	164400	170800	790200	390800	1135000	1744000	1072000	671200	837900	944700	1134000	1128000

WHITE RIVER BASIN

07061000 WHITE RIVER AT BATESVILLE--CONTINUED

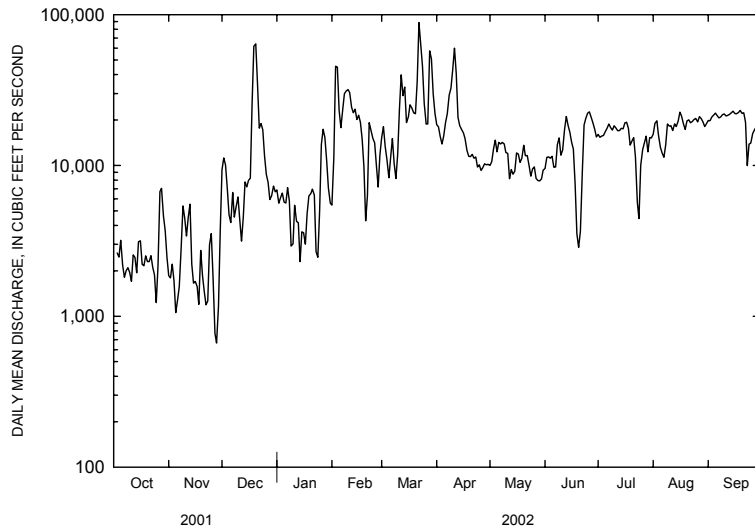
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943-58, 1987-94, 2001-02, BY WATER YEAR (WY)

MEAN	5201	8413	11610	13460	17150	20690	21880	19710	14030	10920	8089	6703
MAX	15350	28600	32380	45000	44790	72740	100400	71230	53690	29620	25860	24680
(WY)	1994	1947	1943	1949	1949	1945	1945	1943	1945	1957	1957	1957
MIN	1224	1587	1640	2454	4974	4812	4439	2495	3216	1893	1504	912
(WY)	1955	1955	1944	1945	1943	1947	2001	2001	2001	1944	1943	1943

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1943-58, 1987-94 2001-02	
ANNUAL TOTAL	2327584		5133364		<sup>1</sup> 13130	
ANNUAL MEAN	6377		14060		26510	
HIGHEST ANNUAL MEAN					5671	
LOWEST ANNUAL MEAN					1945	
HIGHEST DAILY MEAN	64100	Dec 18	100000	Mar 21	303000	Apr 16 1945
LOWEST DAILY MEAN	665	Nov 26	665	Nov 26	592	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	1430	May 29	1610	Nov 15	709	Sep 23 1954
MAXIMUM PEAK FLOW			107000	Mar 21	324000	Apr 16 1945
MAXIMUM PEAK STAGE			18.50	Mar 21	29.43	Apr 16 1945
INSTANTANEOUS LOW FLOW			602	Nov 26	580	Sep 28 1954
ANNUAL RUNOFF (AC-FT)	4617000		10180000		9511000	
10 PERCENT EXCEEDS	12100		22600		27200	
50 PERCENT EXCEEDS	4280		12300		8050	
90 PERCENT EXCEEDS	1670		2390		2300	

<sup>1</sup>Prior to regulation, water years 1938-42, 10,850 ft<sup>3</sup>/s

<sup>e</sup>Estimated



WHITE RIVER BASIN

221

07064000 BLACK RIVER NEAR CORNING

**LOCATION.**--Lat 36°24'07", long 90°32'29", in SW1/4NE1/4 sec.4, T.20 N., R.5 E., Clay County, Hydrologic Unit 11010007, near left bank on downstream side of bridge on U.S. Highway 62, 2.2 mi east of Corning, 11.9 mi downstream from Cane Creek, and at mile 152.2.

**DRAINAGE AREA.**--1,749 mi<sup>2</sup>.

**PERIOD OF RECORD.**--Water years 1939-95, October 1998 to current year. Annual maximum water years 1996-98. Gage-height records collected January 1925 to December 1929 at site 7.0 mi downstream are contained in reports of National Weather Service.

**GAGE.**--Water-stage recorder. Datum of gage is 272.90 ft above NGVD of 1929. Prior to Nov. 5, 1953, nonrecording gage, and Nov. 5, 1953, to Oct. 9, 1957, water-stage recorder, at site 30 ft downstream at present datum.

**REMARKS.**--Records good except estimated daily discharges, which are fair. Satellite telemeter at station. Some regulation by Clearwater Lake (Missouri) since June 3, 1948, 105 mi upstream, capacity, 413,700 acre-ft.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Apr. 18, 1927, reached a stage of 14.4 ft, from records of U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	421	3230	3170	3360	1960	6490	e3420	4300	4020	3010	732
2	279	427	3890	2770	5510	1890	5910	3130	4030	3930	2840	618
3	275	460	3770	2390	7590	1750	5490	3070	3850	3860	2500	553
4	272	505	3220	1990	6930	1580	5150	3130	3820	3830	2040	531
5	282	588	2530	1540	5500	1420	4870	3110	3890	3810	1460	530
6	319	650	1930	1270	4320	1310	4650	3050	4200	3770	1010	527
7	422	674	1860	1150	3790	1260	e4500	3110	4620	3720	789	509
8	430	684	2120	1060	3710	1280	4490	3470	4730	3670	707	487
9	370	693	2420	974	3880	1400	4560	4440	4620	3620	652	466
10	321	724	2530	909	4000	2020	4640	7090	4610	3590	612	438
11	336	751	2390	861	3870	2540	4350	9090	4770	3660	574	414
12	630	763	2050	e820	3500	2770	3860	8760	4970	3770	547	399
13	861	768	1710	775	3070	3100	3490	8340	4970	3850	534	397
14	1210	768	1790	737	2770	3320	3560	8820	5440	3790	562	399
15	1670	766	2250	710	2490	3270	5020	9380	5720	3690	754	400
16	1650	762	2820	687	2220	3450	7040	9060	5290	3620	884	398
17	1250	714	5220	664	1900	3970	6720	8310	4920	3630	814	395
18	814	594	9880	646	1530	4470	5840	8320	4730	3680	780	382
19	688	505	12800	642	1260	4660	5150	9160	4540	3710	860	398
20	668	459	13900	642	1640	5430	4780	9200	4350	3720	846	688
21	577	435	12200	646	2520	8230	4600	8070	4200	3720	790	1710
22	473	422	9640	636	2840	9910	4470	6800	4110	3720	727	2210
23	416	413	8000	660	2800	9350	4160	5810	4040	3710	684	2210
24	391	416	7040	1420	2620	7560	3730	5230	3990	3660	674	1860
25	393	447	6320	3540	2450	6390	3330	4970	3950	3610	1020	1270
26	388	493	5690	7350	2290	7530	3520	4900	4040	3550	1350	865
27	383	510	5130	7850	2140	11100	4190	4750	4080	3510	1310	685
28	396	723	4680	6350	2020	12300	4630	4610	4050	3460	1090	605
29	411	1620	4290	4920	---	10900	4270	4520	4080	3370	916	554
30	422	2480	4000	3770	---	8690	3810	4540	4090	3230	923	519
31	424	---	3650	3080	---	7350	---	4490	---	3110	873	---
TOTAL	17709	20635	152950	64629	92520	152160	141270	184150	133000	113590	33132	22149
MEAN	571.3	687.8	4934	2085	3304	4908	4709	5940	4433	3664	1069	738.3
MAX	1670	2480	13900	7850	7590	12300	7040	9380	5720	4020	3010	2210
MIN	272	413	1710	636	1260	1260	3330	3050	3820	3110	534	382
AC-FT	35130	40930	303400	128200	183500	301800	280200	365300	263800	225300	65720	43930

WHITE RIVER BASIN

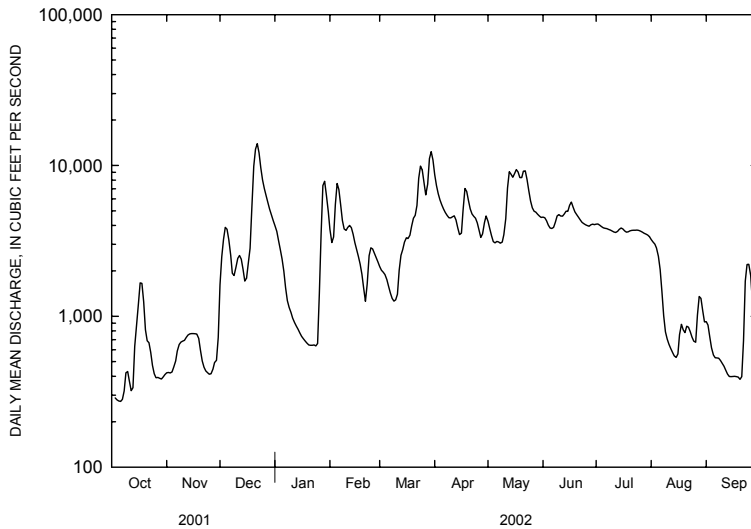
07064000 BLACK RIVER NEAR CORNING--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948-95, 1999-02, BY WATER YEAR (WY)

MEAN	753.2	1305	2117	2564	2648	3035	3234	2729	1588	1063	716.9	688.8
MAX	2868	5220	8417	8969	7490	7308	9125	7217	4433	3858	3266	2116
(WY)	1950	1973	1983	1950	1949	1975	1973	1961	2002	1957	1957	1957
MIN	269	340	356	319	459	753	783	463	419	358	278	252
(WY)	1957	1954	1956	1956	1963	1981	1981	2001	2001	1980	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948-95, 1999-02	
ANNUAL TOTAL	463688		1127894			
ANNUAL MEAN	1270		3090		<sup>1</sup> 1875	
HIGHEST ANNUAL MEAN					4014 1973	
LOWEST ANNUAL MEAN					662 1954	
HIGHEST DAILY MEAN	13900	Dec 20	13900	Dec 20	32000	Mar 12 1964
LOWEST DAILY MEAN	261	Jul 17	272	Oct 4	191	Sep 22 2000
ANNUAL SEVEN-DAY MINIMUM	271	Jul 12	305	Oct 1	202	Sep 18 2000
MAXIMUM PEAK FLOW			14200	Dec 20	<sup>2</sup> 32500	Mar 13 1964
MAXIMUM PEAK STAGE			13.32	Dec 20	<sup>3</sup> 15.23	Mar 13 1964
INSTANTANEOUS LOW FLOW			270	Oct 5	191	Sep 21 2000
ANNUAL RUNOFF (AC-FT)	919700		2237000		1358000	
10 PERCENT EXCEEDS	2970		6580		4150	
50 PERCENT EXCEEDS	663		2840		1060	
90 PERCENT EXCEEDS	331		443		402	

<sup>1</sup>Prior to regulation, water years 1939-47, 1,741 ft<sup>3</sup>/s  
<sup>2</sup>Maximum discharge for period of record, 48,600 ft<sup>3</sup>/s, June 13, 1945  
<sup>3</sup>Maximum gage height for period of record, 16.92 ft, June 13, 1945  
<sup>e</sup>Estimated





WHITE RIVER BASIN

223

07069000 BLACK RIVER AT POCAHONTAS

**LOCATION.**--Lat 36°15'14", long 90°58'12", in SW1/4SW1/4 sec.27, T.19 N., R.1 E., Randolph County, Hydrologic Unit 11010009, near right bank on downstream side of bridge on U.S. Highway 67 at Pocahontas, 2.2 mi downstream from Fourche River, 6.4 mi downstream from Current River, 18.1 mi upstream from Spring River, and at mile 90.1.

**DRAINAGE AREA.**--4,845 mi<sup>2</sup>.

**PERIOD OF RECORD.**--January 1936 to September 1970, October 2000 to current year. Annual maximum 1971-78, 1981-94, Stage only 1995-2000.

**REVISIONS.**--WSP 927: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 241.81 ft above NGVD of 1929. Prior to July 15, 1937, nonrecording gage at site 0.3 mi upstream at same datum. July 15, 1937, to July 23, 1940, nonrecording gage at present site and datum.

**REMARKS.**--No estimated daily discharges. Records good. Some regulation by Clearwater Lake (Missouri), 167 mi upstream, since June 3, 1948 (capacity, 413,700 acre-ft). Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in August 1915 reached a stage of 27.9 ft, from floodmarks from information by the U.S. Army Corps of Engineers. Flood of Apr. 17, 1927, reached a stage of 25.9 ft (discharge, about 80,000 cfs).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	1520	6940	8770	12900	5500	24800	9610	13300	6320	7910	2980
2	1440	1550	6010	7700	15000	5370	22400	9330	12400	6210	8110	2830
3	1420	1710	5360	6940	15700	5330	19900	9090	11400	6120	6680	2670
4	1400	1660	4740	6430	15900	5260	17500	8830	10600	6050	5910	2510
5	1430	1610	4330	6050	15500	5300	15800	8520	9880	6000	5530	2390
6	1490	1580	4310	5810	14900	5380	14500	8160	10200	5930	5210	2310
7	1480	1590	4660	5550	14200	5280	13300	8380	9580	5830	4940	2240
8	1460	1610	5690	5190	13300	5120	12400	8760	8960	5730	4580	2200
9	1500	1630	5780	4790	12300	5630	12500	10200	8460	5630	4060	2190
10	1520	1630	5530	4350	11200	8130	13400	13400	8320	5540	3500	2170
11	1800	1630	5160	3910	10000	10300	13900	17100	8750	5530	3100	2140
12	2020	1650	4930	3540	8890	12300	13900	27600	8790	5700	2850	2100
13	2150	1670	5120	3280	8010	12900	13500	32400	8850	6230	2800	2080
14	2800	1690	5870	3090	7390	12600	13500	33700	9350	6510	3110	2070
15	3010	1700	6710	2940	6970	12000	14800	33400	9630	6540	3430	2060
16	2810	1700	9490	2820	6660	11500	15500	35000	9500	7440	3470	2060
17	2640	1700	14300	2720	6390	10800	15500	36700	9180	7340	3390	2100
18	2520	1710	17300	2640	6110	10400	15400	35500	8880	6810	3350	2130
19	2340	1700	19600	2600	5970	10900	15000	35500	8570	7090	3320	2250
20	2090	1660	21400	2580	7390	13700	14700	40200	8240	8220	3210	4050
21	1880	1600	23700	2560	7960	16000	14100	43400	7930	7660	3050	6260
22	1770	1560	25300	2540	7800	18000	13400	40300	7640	8000	2940	6220
23	1690	1530	25000	2700	7450	20100	12800	35700	7380	7480	2890	5300
24	1620	1560	23200	6190	6880	22100	12200	31300	7150	6750	2960	4460
25	1570	1610	20700	11200	6380	24100	11600	27400	6980	6270	4060	4020
26	1550	1640	18100	11200	6060	27800	11400	24300	6870	5980	4730	3840
27	1550	1740	16000	10300	5850	30900	11300	21000	6720	5790	4190	3770
28	1540	2360	14400	9150	5670	29900	10900	18300	6610	5650	3830	3600
29	1520	4270	12900	8460	---	28700	10400	16500	6510	5520	3600	3240
30	1520	6840	11500	8300	---	27700	9910	15300	6440	5420	3400	2840
31	1520	---	10100	9570	---	26700	---	14300	---	5840	3170	---
TOTAL	56550	57610	364130	173870	268730	445700	430210	709180	263070	197130	127280	91080
MEAN	1824	1920	11750	5609	9598	14380	14340	22880	8769	6359	4106	3036
MAX	3010	6840	25300	11200	15900	30900	24800	43400	13300	8220	8110	6260
MIN	1400	1520	4310	2540	5670	5120	9910	8160	6440	5420	2800	2060
AC-FT	112200	114300	722300	344900	533000	884000	853300	1407000	521800	391000	252500	180700

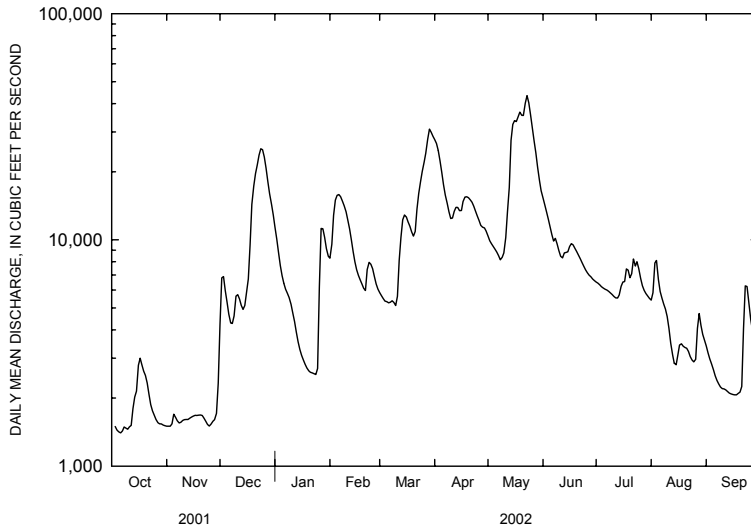
WHITE RIVER BASIN

07069000 BLACK RIVER AT POCAHONTAS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-70, 2001-02, BY WATER YEAR (WY)

MEAN	2405	3240	4257	6562	7740	8863	10060	9379	5710	3483	2589	2272
MAX	8203	10850	12600	25910	24220	27680	33680	22900	27300	12520	6287	4494
(WY)	1950	1952	1952	1950	1949	1945	1945	1961	1945	1951	1951	1965
MIN	1149	1390	1408	1408	1850	2161	3140	2032	1717	1524	1282	1213
(WY)	1957	1957	1956	1956	1963	1941	1956	2001	2001	2001	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1936-70, 2001-02	
ANNUAL TOTAL	1305680		3184540			
ANNUAL MEAN	3577		8725		5533	
HIGHEST ANNUAL MEAN					10820 1950	
LOWEST ANNUAL MEAN					2383 1954	
HIGHEST DAILY MEAN	25300	Dec 22	43400	May 21	59600	Jun 17 1945
LOWEST DAILY MEAN	1260	Jul 19	1400	Oct 4	1080	Oct 16 1956
ANNUAL SEVEN-DAY MINIMUM	1290	Jul 13	1450	Oct 2	1090	Oct 15 1956
MAXIMUM PEAK FLOW			44200	May 21	59600	Jun 17 1945
MAXIMUM PEAK STAGE			23.22	May 21	24.32	Jun 17 1945
INSTANTANEOUS LOW FLOW			1390	Oct 5	1080	Oct 16-19 1956
ANNUAL RUNOFF (AC-FT)	2590000		6317000		4008000	
10 PERCENT EXCEEDS	8000		18200		12100	
50 PERCENT EXCEEDS	2020		6260		3380	
90 PERCENT EXCEEDS	1410		1670		1680	



WHITE RIVER BASIN

225

07069190 MAMMOTH SPRING AT MAMMOTH SPRING

LOCATION.--Lat 36°29'53", long 91°32'08", in SE1/4SW1/4 sec.5, T.21 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at southeast bank of spring outlet pool, 0.25 mi upstream from confluence of Mammoth Spring and Warm Fork at town of Mammoth Spring.

PERIOD OF RECORD.--Occasional low-flow measurements made beginning in 1924. February 1981 to current year. Prior to October 1992 published under Station Number 07069200.

GAGE.--Water-stage recorder. Datum of gage is 500.90 ft above NGVD of 1929.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	180	196	317	451	312	560	540	553	464	408	348
2	188	180	193	313	450	317	556	537	547	459	405	346
3	187	180	189	310	444	331	548	533	544	456	402	341
4	186	179	181	306	434	332	542	529	541	453	400	339
5	185	178	174	303	427	331	538	523	540	451	397	336
6	184	177	175	299	422	324	534	517	541	447	394	335
7	184	176	177	296	411	319	531	514	537	444	389	332
8	184	176	183	293	406	318	561	527	534	440	385	330
9	184	176	184	290	399	418	572	549	532	436	382	328
10	184	176	183	287	394	455	572	560	535	432	379	325
11	188	175	182	284	384	462	570	562	532	429	377	325
12	188	174	182	282	380	471	568	561	529	427	375	320
13	188	175	210	279	377	472	565	577	526	427	375	318
14	189	174	226	276	369	470	598	580	520	424	401	315
15	188	174	233	273	362	470	600	580	515	421	408	315
16	186	174	278	271	355	471	599	575	512	415	408	312
17	186	174	404	268	351	473	597	582	509	412	404	312
18	185	174	420	265	345	472	594	591	505	416	401	311
19	184	174	416	263	338	522	591	592	503	445	396	308
20	184	173	410	262	345	598	585	590	500	455	389	308
21	184	173	406	259	344	595	582	588	497	453	385	306
22	183	174	399	257	337	587	573	583	494	451	380	305
23	182	174	392	260	334	579	569	579	490	447	377	301
24	182	183	382	329	332	571	566	575	485	444	374	299
25	184	185	372	338	329	571	561	572	483	440	372	297
26	183	181	363	334	324	590	559	570	481	433	364	296
27	182	179	353	330	318	587	555	568	478	430	361	296
28	182	180	344	324	315	582	549	565	474	426	358	292
29	180	192	337	320	---	578	544	563	471	423	356	292
30	180	201	330	316	---	570	541	560	468	418	353	290
31	180	---	324	362	---	566	---	556	---	412	351	---
TOTAL	5723	5341	8798	9166	10477	14714	16980	17398	15376	13530	11906	9478
MEAN	184.6	178.0	283.8	295.7	374.2	474.6	566.0	561.2	512.5	436.5	384.1	315.9
MAX	189	201	420	362	451	598	600	592	553	464	408	348
MIN	180	173	174	257	315	312	531	514	468	412	351	290
AC-FT	11350	10590	17450	18180	20780	29190	33680	34510	30500	26840	23620	18800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

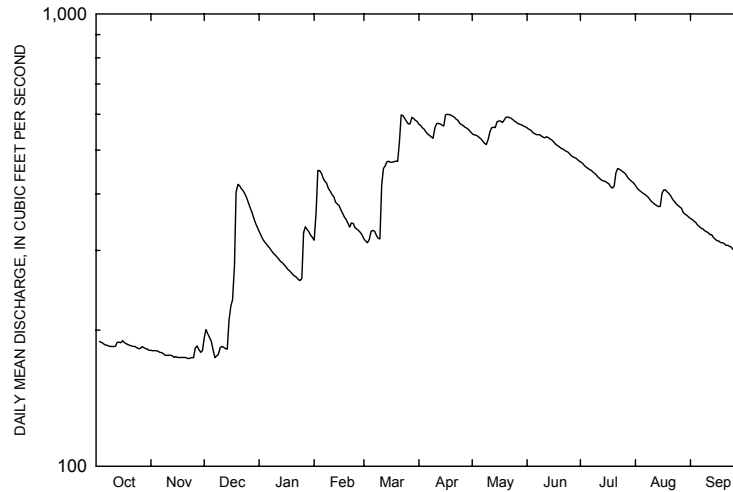
MEAN	269.8	300.4	346.5	360.9	391.3	410.0	437.0	426.8	391.6	339.5	302.0	276.3
MAX	399	473	523	530	540	525	565	568	516	445	389	329
(WY)	1994	1985	1985	1985	1989	1989	1991	1991	2002	2002	2002	1991
MIN	186	190	186	204	254	205	220	228	232	217	208	199
(WY)	2002	1982	1982	2001	2000	1981	1981	2001	2001	2001	2001	2001

WHITE RIVER BASIN

07069190 MAMMOTH SPRING AT MAMMOTH SPRING--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1981 - 2002	
ANNUAL TOTAL	85444		138887			
ANNUAL MEAN	234.1		380.5		358.1	
HIGHEST ANNUAL MEAN					453	1985
LOWEST ANNUAL MEAN					233	2001
HIGHEST DAILY MEAN	420	Dec 18	600	Apr 15	689	Apr 13 1991
LOWEST DAILY MEAN	173	Nov 20	173	Nov 20	173	Nov 20 2001
ANNUAL SEVEN-DAY MINIMUM	174	Nov 15	174	Nov 15	174	Nov 15 2001
MAXIMUM PEAK FLOW			610	Mar 20	706	Apr 13 1991
MAXIMUM PEAK STAGE			4.97	Mar 20	5.13	Apr 13 1991
INSTANTANEOUS LOW FLOW			173	Oct 9	173	<sup>1</sup> Oct 9 2001
ANNUAL RUNOFF (AC-FT)	169500		275500		259400	
10 PERCENT EXCEEDS	334		570		494	
50 PERCENT EXCEEDS	220		380		353	
90 PERCENT EXCEEDS	181		182		233	

<sup>1</sup>Also Dec. 30, 2000 to Jan. 5, 2001



WHITE RIVER BASIN

227

07069297 ROARING SPRING NEAR CHEROKEE VILLAGE

LOCATION.--Lat 36°19'08", long 91°34'31", in NE1/4SE1/4NW1/4 sec.12, T.19 N., R.6 W., Fulton County, Hydrologic Unit 11010010, 0.3 mi upstream from South Fork Spring River, 3.4 mi northwest of Cherokee Village.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June 2001 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	5.44	5.22	4.81
2	---	---	---	---	---	---	---	---	---	5.29	5.21	4.82
3	---	---	---	---	---	---	---	---	---	5.31	5.27	4.82
4	---	---	---	---	---	---	---	---	---	5.49	5.18	4.75
5	---	---	---	---	---	---	---	---	---	5.59	5.22	4.78
6	---	---	---	---	---	---	---	---	---	5.50	5.13	4.78
7	---	---	---	---	---	---	---	---	---	5.57	5.09	4.81
8	---	---	---	---	---	---	---	---	---	5.50	5.04	4.79
9	---	---	---	---	---	---	---	---	---	5.25	5.04	4.78
10	---	---	---	---	---	---	---	---	---	5.30	5.02	4.76
11	---	---	---	---	---	---	---	---	---	5.36	5.04	4.80
12	---	---	---	---	---	---	---	---	---	5.26	5.02	4.82
13	---	---	---	---	---	---	---	---	---	5.24	5.07	4.81
14	---	---	---	---	---	---	---	---	---	5.29	5.05	4.81
15	---	---	---	---	---	---	---	---	---	5.30	5.08	4.83
16	---	---	---	---	---	---	---	---	---	5.28	5.07	4.84
17	---	---	---	---	---	---	---	---	---	5.32	5.08	4.82
18	---	---	---	---	---	---	---	---	---	5.29	5.06	4.86
19	---	---	---	---	---	---	---	---	---	5.25	5.04	4.83
20	---	---	---	---	---	---	---	---	---	5.26	5.03	4.85
21	---	---	---	---	---	---	---	---	---	5.30	5.00	4.86
22	---	---	---	---	---	---	---	---	---	5.25	5.00	4.84
23	---	---	---	---	---	---	---	---	---	5.23	4.94	4.84
24	---	---	---	---	---	---	---	---	---	5.27	4.91	4.79
25	---	---	---	---	---	---	---	---	---	5.24	4.91	4.84
26	---	---	---	---	---	---	---	---	---	5.20	4.83	4.85
27	---	---	---	---	---	---	---	---	---	5.26	4.81	4.89
28	---	---	---	---	---	---	---	---	---	5.33	4.88	4.86
29	---	---	---	---	---	---	---	---	5.37	5.30	4.85	4.84
30	---	---	---	---	---	---	---	---	5.41	5.28	4.89	4.89
31	---	---	---	---	---	---	---	---	---	5.28	4.85	---
TOTAL	---	---	---	---	---	---	---	---	---	165.03	155.83	144.67
MEAN	---	---	---	---	---	---	---	---	---	5.324	5.027	4.822
MAX	---	---	---	---	---	---	---	---	---	5.59	5.27	4.89
MIN	---	---	---	---	---	---	---	---	---	5.20	4.81	4.75
AC-FT	---	---	---	---	---	---	---	---	---	327	309	287

## WHITE RIVER BASIN

## 07069297 ROARING SPRING NEAR CHEROKEE VILLAGE--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.88	4.88	5.05	5.39	6.25	5.73	6.60	6.55	6.27	6.34	5.98	5.83
2	4.88	4.87	5.10	5.40	5.92	5.79	6.52	6.24	6.22	6.29	6.02	5.72
3	4.87	4.88	5.08	5.40	5.90	5.62	6.28	6.22	6.30	6.29	6.33	5.78
4	4.88	4.91	5.12	5.43	5.68	5.67	6.33	6.31	6.51	6.26	6.13	6.18
5	4.83	4.90	5.12	5.42	5.67	5.72	6.29	6.26	6.52	6.04	6.18	6.19
6	4.82	4.89	5.15	5.41	5.72	5.71	6.41	6.28	6.48	6.00	6.22	6.09
7	4.83	4.90	5.16	5.37	5.64	5.73	6.51	6.37	6.48	5.94	6.13	6.04
8	4.88	4.88	5.09	5.51	5.65	5.77	6.83	6.39	6.52	5.89	6.27	5.93
9	4.88	4.91	5.20	5.41	5.68	5.94	6.52	6.26	6.59	5.92	6.26	5.85
10	4.88	4.91	5.12	5.39	5.57	6.13	6.40	6.23	6.70	5.87	6.19	5.80
11	4.90	4.86	5.15	5.38	5.63	6.12	6.58	6.42	6.68	5.89	6.18	6.00
12	4.89	4.88	5.20	5.49	5.73	6.02	6.50	6.35	6.51	5.93	6.21	6.08
13	4.90	4.86	5.17	5.48	5.65	6.16	6.45	6.42	6.54	5.88	5.92	6.16
14	4.85	4.88	5.18	5.42	5.75	6.12	6.60	6.44	6.62	5.90	5.76	6.03
15	4.87	4.87	5.12	5.39	5.76	6.05	6.52	6.41	6.62	5.91	5.73	5.97
16	4.88	4.81	5.38	5.51	5.75	6.05	6.49	6.37	6.46	5.79	5.76	5.94
17	4.88	4.86	5.91	5.41	5.66	6.12	6.48	6.36	6.61	5.80	5.80	6.07
18	4.90	4.95	5.74	5.58	5.67	5.97	6.46	6.65	6.39	6.04	5.92	6.08
19	4.90	4.92	5.48	5.53	5.81	6.41	6.48	6.36	6.31	6.12	5.88	6.00
20	4.89	4.90	5.52	5.58	5.73	7.16	6.43	6.40	6.39	6.05	5.76	6.11
21	4.90	4.92	5.56	5.37	5.71	6.61	6.38	6.50	6.36	6.09	5.72	6.04
22	4.92	4.90	5.66	5.45	5.70	6.43	6.25	6.50	6.68	6.03	5.81	5.93
23	4.90	4.96	5.42	5.43	5.75	6.56	6.40	6.50	6.72	6.14	5.76	5.92
24	4.86	5.04	5.44	5.47	5.80	6.56	6.33	6.59	6.67	6.06	5.88	5.99
25	4.87	4.90	5.50	5.54	5.68	6.56	6.27	6.44	6.48	6.07	5.80	6.17
26	4.82	5.02	5.53	5.53	5.67	6.94	6.27	6.33	6.42	6.07	5.83	6.07
27	4.87	4.93	5.58	5.63	5.69	6.78	6.49	6.36	6.60	6.00	5.83	5.81
28	4.89	5.02	5.52	5.60	5.69	6.77	6.25	6.39	6.60	6.01	5.79	5.88
29	4.89	5.11	5.39	5.55	---	6.66	6.27	6.51	6.35	5.89	5.81	5.96
30	4.90	5.06	5.40	5.63	---	6.54	6.42	6.42	6.29	5.97	5.71	5.85
31	4.90	---	5.45	5.71	---	6.53	---	6.34	---	6.00	5.75	---
TOTAL	151.21	147.58	165.49	169.81	160.51	192.93	193.01	198.17	194.89	186.48	184.32	179.47
MEAN	4.878	4.919	5.338	5.478	5.732	6.224	6.434	6.393	6.496	6.015	5.946	5.982
MAX	4.92	5.11	5.91	5.71	6.25	7.16	6.83	6.65	6.72	6.34	6.33	6.19
MIN	4.82	4.81	5.05	5.37	5.57	5.62	6.25	6.22	6.22	5.79	5.71	5.72
AC-FT	300	293	328	337	318	383	383	393	387	370	366	356

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	4.878	4.919	5.338	5.478	5.733	6.224	6.434	6.393	6.496	5.670	5.486	5.402
MAX	4.88	4.92	5.34	5.48	5.73	6.22	6.43	6.39	6.50	6.02	5.95	5.98
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	4.88	4.92	5.34	5.48	5.73	6.22	6.43	6.39	6.50	5.32	5.03	4.82
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001	2001	2001

WHITE RIVER BASIN

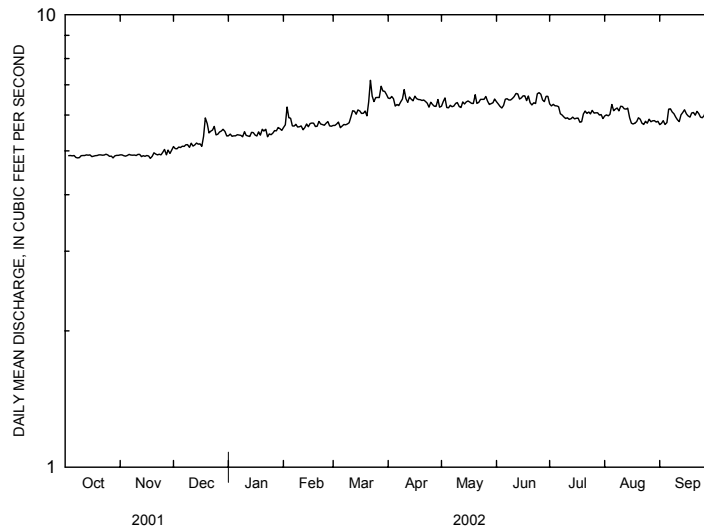
07069297 ROARING SPRING NEAR CHEROKEE VILLAGE--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	2123.87		
ANNUAL MEAN	5.82		5.82
HIGHEST ANNUAL MEAN			5.82 2002
LOWEST ANNUAL MEAN			5.82 2002
HIGHEST DAILY MEAN	7.16	Mar 20	7.16 Mar 20 2002
LOWEST DAILY MEAN	4.81	Nov 16	4.75 Sep 4 2001
ANNUAL SEVEN-DAY MINIMUM	4.9	Oct 1	4.8 Sep 4 2001
MAXIMUM PEAK FLOW	7.4	Mar 20	7.4 Mar 20 2002
MAXIMUM PEAK STAGE	17.37	Mar 20	17.37 Mar 20 2002
INSTANTANEOUS LOW FLOW	4.6	Nov 17	4.6 Nov 17 2001
ANNUAL RUNOFF (AC-FT)	4220		4220
10 PERCENT EXCEEDS	6.5		6.5
50 PERCENT EXCEEDS	5.9		5.9
90 PERCENT EXCEEDS	4.9		4.9



## WHITE RIVER BASIN

## 07069305 SPRING RIVER AT TOWN BRANCH BRIDGE AT HARDY

LOCATION.--Lat 36°18'49", long 91°28'58", in NE1/4SW1/4 sec.11, T.19 N., R.5 W., Sharp County, Hydrologic Unit 11010100, on left upstream abutment of Town Branch bridge in Hardy, 800 ft south of Highway 634/412 (downtown Hardy).

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	281	447	569	10200	741	2050	2190	1280	796	744	486
2	206	289	391	538	3000	796	1880	1790	1230	780	714	476
3	210	283	356	521	2120	947	1780	1550	1170	775	689	478
4	233	281	324	502	1770	999	1680	1410	1150	758	668	468
5	248	276	304	498	1540	951	1600	1340	1250	739	644	464
6	231	279	326	518	1450	917	1550	1290	1500	724	638	460
7	222	280	317	487	1340	882	1540	1560	1310	709	620	456
8	220	275	351	469	1260	858	6680	3770	1190	694	608	456
9	218	264	363	452	1200	6080	5130	5190	1280	669	590	449
10	240	272	349	441	1130	5150	2860	3060	3330	676	580	443
11	276	266	335	426	1050	2510	2370	2170	1660	685	570	444
12	248	264	350	418	999	3660	2190	1900	1370	950	563	444
13	297	264	356	415	951	2600	2600	5600	1270	813	657	436
14	279	270	489	402	910	2110	7320	3950	1210	727	1110	448
15	269	267	533	391	879	1860	3720	2470	1130	719	e891	470
16	258	262	2800	382	839	1920	2610	2140	1100	689	e752	441
17	258	258	9270	385	805	1970	2360	3460	1080	678	e688	480
18	255	257	3540	378	776	1660	2140	6740	1050	2530	e646	464
19	253	275	1980	389	924	6530	1970	2950	1010	5590	e621	457
20	253	270	1520	377	1280	16300	1870	2370	974	2220	e594	511
21	252	269	1270	363	1080	6810	1780	2080	948	1510	e579	470
22	257	261	1130	367	984	3600	1670	1920	922	1190	e558	454
23	256	254	1020	738	924	2910	1610	1770	901	1120	e544	460
24	277	298	925	5710	876	2540	1560	1670	884	1030	e533	436
25	286	288	848	1940	848	5670	1490	1590	880	951	e494	426
26	281	303	800	1380	820	9440	1450	1520	864	882	e512	425
27	293	304	743	1150	786	4260	1420	1470	845	839	e526	417
28	294	414	699	969	755	3210	1400	1490	841	803	531	413
29	292	550	659	886	---	2760	1330	1490	850	771	518	407
30	286	604	625	839	---	2440	1780	1420	821	789	505	411
31	284	---	597	4500	---	2210	---	1350	---	777	496	---
TOTAL	7937	8978	34017	27800	41496	105291	71390	74670	35300	33583	19383	13550
MEAN	256	299	1097	897	1482	3396	2380	2409	1177	1083	625	452
MAX	297	604	9270	5710	10200	16300	7320	6740	3330	5590	1110	511
MIN	205	254	304	363	755	741	1330	1290	821	669	494	407
AC-FT	15740	17810	67470	55140	82310	208800	141600	148100	70020	66610	38450	26880



WHITE RIVER BASIN

07069305 SPRING RIVER AT TOWN BRANCH BRIDGE AT HARDY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

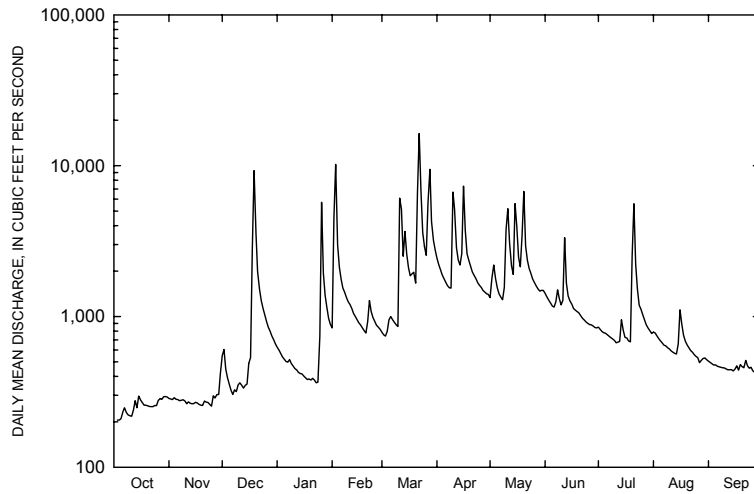
MEAN	287	322	1079	892	1446	3227	2309	2352	1120	998	533	456
MAX	287	322	1079	892	1446	3227	2309	2352	1120	998	533	456
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	287	322	1079	892	1446	3227	2309	2352	1120	998	533	456
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL TOTAL	457082
ANNUAL MEAN	1252
HIGHEST DAILY MEAN	16300 Mar 20
LOWEST DAILY MEAN	205 Oct 1
ANNUAL SEVEN-DAY MINIMUM	270 Oct 1
MAXIMUM PEAK FLOW	19300 Mar 20
MAXIMUM PEAK STAGE	11.48 Mar 20
INSTANTANEOUS LOW FLOW	182 Aug 26
ANNUAL RUNOFF (AC-FT)	906600
10 PERCENT EXCEEDS	2630
50 PERCENT EXCEEDS	739
90 PERCENT EXCEEDS	299

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07069500 SPRING RIVER AT IMBODEN

**LOCATION.**--Lat 36°12'19", long 91°10'19", in SE1/4NE1/4 sec.15, T.18 N., R.2 W., Randolph County, Hydrologic Unit 11010010, near left bank on downstream side of bridge on U.S. Highway 62 at Imboden, 1.8 mi upstream from Harding Creek, 3.9 mi downstream from Janes Creek, 8.2 mi upstream from Eleven Point River, and at mile 12.1.

**DRAINAGE AREA.**--1,183 mi<sup>2</sup>.

**PERIOD OF RECORD.**--February 1936 to September 1994, October 2001 to current year. Annual maximum 1995-2001.

**GAGE.**--Water-stage recorder. Datum of gage is 254.07 ft above NGVD of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	314	1150	830	14800	1020	2670	2620	1510	885	900	593
2	292	397	845	769	6350	1040	2480	2240	1440	863	860	588
3	291	472	709	745	3090	1140	2260	1860	1380	849	824	579
4	298	370	627	718	2470	1190	2120	1700	1330	848	803	570
5	321	348	574	707	2120	1180	2000	1590	1460	823	778	560
6	331	335	612	752	1950	1140	1930	1530	1790	807	759	551
7	299	329	685	718	1800	1110	1870	2970	1540	790	746	545
8	293	328	1410	685	1680	1080	4420	2750	1370	775	721	544
9	293	321	845	671	1590	4210	8180	6610	1300	760	705	540
10	321	317	718	654	1510	7840	3660	3790	2820	754	692	533
11	618	321	648	637	1400	3230	2910	2700	2110	751	682	527
12	400	316	720	620	1330	5660	2650	2290	1580	928	672	522
13	440	314	890	609	1270	3840	4280	4710	1440	1010	727	518
14	505	328	1170	603	1200	2890	8830	6370	1360	857	908	512
15	407	340	1150	587	1160	2500	7520	3260	1270	847	1170	547
16	379	340	7780	578	1120	2420	3750	2610	1220	e826	924	524
17	350	337	20500	574	1080	2510	3120	6020	1210	801	844	603
18	343	336	8380	578	1040	2120	2800	8770	1160	785	803	553
19	340	342	3230	590	1140	5420	2520	4400	1130	2150	781	550
20	338	345	2310	568	2430	20000	2360	3030	1090	9810	742	682
21	333	336	1900	557	1780	15300	2230	2590	1060	3100	719	611
22	326	334	1670	557	1520	5480	2080	2340	1030	1930	700	556
23	324	332	1510	676	1390	4000	1950	2140	1000	1520	685	532
24	326	375	1360	10500	1300	3380	1890	1990	980	1270	686	533
25	333	375	1230	3600	1240	6640	1810	1890	982	1160	677	513
26	313	383	1170	2210	1170	22600	1730	1810	968	1080	658	508
27	309	429	1090	1800	1100	8210	1690	1720	951	1020	646	506
28	313	825	1030	1560	1050	4810	1690	1720	929	964	632	501
29	313	2470	974	1380	---	3890	1600	1750	937	918	623	498
30	314	2760	912	1290	---	3310	1830	1660	909	910	614	492
31	314	---	870	3540	---	2960	---	1590	---	936	603	---
TOTAL	10670	15469	68669	40863	61080	152120	90830	93020	39256	41727	23284	16391
MEAN	344.2	515.6	2215	1318	2181	4907	3028	3001	1309	1346	751.1	546.4
MAX	618	2760	20500	10500	14800	22600	8830	8770	2820	9810	1170	682
MIN	291	314	574	557	1040	1020	1600	1530	909	751	603	492
AC-FT	21160	30680	136200	81050	121200	301700	180200	184500	77860	82770	46180	32510
CFSM	0.29	0.44	1.87	1.11	1.84	4.15	2.56	2.54	1.11	1.14	0.63	0.46
IN.	0.34	0.49	2.16	1.28	1.92	4.78	2.86	2.93	1.23	1.31	0.73	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-94, 2002, BY WATER YEAR (WY)

MEAN	603.8	1159	1524	1681	1874	2346	2484	2088	1191	781.5	577.5	586.6
MAX	2197	4396	10660	6945	6241	6607	8443	6841	6451	2716	1504	1718
(WY)	1985	1974	1983	1949	1989	1945	1973	1961	1945	1951	1950	1993
MIN	281	296	297	286	346	488	505	483	356	342	287	278
(WY)	1957	1955	1956	1956	1963	1941	1981	1941	1941	1941	1954	1954

WHITE RIVER BASIN

07069500 SPRING RIVER AT IMBODEN--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

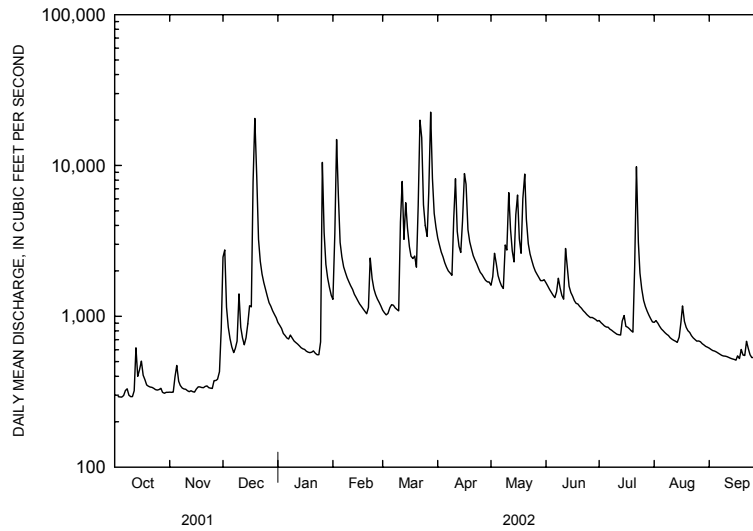
WATER YEARS 1936-94,2002

ANNUAL TOTAL	653379			
ANNUAL MEAN	1790		1408	
HIGHEST ANNUAL MEAN			2793	1973
LOWEST ANNUAL MEAN			466	1981
HIGHEST DAILY MEAN	22600	Mar 26	112000	Dec 3 1982
LOWEST DAILY MEAN	291	Oct 3	215	Aug 1 1936
ANNUAL SEVEN-DAY MINIMUM	304	Oct 1	253	Sep 16 1941
MAXIMUM PEAK FLOW	29200	Mar 26	<sup>1</sup> 244000	Dec 3 1982
MAXIMUM PEAK STAGE	21.39	Mar 26	<sup>2</sup> 38.12	Dec 3 1982
INSTANTANEOUS LOW FLOW	290	Oct 2-4,10		
ANNUAL RUNOFF (AC-FT)	1296000		1020000	
ANNUAL RUNOFF (CFSM)	1.51		1.19	
ANNUAL RUNOFF (INCHES)	20.55		16.17	
10 PERCENT EXCEEDS	3560		2640	
50 PERCENT EXCEEDS	980		801	
90 PERCENT EXCEEDS	338		375	

<sup>1</sup>From rating curve extended above 78,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow

<sup>2</sup>From floodmarks

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07072000 ELEVEN POINT RIVER NEAR RAVENDEN SPRINGS

**LOCATION.**--Lat 36°20'48", long 91°06'48", in SE1/4SE1/4 sec.30, T.20 N., R.1 W., Randolph County, Hydrologic Unit 11010010, on right bank at upstream side of bridge on State Highway 90, 0.9 mi downstream from Hinch Creek, 1.9 mi upstream from Eassis Creek, 6.6 mi northeast of Ravenden Springs and at mile 21.2.

**DRAINAGE AREA.**--1,134 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1929 to September 1933, October 1935 to September 1994, October 2000 to current year. Annual maximum water years 1995-2000. Prior to October 1949, published as "near Elevenpoint." Monthly discharge only for some periods, published in WSP 1311.

**REVISED RECORDS.**--WSP 877: 1930-33, 1936-38. WSP 977: 1933, 1937-39, 1942 WDR Ark. 1973: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 291.98 ft above NGVD of 1929. Prior to Nov. 21, 1938, non-recording gage at present site at datum 0.04 ft higher. Nov. 21 to Dec. 11, 1938, non-recording gage at present site and datum.

**REMARKS.**--Records good except estimated discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	313	605	644	3580	948	2660	1880	1960	1200	1180	893
2	362	325	510	618	2680	953	2500	1820	1900	1180	1110	884
3	358	317	454	596	2330	962	2360	1760	1850	1170	1070	873
4	356	305	419	576	1960	978	2200	1710	1800	1150	1050	866
5	380	300	393	563	1720	982	2090	1670	1820	1140	1030	857
6	386	298	402	575	1580	971	2000	1630	1880	1120	1020	847
7	365	293	398	545	1490	960	1950	1800	1760	1110	1010	843
8	358	293	458	525	1380	948	3080	2840	1690	1090	990	836
9	356	288	448	514	1320	2000	5710	16700	1700	1080	976	831
10	382	283	426	502	1260	3190	3920	11400	1860	1070	967	823
11	488	282	406	489	1210	2570	3160	4230	1690	1080	958	817
12	407	280	430	475	1160	3060	2840	3350	1620	1270	950	816
13	451	276	453	466	1120	2610	2730	4760	1600	1200	982	808
14	452	276	613	458	1080	2340	6680	8170	1560	1090	1560	803
15	414	276	611	446	1050	2150	8710	4510	1510	1600	1620	811
16	397	276	2740	436	1020	2160	4540	3480	1490	1250	1260	813
17	382	267	e7100	432	989	2480	3640	4640	1490	1110	1160	828
18	372	264	e3000	426	963	2170	3210	8560	1470	1120	1120	808
19	368	272	e2000	434	1020	3540	2910	5530	1430	2370	1070	802
20	367	270	1560	422	1450	e11400	2700	3970	1400	2040	1050	857
21	365	262	1320	414	1260	e10700	2550	3390	1370	1640	1020	819
22	359	262	1180	413	1200	e5300	2410	3040	1340	1400	997	793
23	355	264	1070	603	1140	e3900	2280	2820	1320	1300	977	777
24	348	300	988	4180	1110	e3400	2220	2640	1300	1250	1070	769
25	348	301	924	1730	1080	e5500	2120	2500	1320	1210	1080	762
26	331	307	870	1380	1040	e13000	2040	2370	1280	1170	990	759
27	322	313	828	1210	999	e6000	2000	2270	1260	1140	966	758
28	320	405	788	1110	972	e4400	2010	2500	1250	1120	945	753
29	317	725	748	1040	---	e3600	1910	2260	1250	1090	928	747
30	316	1040	706	994	---	3200	1930	2110	1230	1090	915	739
31	313	---	672	2200	---	2900	---	2030	---	2020	904	---
TOTAL	11460	9933	33520	25416	39163	109272	91060	122340	46400	39870	32925	24392
MEAN	369.7	331.1	1081	819.9	1399	3525	3035	3946	1547	1286	1062	813.1
MAX	488	1040	7100	4180	3580	13000	8710	16700	1960	2370	1620	893
MIN	313	262	393	413	963	948	1910	1630	1230	1070	904	739
AC-FT	22730	19700	66490	50410	77680	216700	180600	242700	92030	79080	65310	48380
CFSM	0.33	0.29	0.95	0.72	1.23	3.11	2.68	3.48	1.36	1.13	0.94	0.72
IN.	0.38	0.33	1.10	0.83	1.28	3.58	2.99	4.01	1.52	1.31	1.08	0.80

WHITE RIVER BASIN

07072000 ELEVEN POINT RIVER NEAR RAVENDEN SPRINGS--CONTINUED

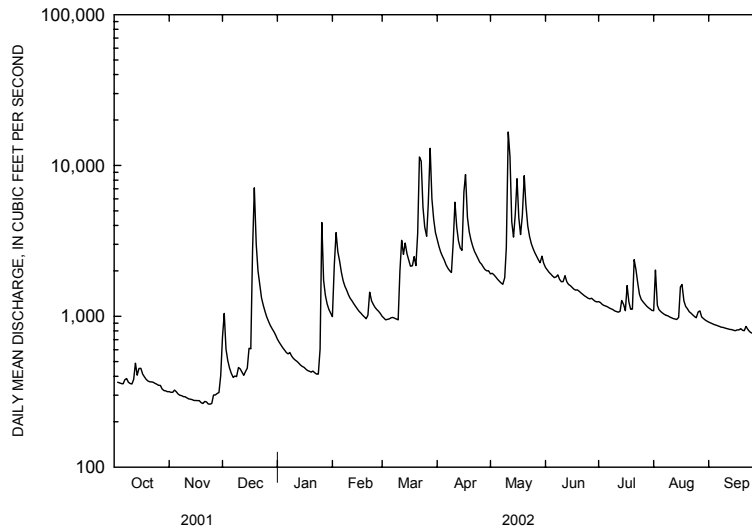
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-33, 1936-94, 2001-02, BY WATER YEAR (WY)

MEAN	590.7	865.8	1077	1278	1361	1673	1948	1731	1184	834.2	672.1	616.0
MAX	1515	3028	6625	4757	3833	4603	6204	4528	4550	2105	1147	1666
(WY)	1985	1959	1983	1949	1950	1945	1973	1973	1945	1951	1946	1975
MIN	272	284	276	266	354	419	440	446	355	311	269	291
(WY)	1957	1957	1956	1956	1963	1981	1981	2001	1936	1936	1936	1956

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1930-33, 1936-94, 2001-02

ANNUAL TOTAL	203272		585751			
ANNUAL MEAN	556.9		1605		1151	
HIGHEST ANNUAL MEAN					2326 1973	
LOWEST ANNUAL MEAN					435 1981	
HIGHEST DAILY MEAN	7100	Dec 17	16700	May 9	53500	Dec 3 1982
LOWEST DAILY MEAN	262	Nov 21	262	Nov 21	226	Sep 9 1936
ANNUAL SEVEN-DAY MINIMUM	266	Nov 17	266	Nov 17	241	Aug 25 1936
MAXIMUM PEAK FLOW			25500	May 9	<sup>1</sup> 162000	Dec 3 1982
MAXIMUM PEAK STAGE			17.85	May 9	<sup>2</sup> 29.06	Dec 3 1982
INSTANTANEOUS LOW FLOW			259	Nov 21	<sup>3</sup> 226	Sep 9 1936
ANNUAL RUNOFF (AC-FT)	403200		1162000		833600	
ANNUAL RUNOFF (CFSM)	0.49		1.42		1.01	
ANNUAL RUNOFF (INCHES)	6.67		19.22		13.79	
10 PERCENT EXCEEDS	871		3170		2090	
50 PERCENT EXCEEDS	433		1080		808	
90 PERCENT EXCEEDS	316		356		399	

<sup>1</sup>From rating curve extended above 23,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow  
<sup>2</sup>From floodmark  
<sup>3</sup>Observed  
<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07072500 BLACK RIVER AT BLACK ROCK

**LOCATION.**--Lat 36°06'15", long 91°05'50", in NW<sub>1/4</sub> sec.21, T.17 N., R.1 W., Lawrence County, Hydrologic Unit 11010009, on right bank beneath U.S. Highway 63 bridge at Black Rock, 3.7 mi downstream from Spring River, and at mile 69.3.

**DRAINAGE AREA.**--7,369 mi<sup>2</sup>.

**PERIOD OF RECORD.**--June 1929 to September 1931, October 1939 to current year. Gage-height records collected since 1904 in same vicinity are contained in reports of National Weather Service.

**REVISED RECORDS.**--WSP 1211: 1930-31. WRD Ark. 1973: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 229.56 ft above NGVD of 1929. Prior to Aug. 1, 1946, nonrecording gage at site 900 ft upstream at same datum. Aug. 1, 1946, to Aug. 17, 1978, nonrecording gage at site 650 ft upstream at same datum.

**REMARKS.**--No estimated daily discharges. Records good. Some regulation by Clearwater Lake (Missouri), since June 3, 1948, 189 mi upstream, capacity, 413,700 acre-ft. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Aug. 21, 1915, reached a stage of 31.9 ft, from records of National Weather Service, discharge, 160,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2250	2250	10100	12400	23700	7720	34500	15000	20300	8570	9630	4590
2	2180	2350	8280	10700	28500	7540	32200	14600	18800	8390	10300	4420
3	2150	2820	7010	9380	25400	7530	29600	13800	17300	8270	9400	4250
4	2130	2520	6120	8470	23600	7500	27200	13100	15900	8160	8260	4060
5	2170	2410	5470	7880	22400	7490	24800	12500	14700	8070	7650	3900
6	2240	2350	5360	7550	21500	7530	22600	12000	15500	7960	7250	3780
7	2220	2330	5700	7260	20500	7470	20800	12500	14400	7840	6920	3690
8	2180	2340	8160	6840	19500	7300	20000	14100	13200	7710	6550	3640
9	2190	2360	7700	6400	18200	8830	23400	18100	12200	7570	6080	3610
10	2250	2360	7060	5940	16700	15900	23700	27200	12400	7480	5530	3590
11	3080	2360	6510	5470	15000	16500	22300	28900	13300	7490	5040	3540
12	2950	2370	6240	5040	13300	19100	21600	27300	12600	7590	4710	3500
13	3000	2380	6710	4710	11800	20300	21800	33200	12200	8470	4620	3460
14	3670	2400	7890	4450	10800	19800	24000	44700	12200	8600	5010	3430
15	3820	2430	8810	4250	9920	18900	29900	48000	12500	8660	6330	3440
16	3650	2430	16100	4100	9350	18100	29700	44500	12500	9500	5980	3450
17	3410	2430	33800	3980	8890	17400	26700	48800	12200	9660	5610	3560
18	3270	2440	39700	3880	8480	16500	25000	54400	11900	9520	5430	3570
19	3130	2450	31900	3850	8310	17400	23700	53700	11500	15000	5480	3640
20	2910	2440	28200	3800	10800	28900	22500	49300	11200	18500	5200	5370
21	2690	2380	26800	3760	11600	43800	21600	51300	10800	14400	4970	7720
22	2550	2320	26700	3740	11300	41500	20600	51600	10400	12300	4790	7980
23	2470	2290	27200	4000	10800	34400	19600	47800	10000	11300	4650	7200
24	2410	2400	27100	13000	10100	31500	18600	43200	9740	10100	4620	6240
25	2350	2410	26100	18600	9330	31900	17600	38700	9520	9230	5290	5590
26	2300	2440	24500	16700	8760	52800	16700	34600	9390	8640	6230	5280
27	2280	2660	22600	15200	8310	53800	16200	31000	9240	8260	6020	5170
28	2270	3560	20700	13500	7980	45400	15800	28200	9000	7980	5570	5030
29	2260	6640	18700	12000	---	41600	15200	26000	8860	7740	5270	4740
30	2250	11500	16600	11200	---	38900	14600	23800	8750	7580	5040	4340
31	2250	---	14400	13000	---	36900	---	21900	---	8050	4800	---
TOTAL	80930	86820	508220	251050	404830	730210	682500	983800	372500	288590	188230	135780
MEAN	2611	2894	16390	8098	14460	23560	22750	31740	12420	9309	6072	4526
MAX	3820	11500	39700	18600	28500	53800	34500	54400	20300	18500	10300	7980
MIN	2130	2250	5360	3740	7980	7300	14600	12000	8750	7480	4620	3430
AC-FT	160500	172200	1008000	498000	803000	1448000	1354000	1951000	738900	572400	373400	269300

WHITE RIVER BASIN

07072500 BLACK RIVER AT BLACK ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2002, BY WATER YEAR (WY)

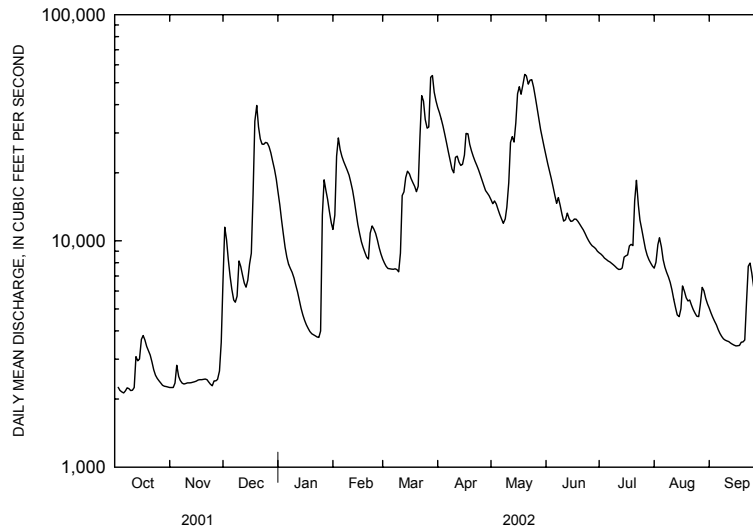
MEAN	3941	6521	9377	10510	11440	13790	15510	13550	7704	5216	4052	3789
MAX	11570	23020	44020	40410	36240	30410	42280	36370	18890	17630	9130	7630
(WY)	1985	1973	1983	1950	1989	1979	1973	1961	1957	1951	1998	1975
MIN	1797	1984	2042	1998	2650	3784	3721	2921	2515	2216	2028	1853
(WY)	1957	1957	1956	1956	1963	1981	1981	2001	2001	2001	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	1842210		4713460			
ANNUAL MEAN	5047		12910		18768	
HIGHEST ANNUAL MEAN					17330 1973	
LOWEST ANNUAL MEAN					3552 1954	
HIGHEST DAILY MEAN	39700	Dec 18	54400	May 18	123000	Dec 5 1982
LOWEST DAILY MEAN	1960	Jul 18	2130	Oct 4	1730	Sep 18 1956
ANNUAL SEVEN-DAY MINIMUM	2000	Jul 13	2180	Oct 2	1730	Sep 22 1956
MAXIMUM PEAK FLOW			60400	Mar 26	<sup>2</sup> 190000 Dec 4 1982	
MAXIMUM PEAK STAGE			25.52	Mar 26	<sup>3</sup> 31.51 Dec 4 1982	
ANNUAL RUNOFF (AC-FT)	3654000		9349000		6352000	
10 PERCENT EXCEEDS	11500		28700		19000	
50 PERCENT EXCEEDS	2790		8640		5690	
90 PERCENT EXCEEDS	2160		2430		2670	

<sup>1</sup>Prior to regulation, water years 1930-31 and 1940-47, 7,854 ft<sup>3</sup>/s

<sup>2</sup>From rating curve extended above 105,000 ft<sup>3</sup>/s

<sup>3</sup>From floodmarks



## WHITE RIVER BASIN

## 07073595 EVENING SHADE SPRING NEAR EVENING SHADE

LOCATION.--Lat 36°03'25", long 91°36'31", in NE1/4NE1/4NE1/4 sec.10, T.16 N., R.6 W., Sharp County, Hydrologic Unit 11010012, 250 ft east of U.S. Highway 167, 300 ft upstream from Mill Creek, and 1.2 mi south of Evening Shade.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.50	1.17	---	---	1.11	1.50	1.19	1.20	1.77	1.41	1.45
2	---	1.58	1.10	---	---	1.11	1.52	1.10	1.27	1.79	1.71	1.22
3	---	1.59	1.10	---	---	1.16	1.49	1.10	1.30	1.80	1.76	1.24
4	---	1.60	1.11	---	---	1.19	1.43	1.10	1.30	1.86	1.88	1.30
5	---	1.60	1.13	---	---	1.19	1.46	1.10	1.39	1.88	1.86	1.30
6	---	1.69	1.13	---	---	1.20	1.50	1.10	1.52	1.91	1.71	1.30
7	---	1.80	1.13	---	---	1.20	1.50	1.16	1.48	1.92	1.80	1.27
8	---	1.80	1.10	---	---	1.20	1.51	1.15	1.52	1.88	1.84	1.16
9	---	1.79	1.10	---	---	1.26	1.50	1.16	1.62	1.81	1.88	1.22
10	---	1.77	1.10	---	---	1.28	1.52	1.19	1.65	1.75	1.44	1.20
11	---	1.77	1.11	---	---	1.27	1.57	1.20	1.73	1.83	1.49	1.17
12	---	1.78	1.10	---	---	1.28	1.52	1.19	1.78	1.87	1.40	1.15
13	---	1.74	1.10	---	---	1.32	1.50	1.19	1.73	1.94	1.43	1.19
14	---	1.58	1.10	---	---	1.33	1.46	1.20	1.79	2.00	1.24	1.21
15	---	1.54	---	---	---	1.39	1.32	1.20	1.99	2.04	1.28	1.20
16	---	1.50	---	---	2.12	1.40	1.32	1.20	1.99	2.14	1.27	1.26
17	---	1.50	---	---	1.51	1.38	1.35	1.23	1.91	2.16	1.10	1.30
18	---	1.50	---	---	1.33	1.39	1.40	1.12	1.95	1.86	1.12	1.31
19	---	1.48	---	---	1.30	1.42	1.40	1.16	2.00	2.00	1.10	1.40
20	1.56	1.40	---	---	1.13	1.47	1.40	1.22	1.93	2.00	1.10	1.39
21	1.53	1.40	---	---	1.00	1.44	1.40	1.29	1.89	1.94	1.18	1.37
22	1.52	1.40	---	---	1.00	1.47	1.40	1.30	1.83	1.97	1.35	1.35
23	1.59	1.40	---	---	1.00	1.42	1.40	1.30	1.77	2.29	1.45	1.11
24	1.60	1.46	---	---	1.09	1.44	1.30	1.30	1.72	2.11	1.60	1.15
25	1.60	1.51	---	---	1.18	1.47	1.28	1.30	1.72	2.03	1.57	1.18
26	1.57	1.40	---	---	1.10	1.50	1.20	1.31	1.66	1.76	1.30	1.20
27	1.40	1.38	---	---	1.10	1.50	1.20	1.34	1.70	1.75	1.40	1.22
28	1.40	1.30	---	---	1.10	1.51	1.20	1.26	1.76	1.78	1.40	1.22
29	1.46	1.24	---	---	---	1.58	1.11	1.10	1.76	1.70	1.40	1.29
30	1.52	1.21	---	---	---	1.56	1.16	1.10	1.76	1.69	1.43	1.27
31	1.50	---	---	---	---	1.53	---	1.17	---	1.35	1.49	---
TOTAL	---	46.21	---	---	---	41.97	41.82	37.03	50.62	58.58	45.39	37.60
MEAN	---	1.540	---	---	---	1.354	1.394	1.195	1.687	1.890	1.464	1.253
MAX	---	1.80	---	---	---	1.58	1.57	1.34	2.00	2.29	1.88	1.45
MIN	---	1.21	---	---	---	1.11	1.11	1.10	1.20	1.35	1.10	1.11
AC-FT	---	92	---	---	---	83	83	73	100	116	90	75





WHITE RIVER BASIN

07073595 EVENING SHADE SPRING NEAR EVENING SHADE--CONTINUED

SUMMARY STATISTICS

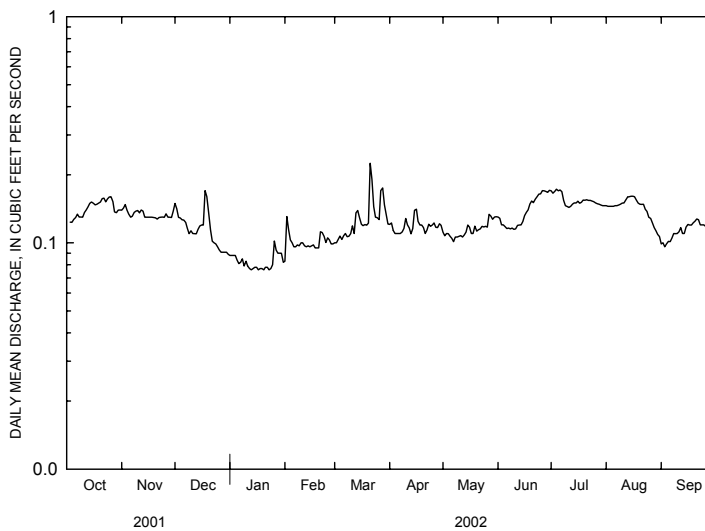
FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	451.64		
ANNUAL MEAN	1.24		1.24
HIGHEST ANNUAL MEAN			1.24 2002
LOWEST ANNUAL MEAN			1.24 2002
HIGHEST DAILY MEAN	2.25	Mar 19	2.29 Jul 23 2001
LOWEST DAILY MEAN	0.76	Jan 11	0.76 Jan 11 2002
ANNUAL SEVEN-DAY MINIMUM	0.77	Jan 15	0.77 Jan 15 2002
MAXIMUM PEAK STAGE	<sup>1</sup> 8.21	Dec 16	<sup>1</sup> 8.21 Dec 16 2001
INSTANTANEOUS LOW FLOW	0.74	at times	0.74 at times
ANNUAL RUNOFF (AC-FT)	896		896
10 PERCENT EXCEEDS	1.5		1.5
50 PERCENT EXCEEDS	1.2		1.2
90 PERCENT EXCEEDS	0.93		0.93

<sup>1</sup>Backwater around pumphouse during flood event

<sup>e</sup>Estimated



WHITE RIVER BASIN

241

07074000 STRAWBERRY RIVER NEAR POUGHKEEPSIE

LOCATION.--Lat 36°06'37", long 91°26'59", in SE1/4NW1/4 sec.19, T.17 N., R.4 W., Sharp County, Hydrologic Unit 11010012, on left bank 250 ft upstream from bridge on State Highway 58, 0.5 mi downstream from Hurricane Creek, 2.5 mi northeast of Poughkeepsie, and at mile 35.9.

DRAINAGE AREA.--473 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1936 to September 1994, October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	58	684	293	7270	354	1040	870	334	105	122	69
2	47	66	412	270	2140	366	889	642	302	107	114	70
3	46	116	307	253	1330	429	767	510	276	110	108	69
4	44	94	250	238	1030	434	675	443	255	99	103	67
5	56	88	212	231	837	377	615	399	267	96	99	67
6	64	79	237	257	754	355	568	367	295	92	99	64
7	55	74	396	253	701	337	539	645	267	89	97	62
8	51	71	1350	239	707	321	1470	690	247	85	91	63
9	49	68	636	227	663	2140	1750	683	227	82	86	63
10	52	66	447	218	593	2200	1020	801	260	80	84	62
11	78	66	355	208	527	1390	825	622	282	78	81	61
12	71	64	368	197	482	3820	864	524	243	94	80	61
13	97	63	486	190	445	1880	3020	1760	224	278	88	60
14	112	63	642	181	408	1280	4490	1540	210	140	137	59
15	107	63	703	172	382	1080	1840	844	191	137	115	63
16	117	63	8320	164	359	1060	1280	674	184	104	101	68
17	96	63	17300	161	333	826	1050	2500	182	96	105	94
18	83	63	5600	157	310	725	927	2290	168	434	110	79
19	75	66	1980	169	598	3620	807	1130	160	784	98	73
20	71	65	1320	161	1810	11000	724	853	155	504	91	95
21	68	64	1030	156	1010	4470	659	702	146	309	87	98
22	65	62	859	161	743	1940	597	601	137	231	82	85
23	63	62	738	256	627	1440	550	528	130	189	84	73
24	63	78	630	5030	558	1170	526	473	127	166	88	66
25	63	73	553	1890	504	5320	482	522	127	150	86	63
26	60	75	498	1080	452	16000	446	616	128	139	81	63
27	59	84	449	825	406	4380	426	434	128	136	79	63
28	58	330	413	687	373	2120	413	413	118	125	75	62
29	58	1220	380	592	---	1600	385	480	116	116	73	60
30	58	1490	342	536	---	1280	719	446	110	120	74	59
31	59	---	315	2970	---	1200	---	376	---	131	69	---
TOTAL	2092	4957	48212	18422	26352	74914	30363	24378	5996	5406	2887	2061
MEAN	67.5	165	1555	594	941	2417	1012	786	200	174	93.1	68.7
MAX	117	1490	17300	5030	7270	16000	4490	2500	334	784	137	98
MIN	44	58	212	156	310	321	385	367	110	78	69	59
AC-FT	4150	9830	95630	36540	52270	148600	60230	48350	11890	10720	5730	4090
CFSM	0.14	0.35	3.29	1.26	1.99	5.11	2.14	1.66	0.42	0.37	0.20	0.15
IN.	0.16	0.39	3.79	1.45	2.07	5.89	2.39	1.92	0.47	0.43	0.23	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-94, 2002, BY WATER YEAR (WY)

MEAN	184	427	579	691	783	961	918	687	341	179	118	160
MAX	1190	2324	3117	4369	3194	3219	3706	2274	2892	1286	694	1050
(WY)	1985	1952	1983	1949	1989	1945	1957	1961	1945	1949	1975	1965
MIN	42.3	56.0	53.3	63.5	86.1	122	136	109	58.7	60.2	44.0	45.1
(WY)	1957	1957	1956	1944	1963	1941	1963	1941	1941	1936	1936	1944

WHITE RIVER BASIN

0707400 STRAWBERRY RIVER NEAR POUGHKEEPSIE--CONTINUED

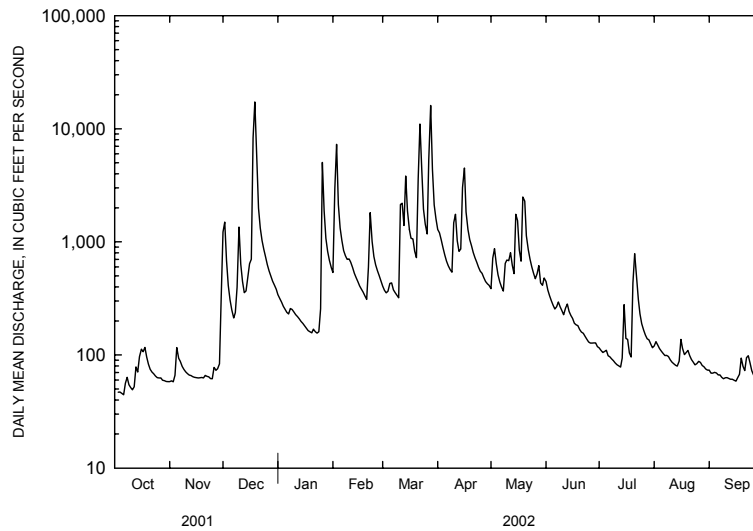
SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1936-94, 2002

ANNUAL TOTAL	246040			
ANNUAL MEAN	674		502	
HIGHEST ANNUAL MEAN			1084	1945
LOWEST ANNUAL MEAN			163	1981
HIGHEST DAILY MEAN	17300	Dec 17	42000	Dec 3 1982
LOWEST DAILY MEAN	44	Oct 4	31	Oct 4 1938
ANNUAL SEVEN-DAY MINIMUM	51	Oct 1	34	Oct 4 1994
MAXIMUM PEAK FLOW	20600	Dec 17	158000	Dec 3 1982
MAXIMUM PEAK STAGE	20.44	Dec 17	<sup>1</sup> 35.90	Dec 3 1982
INSTANTANEOUS LOW FLOW	31	Oct 1	31	Oct 1 2001
ANNUAL RUNOFF (AC-FT)	488000		363400	
ANNUAL RUNOFF (CFSM)	1.43		1.06	
ANNUAL RUNOFF (INCHES)	19.35		14.41	
10 PERCENT EXCEEDS	1340		960	
50 PERCENT EXCEEDS	239		190	
90 PERCENT EXCEEDS	63		60	

<sup>1</sup>From floodmarks



WHITE RIVER BASIN

243

07074420 BLACK RIVER AT ELGIN FERRY

LOCATION.--Lat 35°45'51", long 91°17'40", in NW1/4SE1/4 sec.15, T.13 N., R.3 W., Jackson County, Hydrologic Unit 11010009, on left bank 1,800 ft upstream from State Highway 37 bridge at Elgin Ferry.

DRAINAGE AREA.--8,418 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1999 to current year. Annual maximum water years 1979-98.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above NGVD of 1929.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4, 1982, reached a stage of 27.7 ft, from floodmarks, discharge unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2700	2690	13400	19600	17100	9490	40200	16500	26000	e9620	9720	7260
2	2630	2690	11800	16100	22500	9070	37300	16600	24200	e9450	10400	7170
3	2550	2950	9640	12700	e24800	8780	35100	16000	22700	e9280	10600	7080
4	2500	3300	8160	10700	e25900	8620	33400	14900	21300	e9190	10200	e7060
5	2470	3130	7200	9580	e26400	8660	32400	14000	19600	e9150	9550	e6790
6	2520	2960	6700	9050	e26700	8710	31200	13300	17900	e8950	9120	e6640
7	2590	2860	7040	e8680	e26900	8560	30300	12800	16900	e8800	8890	e6540
8	2580	2810	8950	e8270	e26700	8440	29600	13100	15700	e8720	8800	e6430
9	e2530	2790	10900	e7860	e26500	8570	29900	13900	14300	e8630	8570	e6390
10	2540	2780	9650	e7410	25800	12400	32000	15500	13400	e8540	8240	e6350
11	2850	2790	8510	e6840	24000	17000	32200	17800	13400	e8560	7770	e6320
12	3600	2790	7860	6520	e22000	19500	30000	19800	13700	e8700	7390	6310
13	3630	2790	8370	6100	19800	21800	28200	21600	13400	e9210	7100	6380
14	3900	2800	9310	5770	17200	22600	27300	23000	13000	e9200	7330	e6380
15	4340	2810	10400	5480	14800	22700	27100	24900	12700	e9290	7940	6320
16	4430	2830	13000	5240	13100	22700	27100	28700	12700	e10200	8580	e6310
17	4250	2840	22500	5060	11700	22500	27100	33500	e12500	10300	8340	6660
18	4020	2850	35300	4910	10500	21900	27100	36500	e12400	10400	7970	e6720
19	3850	2890	43800	4820	9710	21500	26900	39300	e12100	11200	7880	6770
20	3710	2900	44400	4740	11400	23800	26400	41000	e11900	14700	7860	8100
21	3520	2890	40000	4650	13600	31200	25600	40700	e11800	16500	7630	9620
22	3310	2840	36500	4570	13500	42200	24800	39900	e11500	15600	7470	9900
23	3150	2790	34600	4940	12900	45000	23700	40000	e11100	13600	7340	9670
24	3030	2820	32800	7220	12100	41800	22900	39800	e10800	12000	7280	9090
25	2950	2880	31100	13800	11200	38400	22100	38700	e10500	11000	7250	8520
26	2870	2910	29800	16900	10400	37300	21000	37400	e10400	10300	7850	8040
27	2800	2960	28600	17400	9890	46400	19700	35200	e10300	9940	8350	7680
28	2750	3450	26800	e16800	9690	58300	18600	33100	e10100	9580	8240	7360
29	2730	6130	25500	e15000	---	55700	17500	31300	e9920	9410	7880	7030
30	2710	11400	23800	13500	---	48900	16500	29700	e9780	9270	7630	6640
31	2690	---	22100	12900	---	43900	---	27900	---	9260	7480	---
TOTAL	96700	98320	628490	293110	496790	796400	823200	826400	426000	318550	256650	217530
MEAN	3119	3277	20270	9455	17740	25690	27440	26660	14200	10280	8279	7251
MAX	4430	11400	44400	19600	26900	58300	40200	41000	26000	16500	10600	9900
MIN	2470	2690	6700	4570	9690	8440	16500	12800	9780	8540	7100	6310
AC-FT	191800	195000	1247000	581400	985400	1580000	1633000	1639000	845000	631800	509100	431500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

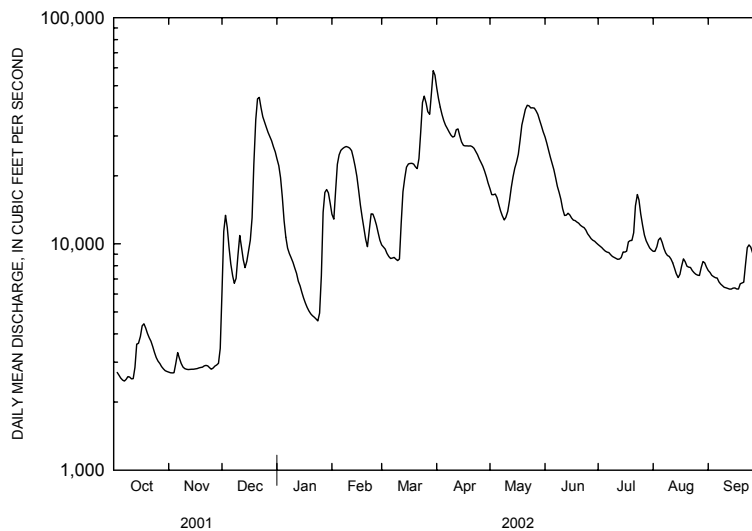
MEAN	2941	3119	9511	6979	13570	14650	14880	11880	8060	5354	4392	3870
MAX	3299	3277	20270	9455	17740	25690	27440	26660	14200	10280	8279	7251
(WY)	2000	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	2404	2917	3013	3145	6620	9729	5280	3452	3050	2654	3032	2427
(WY)	2001	2001	2001	2001	2000	2000	2001	2001	2001	2001	2000	2000

WHITE RIVER BASIN

07074420 BLACK RIVER AT ELGIN FERRY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	2235110		5278140			
ANNUAL MEAN	6124		14460		8235	
HIGHEST ANNUAL MEAN					14460	2002
LOWEST ANNUAL MEAN					4567	2001
HIGHEST DAILY MEAN	44400	Dec 20	58300	Mar 28	58300	Mar 28 2002
LOWEST DAILY MEAN	2370	Jul 18	2470	Oct 5	2010	Oct 28 2000
ANNUAL SEVEN-DAY MINIMUM	2450	Jul 13	2530	Oct 4	2040	Oct 25 2000
MAXIMUM PEAK FLOW			59500	Mar 28	59500	Mar 28 2002
MAXIMUM PEAK STAGE			26.33	Mar 28	26.33	Mar 28 2002
INSTANTANEOUS LOW FLOW			2460	Oct 5	2000	Oct 28 2000
ANNUAL RUNOFF (AC-FT)	4433000		10470000		5966000	
10 PERCENT EXCEEDS	13300		31600		19600	
50 PERCENT EXCEEDS	3340		9940		4620	
90 PERCENT EXCEEDS	2590		2890		2600	

<sup>e</sup>Estimated



WHITE RIVER BASIN

245

07074500 WHITE RIVER AT NEWPORT

**LOCATION.**--Lat 35°36'18", long 91°17'19", in NE1/4NE1/4 sec.10, T.11 N., R.3 W., Jackson County, Hydrologic Unit 11010013, on left bank 100 ft downstream from bridge on State Highway 367 at Newport, 7.2 mi downstream from Black River, and at mile 254.7.

**DRAINAGE AREA.**--19,860 mi<sup>2</sup>.

**PERIOD OF RECORD.**--September 1927 to September 1931 (published as "near Newport"), October 1937 to current year. Gage-height records collected at present site since 1885 are contained in reports of National Weather Service.

**REVISED RECORDS.**--WDR Ark. 1973: Drainage area. WDR Ark. 2001: 2000.

**GAGE.**--Water-stage recorder. Datum of gage is 194.09 ft above NGVD of 1929. September 1927 to September 1931, nonrecording gage at site 2.8 mi downstream at datum 2.30 ft lower. Oct. 1, 1937, to Aug. 14, 1953, nonrecording gage at present site and datum.

**REMARKS.**--No estimated daily discharges. Records good. Some regulation since 1943 by Norfolk Lake, capacity, 1,983,000 acre-ft since 1948 by Clearwater Lake (Missouri), capacity, 413,700 acre-ft, since July 24, 1951, by Bull Shoals Lake, 149 mi upstream, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Apr. 16, 1927, reached a stage of 35.6 ft, from records of National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5980	4710	22400	30600	33000	25000	66800	29800	43300	25700	27800	25700
2	5340	4830	22600	28300	46500	22500	61500	31000	41600	25200	28200	26300
3	4970	4610	19500	24900	49800	20300	57200	31500	39800	25600	26700	26700
4	5340	4600	16500	21000	46500	18500	54600	30600	37800	25900	24600	26900
5	4620	4790	15200	18800	44400	20400	52400	30400	35400	26900	22900	25900
6	4430	5000	14700	17500	47400	21100	53000	29900	33900	27000	21600	25500
7	4530	5850	14000	15500	49400	19000	54900	29500	34100	26500	23300	25500
8	4630	6950	15300	13100	51100	17800	56700	28800	33100	26500	25500	25700
9	4430	6770	17800	12500	51600	20000	61800	28600	30100	26300	25500	25800
10	4450	6210	16900	12800	50900	32400	67600	27900	30600	26000	24900	25800
11	5180	7090	14900	11800	48100	40100	63700	27700	32900	25600	24500	25600
12	5600	7070	15700	10700	46400	43500	56500	29100	33600	25600	24400	25800
13	5890	5390	17300	9420	43800	44500	51200	30500	33400	25800	24000	26200
14	6610	4890	18800	9460	41200	41700	48600	32500	31800	26800	26100	26400
15	6820	4920	20500	9100	38200	42600	45900	35000	29700	28300	27200	26000
16	6690	4730	25800	8670	34900	43800	43800	36400	27500	28100	27700	25900
17	6570	4700	46000	9730	30100	43600	41900	38900	23100	26700	26000	26800
18	6520	5580	61300	10100	24200	43000	40700	44000	19900	25500	25600	27100
19	6210	5100	72600	10900	19500	43500	40100	47800	18200	27400	26000	27000
20	6140	4800	71400	10900	22800	53200	39900	52500	18400	31400	26300	28700
21	6040	4570	65800	9770	29500	68400	39100	56000	23700	29900	25700	27500
22	5650	4890	61600	7810	30000	82400	38200	56700	28200	27000	25900	24300
23	5200	5930	56700	8700	29100	79000	37000	56000	30800	24800	26000	24700
24	4750	6200	50600	13500	27000	71500	36000	56400	32200	25900	25900	24900
25	5760	5100	46100	23400	23900	65500	34900	55800	32600	26100	25900	25400
26	8060	4500	42600	29100	21300	66100	34000	54300	31500	26200	26600	25700
27	7900	4370	39600	29900	22900	77500	33000	52000	30200	26100	26500	25000
28	6460	5510	37800	28200	25000	86500	32000	49500	28800	24100	25900	23400
29	5970	10000	36200	25600	---	83000	30800	47700	26800	24700	25300	20400
30	5210	18700	34700	23000	---	77100	29800	46400	26400	24900	25300	16600
31	4660	---	32900	21600	---	71800	---	44700	---	25800	25800	---
TOTAL	176610	178360	1043800	516360	1028500	1485300	1403600	1247900	919400	818300	793600	763200
MEAN	5697	5945	33670	16660	36730	47910	46790	40250	30650	26400	25600	25440
MAX	8060	18700	72600	30600	51600	86500	67600	56700	43300	31400	28200	28700
MIN	4430	4370	14000	7810	19500	17800	29800	27700	18200	24100	21600	16600
AC-FT	350300	353800	2070000	1024000	2040000	2946000	2784000	2475000	1824000	1623000	1574000	1514000

WHITE RIVER BASIN

07074500 WHITE RIVER AT NEWPORT--CONTINUED

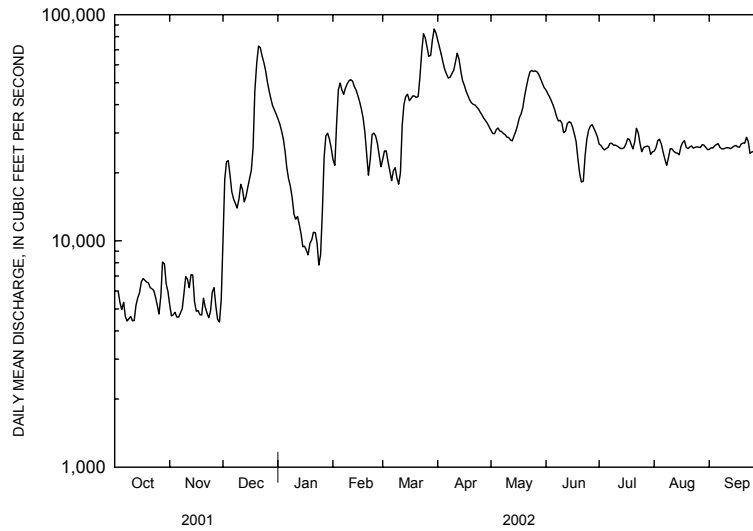
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2002, BY WATER YEAR (WY)

MEAN	10280	15220	22980	25750	28840	34500	37980	33910	22050	16500	13240	11020
MAX	26280	41430	89140	90830	95540	117400	164200	102800	98630	43020	34390	29530
(WY)	1994	1973	1983	1950	1949	1945	1945	1943	1945	1951	1957	1957
MIN	3667	3795	4371	5310	7052	9148	6539	6022	5986	5354	4611	3702
(WY)	2001	1955	1944	1944	1964	1981	1981	2001	2001	1944	1944	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1943 - 2002	
ANNUAL TOTAL	4497080		10374930			
ANNUAL MEAN	12320		28420		<sup>1</sup> 22660	
HIGHEST ANNUAL MEAN					46320 1945	
LOWEST ANNUAL MEAN					8073 1981	
HIGHEST DAILY MEAN	72600	Dec 19	86500	Mar 28	340000	Apr 18 1945
LOWEST DAILY MEAN	4200	Jan 9	4370	Nov 27	2870	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	4610	Oct 5	4610	Oct 5	2960	Sep 24 1954
MAXIMUM PEAK FLOW			87800	Mar 28	343000	Apr 17 1945
MAXIMUM PEAK STAGE			28.40	Mar 28	<sup>2</sup> 35.19	Apr 18 1945
INSTANTANEOUS LOW FLOW			4250	Oct 10	2820	Oct 26 2000
ANNUAL RUNOFF (AC-FT)	8920000		20580000		16410000	
10 PERCENT EXCEEDS	29500		52400		47900	
50 PERCENT EXCEEDS	7380		26100		15700	
90 PERCENT EXCEEDS	4930		5720		6520	

<sup>1</sup>Prior to regulation, water years 1928-31, 1938-42, 26,370 ft<sup>3</sup>/s

<sup>2</sup>Observed





WHITE RIVER BASIN

247

07075300 SOUTH FORK LITTLE RED RIVER AT CLINTON

LOCATION.--Lat 35°35'29", long 92°27'20", in SW1/4 sec.14, T.11 N., R.14 W., Van Buren County, Hydrologic Unit 11010014, at U.S. Highway 65, 0.25 mi upstream from Archey Fork at Clinton.

DRAINAGE AREA.--148 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to September 1994, October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	7.3	194	69	1920	194	538	162	89	14	30	8.3
2	1.2	7.3	104	64	924	606	433	144	68	15	27	7.8
3	1.0	10	65	61	682	922	338	128	54	17	24	7.0
4	0.87	8.2	46	56	498	630	275	121	45	16	22	6.3
5	1.5	12	34	63	380	480	233	112	43	14	19	5.5
6	2.2	12	63	70	341	384	199	100	39	13	18	4.5
7	2.3	14	60	88	306	318	190	91	36	11	17	4.1
8	2.0	15	74	77	329	266	2550	82	32	10	14	5.1
9	1.9	14	62	70	309	2190	1380	79	30	9.7	13	5.0
10	2.3	14	50	66	276	1140	876	87	35	8.9	12	4.1
11	7.0	13	40	62	216	1040	680	94	46	9.6	11	3.0
12	5.9	13	59	59	172	1880	520	91	57	13	11	2.0
13	11	12	214	56	172	1040	581	122	44	11	11	1.5
14	108	11	224	58	117	768	463	142	42	12	75	1.2
15	40	11	175	59	156	572	368	110	42	13	142	0.97
16	27	10	3810	52	140	421	304	90	36	14	72	0.99
17	21	9.8	8090	48	131	332	285	109	31	12	44	4.2
18	18	10	1580	47	121	273	258	130	28	471	35	2.4
19	16	9.1	910	52	268	2690	217	112	26	555	29	1.6
20	14	8.7	620	54	728	3860	193	90	25	202	25	5.9
21	13	8.4	441	54	375	1510	169	74	24	118	22	5.1
22	12	8.0	339	61	217	919	148	63	23	71	20	4.3
23	11	7.7	268	304	188	706	149	52	20	92	18	4.3
24	11	12	212	1940	285	535	217	47	18	194	17	3.5
25	10	18	175	962	267	860	180	43	20	78	16	2.1
26	9.3	15	147	647	121	2510	167	43	23	46	14	1.9
27	8.8	14	129	459	106	1100	201	105	21	35	13	1.6
28	8.7	52	113	346	186	794	209	96	20	30	12	1.0
29	8.2	524	98	278	---	621	182	173	18	27	11	0.79
30	8.4	423	85	232	---	528	162	150	15	29	10	0.93
31	8.1	---	75	1500	---	677	---	116	---	34	9.5	---
TOTAL	392.87	1303.5	18556	8014	9931	30766	12665	3158	1050	2195.2	813.5	106.98
MEAN	12.7	43.5	599	259	355	992	422	102	35.0	70.8	26.2	3.57
MAX	108	524	8090	1940	1920	3860	2550	173	89	555	142	8.3
MIN	0.87	7.3	34	47	106	194	148	43	15	8.9	9.5	0.79
AC-FT	779	2590	36810	15900	19700	61020	25120	6260	2080	4350	1610	212
CFSM	0.09	0.29	4.04	1.75	2.40	6.71	2.85	0.69	0.24	0.48	0.18	0.02
IN.	0.10	0.33	4.66	2.01	2.50	7.73	3.18	0.79	0.26	0.55	0.20	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962-94, 2002, BY WATER YEAR (WY)

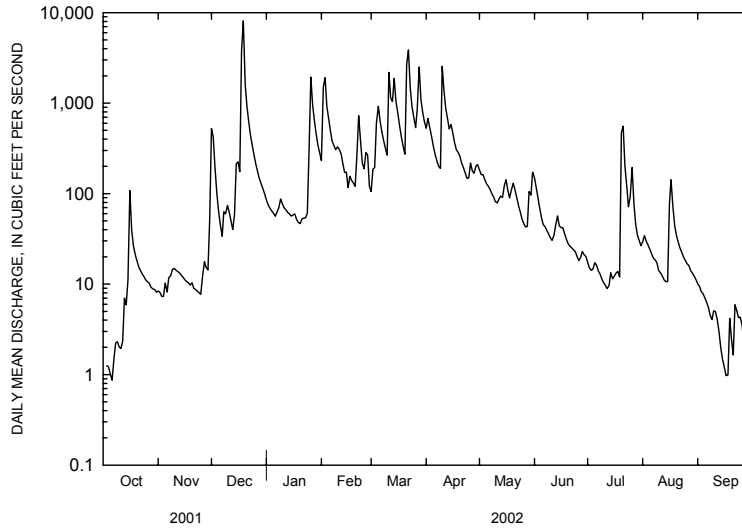
MEAN	92.7	251	400	282	359	505	464	305	121	23.7	17.7	47.4
MAX	851	721	2118	921	1255	1330	1461	892	617	73.3	98.0	473
(WY)	1985	1989	1983	1969	1989	1977	1973	1990	1974	1979	1977	1970
MIN	0.000	1.99	5.24	11.5	34.3	75.3	61.2	40.5	6.30	1.71	0.11	0.000
(WY)	1964	1990	1990	1981	1963	1972	1963	1977	1977	1966	1985	1969

WHITE RIVER BASIN

07075300 SOUTH FORK LITTLE RED RIVER AT CLINTON--CONTINUED

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1962-94, 2002	
ANNUAL TOTAL	88952.05			
ANNUAL MEAN	244		238	
HIGHEST ANNUAL MEAN			490	1973
LOWEST ANNUAL MEAN			78.9	1963
HIGHEST DAILY MEAN	8090	Dec 17	41600	Dec 3 1982
LOWEST DAILY MEAN	0.79	Sep 29	0.00	Aug 9 1963
ANNUAL SEVEN-DAY MINIMUM	1.5	Oct 1	0.00	Aug 23 1963
MAXIMUM PEAK FLOW	15400	Dec 17	67900	Dec 3 1982
MAXIMUM PEAK STAGE	16.37	Dec 17	<sup>1</sup> 34.27	Dec 3 1982
INSTANTANEOUS LOW FLOW	0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	176400		172600	
ANNUAL RUNOFF (CFSM)	1.65		1.61	
ANNUAL RUNOFF (INCHES)	22.36		21.87	
10 PERCENT EXCEEDS	612		520	
50 PERCENT EXCEEDS	57		80	
90 PERCENT EXCEEDS	5.9		1.5	

<sup>1</sup>From floodmarks



WHITE RIVER BASIN

249

07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS

LOCATION.--Lat 35°31'15", long 91°59'42", in SE1/4 sec.6, T.10 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, on State Highway 25 at Greers Ferry Dam on Little Red River, 2.5 mi northwest of Heber Springs, 5.5 mi upstream from Canoe Creek, and at mile 79.0.

DRAINAGE AREA.--1,153 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to September 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	RESER-VOIR DEPTH (FEET) (72025)	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT) (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-WATER (DEG C) (00010)
OCT											
04...	1052	80513	147	.20	5.60	768	8.6	99	7.7	46	22.7
04...	1053	80513	147	10.0	--	768	8.6	99	7.6	46	22.6
04...	1054	80513	147	20.1	--	768	8.5	97	7.6	47	22.6
04...	1055	80513	147	30.0	--	768	8.4	97	7.6	46	22.6
04...	1057	80513	147	34.1	--	768	8.3	95	7.5	46	22.6
04...	1058	80513	147	35.0	--	768	8.4	96	7.5	47	22.2
04...	1101	80513	147	37.1	--	768	9.3	103	7.3	50	20.7
04...	1102	80513	147	38.0	--	768	9.5	103	7.2	53	19.6
04...	1104	80513	147	39.0	--	768	9.1	97	7.2	53	19.1
04...	1105	80513	147	40.0	--	768	9.1	95	7.2	56	18.0
04...	1106	80513	147	41.0	--	768	9.2	95	7.1	60	17.2
04...	1107	80513	147	42.2	--	768	9.0	91	7.1	62	16.2
04...	1108	80513	147	43.1	--	768	8.8	87	7.0	65	15.4
04...	1109	80513	147	44.0	--	768	8.5	83	7.0	67	14.7
04...	1111	80513	147	47.1	--	768	8.2	79	6.9	61	13.6
04...	1112	80513	147	50.0	--	768	7.9	74	6.8	44	12.5
04...	1113	80513	147	53.0	--	768	7.9	72	6.7	39	11.4
04...	1114	80513	147	56.1	--	768	7.8	70	6.7	40	10.7
04...	1115	80513	147	60.0	--	768	7.6	67	6.7	40	10.1
04...	1116	80513	147	70.1	--	768	7.1	62	6.6	40	9.2
04...	1117	80513	147	80.0	--	768	7.0	60	6.6	40	8.6
04...	1118	80513	147	90.0	--	768	6.9	58	6.6	40	8.2
04...	1119	80513	147	100	--	768	6.7	56	6.5	40	8.0
04...	1120	80513	147	110	--	768	6.5	54	6.5	40	7.7
04...	1121	80513	147	120	--	768	6.1	51	6.5	40	7.5
04...	1122	80513	147	130	--	768	6.0	49	6.5	40	7.5
04...	1123	80513	147	140	--	768	5.9	49	6.4	40	7.5
04...	1124	80513	147	147	--	768	5.7	47	6.4	41	7.4
NOV											
05...	1335	80513	147	.00	5.80	772	8.3	--	8.2	--	21.1
05...	1337	80513	147	.40	--	772	8.9	--	7.5	--	18.4
05...	1338	80513	147	10.0	--	772	8.8	--	7.3	--	18.2
05...	1339	80513	147	20.0	--	772	8.9	--	7.3	--	18.0
05...	1340	80513	147	30.0	--	772	8.8	--	7.2	--	18.0
05...	1342	80513	147	40.1	--	772	8.5	--	7.2	--	17.8
05...	1343	80513	147	43.1	--	772	8.2	--	6.9	--	17.5
05...	1344	80513	147	46.1	--	772	7.7	--	6.8	--	16.7
05...	1346	80513	147	49.0	--	772	7.1	--	6.5	--	15.0
05...	1347	80513	147	50.0	--	772	7.1	--	6.4	--	14.4
05...	1349	80513	147	51.0	--	772	7.2	--	6.3	--	13.0
05...	1350	80513	147	53.0	--	772	7.1	--	6.2	--	12.0
05...	1351	80513	147	53.9	--	772	7.1	--	6.2	--	11.6
05...	1353	80513	147	59.0	--	772	6.7	--	6.1	--	10.8
05...	1354	80513	147	60.0	--	772	6.7	--	6.1	--	10.6
05...	1355	80513	147	70.1	--	772	6.6	--	6.1	--	9.5
05...	1356	80513	147	80.2	--	772	6.5	--	6.0	--	8.8
05...	1357	80513	147	90.0	--	772	6.5	--	6.0	--	8.5
05...	1358	80513	147	99.9	--	772	6.5	--	6.0	--	8.1
05...	1359	80513	147	110	--	772	6.3	--	6.0	--	7.9
05...	1400	80513	147	120	--	772	5.9	--	6.0	--	7.8
05...	1401	80513	147	130	--	772	5.6	--	5.9	--	7.7
05...	1402	80513	147	140	--	772	5.4	--	5.9	--	7.5
05...	1403	80513	147	147	--	772	5.3	--	5.9	--	7.6
DEC											
19...	1128	80513	159	.40	4.60	768	10.3	--	7.2	--	12.3
19...	1129	80513	159	10.1	--	768	9.3	--	7.1	--	12.3
19...	1130	80513	159	20.3	--	768	9.2	--	7.1	--	12.3
19...	1131	80513	159	30.3	--	768	9.1	--	7.0	--	12.3
19...	1132	80513	159	40.0	--	768	9.1	--	6.9	--	12.3
19...	1133	80513	159	50.1	--	768	9.0	--	6.9	--	12.3
19...	1134	80513	159	60.4	--	768	8.9	--	6.8	--	12.3
19...	1135	80513	159	70.2	--	768	8.8	--	6.8	--	12.3
19...	1136	80513	159	80.1	--	768	6.5	--	6.5	--	11.8
19...	1137	80513	159	83.1	--	768	5.7	--	6.4	--	10.9
19...	1138	80513	159	86.0	--	768	5.5	--	6.3	--	10.3
19...	1139	80513	159	89.9	--	768	5.5	--	6.2	--	9.8
19...	1140	80513	159	100	--	768	5.5	--	6.2	--	9.2
19...	1141	80513	159	110	--	768	5.5	--	6.2	--	8.7
19...	1142	80513	159	120	--	768	5.5	--	6.1	--	8.3
19...	1143	80513	159	130	--	768	5.2	--	6.1	--	7.9
19...	1144	80513	159	140	--	768	4.8	--	6.1	--	7.8
19...	1145	80513	159	150	--	768	4.3	--	6.0	--	7.7
19...	1146	80513	159	159	--	768	3.9	--	6.0	--	7.6
JAN											
22...	1314	80513	147	.60	6.20	766	8.6	76	6.7	43	10.1
22...	1315	80513	147	10.0	--	766	9.3	79	6.7	43	8.3
22...	1316	80513	147	20.0	--	766	9.1	77	6.5	43	8.2
22...	1317	80513	147	30.0	--	766	8.9	75	6.5	43	8.1
22...	1319	80513	147	40.0	--	766	8.9	75	6.5	43	8.1
22...	1320	80513	147	50.0	--	766	8.9	75	6.6	43	8.1

## WHITE RIVER BASIN

## 07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JAN											
22...	1321	80513	147	60.0	--	766	8.8	74	6.6	43	8.1
22...	1322	80513	147	70.0	--	766	8.9	75	6.6	43	8.1
22...	1324	80513	147	80.0	--	766	8.8	74	6.6	43	8.1
22...	1325	80513	147	90.0	--	766	8.7	73	6.5	43	8.1
22...	1327	80513	147	100	--	766	8.2	69	6.5	43	8.1
22...	1328	80513	147	110	--	766	5.9	49	6.3	45	8.0
22...	1329	80513	147	120	--	766	4.3	36	6.2	46	7.9
22...	1331	80513	147	130	--	766	3.8	31	6.1	46	7.9
22...	1332	80513	147	140	--	766	3.3	27	6.1	46	7.9
22...	1333	80513	147	147	--	766	2.8	24	6.1	46	7.8
MAR											
27...	1036	80513	157	1.00	7.30	770	10.8	95	6.8	42	9.9
27...	1037	80513	157	10.0	--	770	10.8	94	6.9	42	9.5
27...	1038	80513	157	20.0	--	770	10.8	93	7.0	42	9.4
27...	1039	80513	157	30.0	--	770	10.8	93	6.9	42	9.4
27...	1040	80513	157	40.0	--	770	10.7	92	5.1	42	9.3
27...	1041	80513	157	50.0	--	770	10.8	92	6.9	42	9.0
27...	1042	80513	157	60.0	--	770	10.6	89	6.9	43	8.2
27...	1043	80513	157	70.0	--	770	10.5	87	6.8	43	7.9
27...	1044	80513	157	80.0	--	770	10.5	87	6.8	43	7.8
27...	1045	80513	157	90.0	--	770	10.5	87	6.8	44	7.7
27...	1046	80513	157	100	--	770	10.5	87	6.8	44	7.6
27...	1047	80513	157	110	--	770	10.4	86	6.8	44	7.6
27...	1048	80513	157	120	--	770	10.4	85	6.8	44	7.5
27...	1049	80513	157	130	--	770	10.3	84	6.8	44	7.3
27...	1050	80513	157	140	--	770	10.1	83	6.7	44	7.3
27...	1051	80513	157	150	--	770	10.0	82	6.7	44	7.3
27...	1052	80513	157	157	--	770	9.9	81	6.7	44	7.2
AUG											
12...	1307	80513	153	1.10	2.70	765	7.9	104	7.6	44	30.0
12...	1309	80513	153	10.1	--	765	7.8	103	7.6	44	29.8
12...	1310	80513	153	20.1	--	765	7.9	103	7.4	44	28.9
12...	1311	80513	153	23.0	--	765	7.9	101	7.2	43	27.9
12...	1312	80513	153	24.9	--	765	8.1	102	7.1	44	27.1
12...	1313	80513	153	27.1	--	765	8.6	105	7.0	44	25.7
12...	1314	80513	153	29.2	--	765	8.2	97	6.8	44	24.1
12...	1315	80513	153	29.7	--	765	7.8	92	6.8	44	23.4
12...	1316	80513	153	31.0	--	765	7.3	84	6.7	44	22.4
12...	1317	80513	153	32.4	--	765	6.8	76	6.6	44	21.1
12...	1318	80513	153	34.2	--	765	6.4	70	6.5	44	19.8
12...	1319	80513	153	35.9	--	765	6.0	64	6.4	44	19.1
12...	1321	80513	153	37.1	--	765	5.7	60	6.4	44	18.1
12...	1322	80513	153	38.0	--	765	5.5	57	6.4	44	17.6
12...	1323	80513	153	40.1	--	765	5.4	55	6.3	44	16.6
12...	1324	80513	153	43.0	--	765	5.5	54	6.3	44	15.4
12...	1326	80513	153	45.2	--	765	5.8	57	6.3	44	14.6
12...	1327	80513	153	47.0	--	765	5.8	56	6.3	44	13.8
12...	1328	80513	153	50.1	--	765	5.7	54	6.3	44	12.6
12...	1330	80513	153	54.1	--	765	6.0	55	6.3	44	11.8
12...	1331	80513	153	59.8	--	765	6.5	59	6.3	44	10.9
12...	1332	80513	153	70.1	--	765	7.1	63	6.3	44	10.1
12...	1333	80513	153	80.2	--	765	7.5	65	6.3	44	9.7
12...	1334	80513	153	90.0	--	765	7.7	67	6.3	44	9.2
12...	1335	80513	153	100	--	765	7.8	67	6.4	45	8.9
12...	1336	80513	153	110	--	765	7.7	65	6.4	45	8.6
12...	1337	80513	153	121	--	765	7.3	62	6.3	46	8.3
12...	1338	80513	153	130	--	765	6.8	58	6.2	46	8.2
12...	1339	80513	153	140	--	765	6.4	54	6.2	46	8.1
12...	1341	80513	153	150	--	765	6.3	53	6.2	46	8.1
12...	1342	80513	153	153	--	765	5.6	47	6.3	48	8.1
SEP											
09...	0934	80513	151	1.00	3.00	772	7.5	95	7.3	44	28.2
09...	0935	80513	151	10.0	--	772	7.4	94	7.3	44	28.3
09...	0936	80513	151	20.0	--	772	7.1	90	7.2	44	28.2
09...	0937	80513	151	23.1	--	772	6.7	84	6.8	44	27.7
09...	0938	80513	151	26.1	--	772	6.7	82	6.6	44	26.5
09...	0939	80513	151	28.1	--	772	6.5	78	6.5	44	25.1
09...	0940	80513	151	30.0	--	772	6.0	70	6.4	44	23.7
09...	0941	80513	151	32.0	--	772	5.4	61	6.3	44	22.0
09...	0942	80513	151	34.1	--	772	4.7	51	6.2	44	20.5
09...	0943	80513	151	36.0	--	772	4.1	44	6.2	44	18.9
09...	0944	80513	151	38.1	--	772	3.9	41	6.1	44	17.7
09...	0945	80513	151	40.1	--	772	3.8	38	6.1	44	16.6
09...	0946	80513	151	42.2	--	772	4.0	40	6.1	44	15.6
09...	0947	80513	151	44.1	--	772	4.1	40	6.1	44	14.9
09...	0948	80513	151	47.2	--	772	4.3	40	6.1	44	13.7
09...	0949	80513	151	50.1	--	772	4.4	41	6.1	44	12.9
09...	0950	80513	151	55.0	--	772	4.9	45	6.1	44	11.8
09...	0951	80513	151	60.0	--	772	5.4	49	6.1	44	11.1
09...	0952	80513	151	70.1	--	772	6.0	53	6.2	44	10.3
09...	0953	80513	151	80.1	--	772	6.4	55	6.2	44	9.7
09...	0954	80513	151	90.0	--	772	6.5	56	6.2	44	9.3
09...	0955	80513	151	100	--	772	6.4	55	6.2	44	8.9
09...	0956	80513	151	110	--	772	6.2	52	6.2	45	8.6
09...	0957	80513	151	120	--	772	5.6	47	6.1	45	8.4
09...	0958	80513	151	130	--	772	5.3	44	6.1	46	8.3
09...	0959	80513	151	140	--	772	4.8	40	6.1	46	8.2
09...	1000	80513	151	150	--	772	4.7	40	6.0	46	8.2
09...	1001	80513	151	151	--	772	4.5	38	6.1	46	8.2

WHITE RIVER BASIN

251

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS

LOCATION.--Lat 35°31'02", long 91°59'50", in NE1/4 sec.7, T.10 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, on right bank 1,600 ft downstream from Greers Ferry Dam, 3.0 mi northeast of Heber Springs, and at mile 78.8.

DRAINAGE AREA.--1,153 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1949 to September 1952, water years 1955-71, December 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1949 to September 1952, water years 1968-71, May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

REMARKS.--Flow regulated by Greers Ferry Lake. Dissolved oxygen and water temperature collected continuously June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	SAM-PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
OCT	04...	80513			773	11.7	108	7.7	79	12.6	
NOV	05...	80513			775	11.3	--	7.2	--	15.3	
DEC	19...	80513			768	9.7	--	6.7	--	10.0	
JAN	22...	80513			765	10.5	90	6.6	42	8.6	
MAR	27...	80513			775	11.3	94	6.9	44	8.2	
JUL	16...	80513	4.90	200	779	7.4	64	--	44	9.8	16.0
	16...	80513	6.70	200	779	7.2	62	--	44	9.7	49.0
	16...	80513	6.60	200	779	7.2	62	--	44	9.6	82.0
	16...	80513	6.50	200	779	7.2	61	--	44	9.5	115
	16...	80513	7.10	200	779	7.1	61	8.0	44	9.5	148
	16...	80513	4.30	200	779	7.1	61	7.7	44	9.5	181
AUG	12...	80513			770	9.7	89	7.8	44	11.9	
SEP	09...	80513			775	10.5	94	6.5	45	11.3	



WHITE RIVER BASIN

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

WATER TEMPERATURE C, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.6	7.7	8.4	9.0	7.8	8.3	9.1	7.3	7.8	---	---	---
2	9.6	7.6	8.1	9.5	7.9	8.5	9.2	7.3	7.9	---	---	---
3	11.0	7.5	8.3	9.5	7.8	8.4	8.7	7.3	7.9	---	---	---
4	10.9	7.6	8.2	9.8	7.6	8.3	8.4	7.8	8.1	---	---	---
5	8.9	7.5	8.0	9.9	7.6	8.3	8.4	7.8	8.2	8.6	7.8	8.1
6	8.9	7.1	7.7	9.6	7.6	8.2	9.1	8.3	8.6	8.6	7.5	8.2
7	9.9	7.2	8.2	9.6	7.5	8.2	8.4	7.7	8.1	8.6	7.1	8.2
8	9.6	7.3	7.8	9.7	7.5	8.2	8.4	7.4	8.0	8.9	7.6	8.4
9	9.7	7.5	8.4	9.3	7.4	8.0	8.5	7.1	7.5	9.1	8.0	8.5
10	8.7	8.0	8.4	9.1	7.5	8.1	8.9	7.2	8.0	8.5	8.3	8.4
11	9.1	7.8	8.3	9.6	7.6	8.2	8.5	7.2	7.8	9.0	7.8	8.4
12	9.4	7.8	8.2	9.5	7.3	8.0	8.5	7.8	8.0	9.2	7.6	8.2
13	8.9	7.8	8.1	9.5	7.3	8.0	8.6	7.8	8.1	8.8	7.4	8.0
14	9.6	7.5	8.2	9.5	7.4	8.1	8.6	7.8	8.1	8.5	8.3	8.4
15	10.2	7.4	8.4	9.6	7.5	8.1	8.2	7.5	7.8	8.5	8.2	8.4
16	9.7	7.3	8.1	9.4	7.5	8.1	9.6	7.9	8.4	8.6	7.8	8.3
17	9.9	7.2	8.1	9.2	7.5	8.1	9.1	8.2	8.6	8.3	7.6	7.8
18	10.0	7.3	8.2	9.5	7.7	8.2	9.1	7.6	8.2	8.4	7.4	8.0
19	9.7	7.6	8.4	8.4	7.3	7.9	9.4	7.5	8.2	8.0	7.7	7.8
20	9.9	7.8	8.5	---	---	---	9.0	7.5	8.5	8.4	7.6	7.8
21	10.5	7.6	8.5	---	---	---	8.9	7.7	8.6	9.4	7.4	8.0
22	10.4	7.7	8.6	8.3	7.2	7.7	9.0	7.7	8.6	---	---	---
23	9.9	8.2	9.0	8.3	7.7	8.0	9.2	7.5	8.7	---	---	---
24	10.5	8.0	9.0	9.3	7.8	8.4	9.3	7.6	8.7	---	---	---
25	10.1	7.7	8.4	9.3	7.4	8.0	---	---	---	---	---	---
26	9.8	7.5	8.2	8.1	7.3	7.7	---	---	---	---	---	---
27	9.6	7.2	8.0	8.3	7.5	7.9	---	---	---	---	---	---
28	9.8	7.4	8.1	8.2	7.3	7.6	9.3	7.8	8.8	---	---	---
29	9.9	7.4	8.2	8.4	7.3	7.6	9.2	7.7	8.7	---	---	---
30	9.9	7.4	8.2	8.7	7.3	7.8	9.0	7.5	8.6	---	---	---
31	9.7	7.4	8.2	---	---	---	---	---	---	---	---	---
MONTH	11.0	7.1	8.3	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.1	7.9	8.0	8.5	8.2	8.4	9.5	8.6	8.9	11.1	8.6	9.1
2	8.3	7.9	8.0	8.6	8.3	8.4	9.4	8.6	8.8	10.9	8.6	8.9
3	12.0	7.9	8.6	8.6	8.2	8.4	11.6	8.6	9.1	11.5	8.6	9.1
4	11.3	8.0	8.5	8.6	8.2	8.5	11.3	8.6	9.1	11.4	8.5	9.1
5	10.9	8.1	8.6	8.6	8.3	8.4	10.3	8.6	8.8	10.0	8.6	8.9
6	12.0	7.9	8.8	8.7	8.3	8.5	10.6	8.6	9.0	11.8	8.5	9.1
7	10.7	7.8	8.2	8.6	8.4	8.5	12.1	8.8	9.3	12.1	8.6	9.2
8	10.8	7.8	8.4	8.7	8.2	8.5	12.0	8.4	9.1	10.2	8.7	9.0
9	8.2	7.9	8.0	8.6	8.3	8.5	11.4	8.5	9.1	11.6	8.7	9.1
10	8.3	8.0	8.1	8.9	8.3	8.6	10.4	8.6	9.2	11.1	8.6	9.1
11	9.6	8.0	8.3	8.9	8.5	8.6	10.9	8.6	9.2	12.0	8.6	9.5
12	9.2	8.1	8.2	8.7	8.4	8.6	10.4	8.6	8.9	12.1	8.6	9.4
13	10.6	8.0	8.4	8.8	8.5	8.7	11.0	8.6	9.1	12.1	8.6	9.4
14	8.5	8.0	8.2	8.8	8.5	8.6	11.9	8.6	9.5	11.6	8.6	9.5
15	8.4	7.9	8.2	8.9	8.5	8.7	10.3	8.6	9.0	11.1	8.7	9.3
16	8.3	8.1	8.1	9.1	8.5	8.7	10.5	8.7	9.1	11.2	8.8	9.5
17	11.4	8.0	8.7	9.3	8.5	8.7	10.9	8.6	9.3	10.8	8.7	9.2
18	9.6	8.1	8.4	10.4	8.5	8.9	11.8	8.7	9.3	10.5	8.7	9.0
19	9.9	8.1	8.4	9.3	8.5	8.8	11.2	8.8	9.1	10.1	8.8	9.2
20	8.3	8.1	8.2	11.1	8.5	8.8	10.8	8.7	8.9	10.9	8.8	9.5
21	8.4	8.1	8.3	10.8	8.5	8.9	11.3	8.6	9.3	10.5	8.8	9.4
22	8.4	8.1	8.2	11.0	8.4	8.8	10.8	8.6	9.0	12.0	8.6	9.7
23	8.4	8.1	8.3	11.0	8.5	8.9	10.6	8.6	8.9	11.5	8.3	9.3
24	8.5	8.1	8.3	9.9	8.4	8.7	11.6	8.6	9.4	12.0	8.3	9.2
25	8.5	8.2	8.4	10.3	8.4	8.7	11.7	8.7	9.2	10.1	8.5	9.0
26	8.5	8.2	8.3	11.1	8.5	8.9	11.6	8.6	9.1	9.9	8.8	9.2
27	8.5	8.2	8.4	8.9	8.5	8.7	11.1	8.5	9.1	10.9	8.6	9.1
28	8.5	8.2	8.3	9.9	8.6	8.8	10.9	8.5	9.1	11.4	8.5	9.1
29	8.5	8.2	8.3	10.1	8.6	8.9	11.6	8.5	9.1	11.6	8.5	9.2
30	8.7	8.1	8.4	8.9	8.6	8.8	12.3	8.5	9.2	11.5	8.5	9.2
31	---	---	---	9.4	8.6	8.9	10.7	8.6	9.1	---	---	---
MONTH	12.0	7.8	8.3	11.1	8.2	8.7	12.3	8.4	9.1	12.1	8.3	9.2

## WHITE RIVER BASIN

## 07076517 LITTLE RED RIVER NEAR DEWEY

LOCATION.--Lat 35°26'16", long 91°44'48", in SW<sub>1</sub>/<sub>4</sub>NW<sub>1</sub>/<sub>4</sub> sec.3, T.9 N., R.7 W., White County, Hydrologic Unit 11010014, near right bank on downstream side of bridge on State Highway 124, 1.3 mi northeast of Dewey.

DRAINAGE AREA.--1,340 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder.

REMARKS.--Records good except estimated daily discharges, which are poor. Flow completely regulated since March 30, 1962, by Greers Ferry Lake 30.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	e97	512	3150	7070	2520	1290	2530	1260	2790	3250	391
2	163	e522	266	2960	3600	2220	1730	3280	1350	3150	2850	349
3	381	e567	198	2980	4490	3930	1750	3100	1230	3340	2700	832
4	501	e210	164	3180	4080	3280	2050	3460	1260	3760	1070	1300
5	467	e111	1600	2030	6990	2550	3150	2490	1340	3480	1020	1500
6	318	e179	2040	1550	7550	1740	2720	3200	1280	3540	2720	2080
7	277	e96	1030	1350	7240	1200	3930	2310	1330	4090	1950	1170
8	270	e96	723	2810	2730	1050	3230	2770	1420	3230	1830	564
9	288	e152	360	2790	4730	4550	3820	2120	3110	3250	1510	298
10	277	e210	225	2210	3970	6720	3830	1270	3170	4010	859	1600
11	264	e104	795	3130	3660	6860	3650	1480	2130	3700	412	1450
12	236	93	823	860	2860	6520	2620	1300	2350	3980	289	524
13	244	93	1710	649	4140	2550	1550	1440	2440	3900	1660	461
14	274	94	1660	1870	2990	4460	2360	1510	2430	3880	1170	615
15	265	94	1320	4570	2530	3770	1730	1390	3450	3970	887	257
16	199	152	4380	2570	3180	3980	1540	1300	3720	3270	1960	236
17	130	236	18300	633	3100	3650	1900	3770	2440	2260	648	236
18	97	117	5390	275	3080	3360	1650	2280	3680	2660	385	285
19	95	96	1440	1230	3450	5450	1660	1830	3110	2600	527	474
20	170	93	1550	284	4840	7930	1470	1780	2900	1550	1350	442
21	122	92	4180	169	3520	2300	1290	1290	3420	1330	1340	1370
22	95	94	3670	484	3260	1760	1310	1370	2780	1450	1050	389
23	274	95	3370	2510	3640	1330	1390	1320	3270	1290	1620	481
24	242	108	3390	2560	3290	666	1790	1340	3370	1390	1100	499
25	e119	115	3490	3130	3330	592	1550	1560	4000	2070	487	364
26	e96	101	3180	971	3000	2560	1450	1390	3520	2850	605	704
27	e96	283	3100	679	3400	2040	1440	1440	3280	3140	1890	597
28	e97	924	3540	3500	3160	2180	1090	1300	2840	3120	2220	634
29	e97	1030	3200	3930	---	1690	1300	1280	3340	3080	1870	426
30	e97	1230	3040	5170	---	1980	2200	1320	3140	3190	1580	516
31	e97	---	2820	5210	---	2170	---	1500	---	2900	1740	---
TOTAL	6597	7484	81466	69394	112880	97558	62440	59720	78360	92220	44549	21044
MEAN	212.8	249.5	2628	2239	4031	3147	2081	1926	2612	2975	1437	701.5
MAX	501	1230	18300	5210	7550	7930	3930	3770	4000	4090	3250	2080
MIN	95	92	164	169	2530	592	1090	1270	1230	1290	289	236
AC-FT	13090	14840	161600	137600	223900	193500	123800	118500	155400	182900	88360	41740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

MEAN	601.1	415.4	1587	1704	2848	3234	2171	1777	1626	1490	1114	629.2
MAX	1159	876	5060	4241	4394	4573	3445	3501	2688	3036	1529	855
(WY)	1999	1999	1997	1997	1998	1997	1998	1997	1997	2002	2000	2000
MIN	213	149	199	353	383	1154	565	420	474	972	704	374
(WY)	2002	1998	1998	2000	2000	2000	2001	2001	2001	2001	2001	2001



WHITE RIVER BASIN

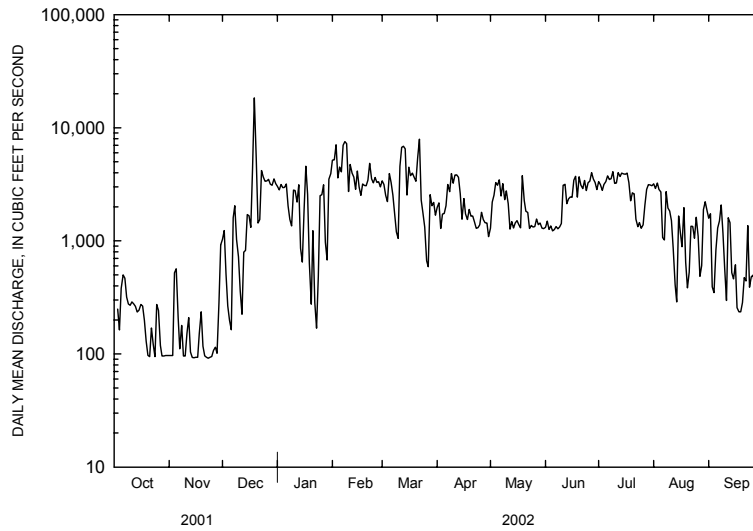
07076517 LITTLE RED RIVER NEAR DEWEY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	427199		733712			
ANNUAL MEAN	1170		2010		1403	
HIGHEST ANNUAL MEAN					2084	2002
LOWEST ANNUAL MEAN					949	2000
HIGHEST DAILY MEAN	18300	Dec 17	18300	Dec 17	21300	Apr 5 1997
LOWEST DAILY MEAN	89	May 10	92	Nov 21	83	Oct 30 2000
ANNUAL SEVEN-DAY MINIMUM	97	Oct 26	97	Oct 26	92	Nov 10 1999
MAXIMUM PEAK FLOW			22000	Dec 17	<sup>1</sup> 25300	Apr 5 1997
MAXIMUM PEAK STAGE			25.83	Dec 17	28.25	Apr 5 1997
INSTANTANEOUS LOW FLOW			91	Nov 12	82	<sup>2</sup> Oct 20 2000
ANNUAL RUNOFF (AC-FT)	847300		1455000		1016000	
10 PERCENT EXCEEDS	3380		3820		3530	
50 PERCENT EXCEEDS	378		1620		813	
90 PERCENT EXCEEDS	109		175		144	

<sup>1</sup>From rating curve extended above 12,000 ft<sup>3</sup>/s

<sup>2</sup>Also October 31, 2000

<sup>e</sup>Estimated



## WHITE RIVER BASIN

## 07077000 WHITE RIVER AT DEVALLS BLUFF

**LOCATION.**--Lat 34°47'25", long 91°26'45", in SE<sub>1</sub>/<sub>4</sub> sec.17, T.2 N., R.4 W., Prairie County, Hydrologic Unit 08020301, near center of span on downstream side of bridge on U.S. Highway 70, 1.0 mi northeast of DeValls Bluff, 7.5 mi downstream from Wattensaw Bayou, 24.1 mi upstream from Cache River, and at mile 125.3.

**DRAINAGE AREA.**--23,431 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1927 to September 1945 (large part of floodflow above station overflowed into Cache River and was not included in the records), October 1949 to September 1970, October 1988 to current year. Monthly discharge only for some periods, published in WSP 1311. Daily stages for the period October 1970 to date published in reports of U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 152.93 ft above NGVD of 1929. Prior to Dec. 22, 1933, nonrecording gage at same site and datum.

**REMARKS.**--No estimated daily discharges. Records good. Some regulation since 1943 by Norfolk Lake, capacity, 1,983,000 acre-ft, since 1948 by Clearwater Lake (Missouri), capacity, 413,700 acre-ft, since July 24, 1951, by Bull Shoals Lake, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, since Mar. 30, 1962, by Greers Ferry Lake, capacity, 2,926,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft. Satellite telemeter at station.

**COOPERATION.**--Gage-height record was provided by the U.S. Army Corps of Engineers.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Apr. 23, 1927, reached a stage of 34.6 ft. Flood of Feb. 3, 1949, reached a stage of 31.35 ft, discharge, 220,000 ft<sup>3</sup>/s by current-meter measurement, furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6730	6810	16400	52400	35900	37600	72600	41600	47700	31200	27800	25100
2	7150	6100	19800	50800	37500	36500	75600	40400	47700	30400	28000	24700
3	7220	5560	22500	49200	39400	35100	76200	39600	47500	29500	28500	24300
4	6800	5370	23600	47600	41100	33900	74900	38900	47200	28800	28700	24300
5	6330	5180	22700	45900	42600	32300	72500	38200	46800	28400	28000	24700
6	6080	4880	21300	43700	43700	30800	69400	37400	46300	28300	26600	25100
7	5820	4670	20300	40100	44500	29700	66300	36600	45700	28400	25500	25300
8	5370	4650	19500	36000	45200	28500	63900	35700	44800	28500	24400	25100
9	4990	5000	18600	33000	45900	26800	61800	35100	43900	28500	24100	24600
10	4850	5840	18400	30600	46600	26400	60200	34600	43200	28300	24300	24200
11	5550	6520	18500	28300	47300	28800	58700	33600	42200	28200	24400	24200
12	7070	6750	18900	26400	48000	36800	57700	32900	41100	28200	24100	24400
13	8540	6910	21300	24300	48700	42700	57600	32400	40200	28100	23700	24200
14	10400	7120	23500	22200	49200	44300	57900	32200	40300	28200	23900	24000
15	10400	6790	25000	20300	49800	45300	58000	32200	39700	28300	24100	24100
16	9920	6060	26300	19600	50000	46100	57600	32500	39000	28600	24600	24100
17	9520	5380	34900	18900	49800	47000	56900	33200	37900	29100	25500	24100
18	9150	4930	43600	17600	49300	48000	55800	34800	36100	29300	25800	24100
19	8750	4730	46400	16600	48700	48400	54400	37500	33900	29500	25400	24400
20	8400	4790	47800	16100	48500	50100	53100	39300	31400	30000	24900	25100
21	8050	4910	49400	16000	47500	51900	51800	40400	28700	30500	24900	26000
22	7740	4790	51400	15800	46300	53700	50500	41200	26800	30900	25100	26900
23	7530	4570	53500	15500	45400	55800	49300	42000	26900	30900	25100	26700
24	7240	4440	55800	17200	44900	58000	48300	42900	28300	30400	25300	25800
25	6890	4810	57800	20300	44300	60200	47600	43500	29800	29400	25400	25100
26	6400	5480	59000	23700	43400	62600	46800	44300	31100	28900	25200	24700
27	6150	5700	59200	27900	41700	64300	46100	45000	32000	28800	25000	24600
28	6940	5700	58600	31100	39400	64500	45200	45700	32300	28900	25300	24700
29	7860	8400	57400	33400	---	64400	44300	46400	32300	28800	25600	24400
30	7950	12800	55800	34800	---	65200	43100	47100	31900	28300	25600	23600
31	7470	---	54100	35500	---	68700	---	47500	---	e28000	25300	---
TOTAL	229260	175640	1121300	910800	1264600	1424400	1734100	1204700	1142700	901600	790100	742600
MEAN	7395	5855	36170	29380	45160	45950	57800	38860	38090	29080	25490	24750
MAX	10400	12800	59200	52400	50000	68700	76200	47500	47700	31200	28700	26900
MIN	4850	4440	16400	15500	35900	26400	43100	32200	26800	28000	23700	23600
AC-FT	454700	348400	2224000	1807000	2508000	2825000	3440000	2390000	2267000	1788000	1567000	1473000

WHITE RIVER BASIN

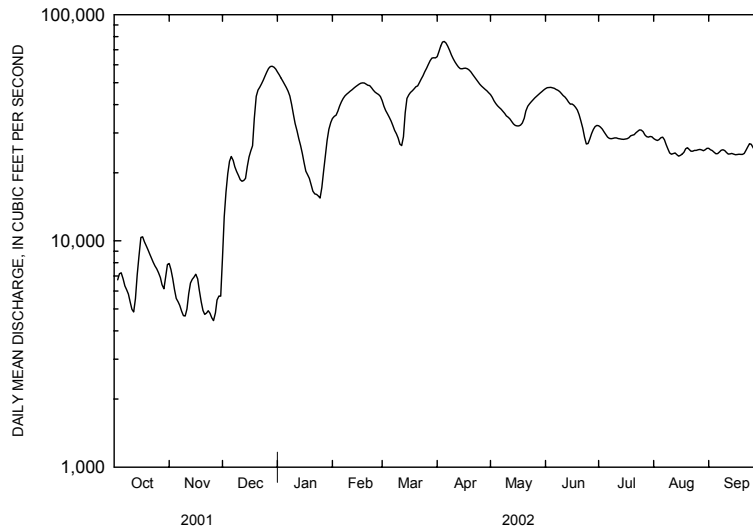
07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-70, 1989-02, BY WATER YEAR (WY)

MEAN	11770	15630	24130	30400	36460	40690	42320	40820	26290	19670	16240	13050
MAX	30100	48890	67180	110000	107100	73060	75360	90730	73590	48560	48900	36450
(WY)	1950	1958	1952	1950	1950	1989	1957	1957	1957	1951	1957	1950
MIN	3715	3831	5260	6042	7974	13240	13230	7448	6676	7822	7112	4276
(WY)	1955	1955	1955	1964	1964	1996	1963	2001	2001	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950-70, 1989-02	
ANNUAL TOTAL	5659120		11641800			
ANNUAL MEAN	15500		31900		26400	
HIGHEST ANNUAL MEAN					51270 1950	
LOWEST ANNUAL MEAN					12230 1963	
HIGHEST DAILY MEAN	59200	Dec 27	76200	Apr 3	154000	Jan 19 1950
LOWEST DAILY MEAN	4440	Nov 24	4440	Nov 24	3230	Sep 29 1954
ANNUAL SEVEN-DAY MINIMUM	4720	Nov 19	4720	Nov 19	3290	Sep 26 1954
MAXIMUM PEAK FLOW			76600	Apr 3	154000	Jan 19 1950
MAXIMUM PEAK STAGE			25.93	Apr 3	28.42	Jan 20 1950
INSTANTANEOUS LOW FLOW			4400	Nov 24	3230	<sup>1</sup> Sep 29 1954
ANNUAL RUNOFF (AC-FT)	11220000		23090000		19130000	
10 PERCENT EXCEEDS	46600		53900		54200	
50 PERCENT EXCEEDS	9670		29100		19200	
90 PERCENT EXCEEDS	5830		6810		7910	

<sup>1</sup>Also Sept. 30 to Oct. 1 and Oct. 29, 1954



## WHITE RIVER BASIN

## 07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-60, 1968-70, 1974-95, and 2001 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
OCT	31...	0845	80020	80513	7560	771	10.1	100	8.5	324	15.2	160
JAN	08...	0930	80020	80513	41600	777	11.1	82	8.0	185	3.4	88
MAR	26...	1000	80020	80513	88400	777	8.6	78	8.0	153	11.8	69
MAY	30...	1000	80020	80513	56200	769	6.2	71	7.9	188	22.7	90
JUN	25...	0945	80020	80513	32900	764	7.7	91	7.7	262	24.0	130
SEP	12...	0900	80020	80513	24400	779	8.6	93	8.0	277	20.1	140
Date		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
OCT	31...	37.6	16.1	2.14	.1	3.56	5	155	6.06	<.1	6.7	
JAN	08...	21.4	8.41	1.95	.1	2.30	5	86	3.74	E.1	5.9	
MAR	26...	18.5	5.60	1.29	.1	1.43	4	71	2.36	E.1	4.4	
MAY	30...	21.0	9.07	1.73	.1	1.54	4	84	2.69	<.1	3.4	
JUN	25...	30.8	13.0	1.63	.1	2.74	4	146	4.24	<.1	5.3	
SEP	12...	34.6	12.2	1.63	.1	3.82	6	124	5.70	E.08	6.5	
Date		SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, TOTAL (MG/L AS N) (00600)		
OCT	31...	.23	3510	172	165	<.04	.33	<.05	<.008	--		
JAN	08...	.15	12400	110	96	<.04	.38	.25	<.008	.63		
MAR	26...	.13	23500	98	77	<.04	.42	.19	<.008	.61		
MAY	30...	.14	15300	101	90	E.03	.40	E.04	<.008	--		
JUN	25...	.19	12700	143	146	E.03	.42	.28	E.004	.69		
SEP	12...	.20	9790	149	141	<.04	.27	.40	<.008	.66		
Date		PHOS-ORPHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE 0.75 MM, % FINER THAN (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	
OCT	31...	--	<.06	<.02	E.05	1.0	100	E9	26	90	74	1510
JAN	08...	--	<.06	E.01	.07	1.8	36	25	230	95	86	9660
MAR	26...	--	<.06	E.01	.11	1.4	110	110	140	57	127	30300
MAY	30...	.055	E.03	.02	.09	2.1	E16	E31	83	12	571	86600
JUN	25...	--	<.06	E.02	.09	6.2	62	43	34	95	123	10900
SEP	12...	--	<.06	<.02	E.05	2.6	E6	E9	E8	82	58	3820

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

WHITE RIVER BASIN

259

07077380 CACHE RIVER AT EGYPT

LOCATION.--Lat 35°51'28", long 90°56'00", in NW1/4SE1/4 sec.12, T.14 N., R.1 E., Craighead County, Hydrologic Unit 08020302, on right bank on downstream side of bridge on State Highway 91, 1.0 mi southeast of Egypt, 2.2 mi northwest of Winesburg, and at mile 143.

DRAINAGE AREA.--701 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year. Daily stages and results of discharge measurements for July 1937 to December 1940, and December 1944 to date are published in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR Ark. 1972: 1966. WDR Ark. 1973: Drainage area. WDR Ark. 2000: 1998-99.

GAGE.--Water-stage recorder. Datum of gage is 222.99 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	4.6	3970	4020	3210	196	3600	541	170	184	1130	314
2	17	1.0	4000	3870	3380	158	3480	215	91	105	1210	260
3	12	155	3990	3750	3400	153	3370	98	66	71	812	219
4	7.4	586	3920	3620	3340	180	3230	62	50	67	520	221
5	5.4	505	3820	3360	3270	171	3080	52	41	126	340	205
6	4.5	208	3800	2760	3190	167	2570	47	117	162	225	198
7	36	50	3840	1990	3110	312	1310	43	842	137	186	196
8	230	9.4	3970	1360	2880	313	608	575	515	112	137	160
9	136	3.0	4020	1020	1890	337	424	1500	253	81	148	143
10	56	0.05	4000	824	1030	959	286	1400	259	69	194	137
11	111	0.00	3950	655	696	783	191	884	787	155	232	118
12	935	0.00	3920	547	520	2000	126	460	959	315	242	102
13	1600	0.17	3940	462	482	2490	386	1310	1010	882	447	e85
14	2390	1.2	4020	389	513	1980	883	2530	1660	1720	1750	e70
15	2680	0.09	4020	346	469	954	1240	2580	1940	1630	2470	e80
16	2680	0.91	4150	339	404	834	904	2520	1630	1200	2260	e90
17	2450	0.00	5480	319	356	1200	318	2960	674	888	1520	e100
18	1670	4.2	6160	290	318	921	181	3490	231	731	912	e190
19	828	8.3	6430	292	394	1590	117	3440	100	1630	616	e800
20	477	13	6510	287	2460	3300	78	3310	66	2210	544	e2300
21	293	22	6410	297	2780	3470	58	3180	67	1590	454	e3300
22	170	48	6260	391	2640	3470	51	3050	75	895	399	e3300
23	87	49	6050	1460	1960	3390	47	2940	55	427	377	3320
24	46	197	5840	2860	822	3290	39	2820	60	217	466	e3300
25	32	973	5640	3260	407	3200	36	2660	123	119	1050	e3200
26	52	1430	5390	3240	351	3330	35	1980	380	130	1420	e3000
27	44	2220	5120	3140	289	3420	42	1360	501	193	1130	e2800
28	23	2980	4850	2900	220	3420	60	688	462	221	820	e1700
29	20	3580	4590	1970	---	3410	81	284	327	234	611	e570
30	13	3870	4370	1140	---	3470	369	217	238	325	489	e260
31	8.0	---	4170	1470	---	3590	---	227	---	606	381	---
TOTAL	17137.3	16918.92	146600	52628	44781	56458	27200	47423	13749	17432	23492	30738
MEAN	552.8	564.0	4729	1698	1599	1821	906.7	1530	458.3	562.3	757.8	1025
MAX	2680	3870	6510	4020	3400	3590	3600	3490	1940	2210	2470	3320
MIN	4.5	0.00	3800	287	220	153	35	43	41	67	137	70
AC-FT	33990	33560	290800	104400	88820	112000	53950	94060	27270	34580	46600	60970
CFSM	0.79	0.80	6.75	2.42	2.28	2.60	1.29	2.18	0.65	0.80	1.08	1.46
IN.	0.91	0.90	7.78	2.79	2.38	3.00	1.44	2.52	0.73	0.93	1.25	1.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

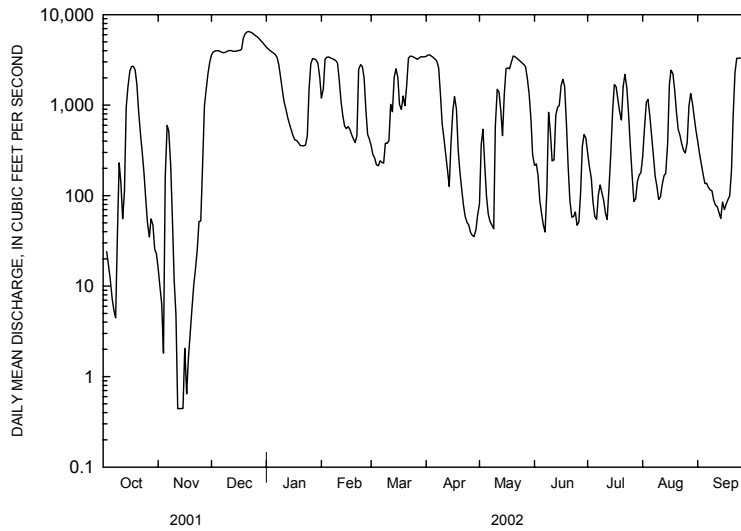
MEAN	374.5	774.5	1351	1307	1284	1240	1224	1073	491.6	422.6	430.6	454.6
MAX	2437	2942	4729	4249	3552	3543	4759	4256	1655	1528	2117	1637
(WY)	1985	1997	2002	1991	1989	1997	1979	1973	2000	1976	1998	1965
MIN	12.5	4.50	45.0	11.8	87.4	216	75.2	84.9	29.2	102	85.8	75.1
(WY)	1995	2000	1977	1981	1996	1996	1981	1987	1988	1968	1968	1971

WHITE RIVER BASIN

07077380 CACHE RIVER AT EGYPT--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	389949.42		494557.22			
ANNUAL MEAN	1068		1355		867.3	
HIGHEST ANNUAL MEAN					1762	1973
LOWEST ANNUAL MEAN					299	1972
HIGHEST DAILY MEAN	6510	Dec 20	6510	Dec 20	7940	Apr 25 1973
LOWEST DAILY MEAN	0.00	May 16	0.00	Nov 11	0.00	Nov 6 1982
ANNUAL SEVEN-DAY MINIMUM	0.34	Nov 11	0.34	Nov 11	0.00	Oct 14 1991
MAXIMUM PEAK FLOW			6570	Dec 20	8490	Jan 6 1966
MAXIMUM PEAK STAGE			21.25	Dec 20	21.88	Jan 6 1966
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	773500		981000		628300	
ANNUAL RUNOFF (CFSM)	1.52		1.93		1.24	
ANNUAL RUNOFF (INCHES)	20.69		26.24		16.81	
10 PERCENT EXCEEDS	4000		3610		2780	
50 PERCENT EXCEEDS	323		520		300	
90 PERCENT EXCEEDS	20		47		38	

<sup>e</sup>Estimated



WHITE RIVER BASIN

261

07077500 CACHE RIVER AT PATTERSON

LOCATION.--Lat 35°16'10", long 91°14'15", in SE1/4 sec.31, T.8 N., R.2 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64 at Patterson, 10.9 mi upstream from Maple Slough, and at mile 77.2.

DRAINAGE AREA.--1,037 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1931, February 1937, August 1937 to September 1960, October 1965 to September 1977, October 1997 to current year in reports of the U.S. Geological Survey. Monthly discharge only for some periods, published in WSP 1311 and WSP 1731. January 1947 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers, Memphis District. Gage-height records July 11, 1916, to Dec. 31, 1931, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 182.96 ft above NGVD of 1929. Prior to Oct. 3, 1966, nonrecording and recording gages at or within 1,000 ft of old U.S. Highway 64 crossing, 1.4 mi downstream as follows: Prior to 1931, nonrecording gage at datum 183.17 ft above NGVD of 1929; January 1937 to Oct. 5, 1949, nonrecording gage; and Oct. 6, 1949, to Dec. 31, 1950, water-stage recorder at mean Gulf level, or 0.24 ft below sea level; Jan. 1, 1950, to Oct. 2, 1966, water-stage recorder at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges and those below 100 ft<sup>3</sup>/s, which are fair. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 19, 1927, reached a stage of 16.1 ft, present datum, from floodmarks, discharge, 24,500 ft<sup>3</sup>/s, due to break in White River levee.

DISCHARGE FROM THE CORPS OF ENGINEERS, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	66	3720	5980	3260	1410	4240	145	1680	324	591	1130
2	152	50	4440	5840	3400	1180	4150	142	1320	375	529	993
3	109	45	4760	5670	3070	1000	3780	146	1050	362	603	845
4	75	38	4760	5480	2820	849	3550	241	825	313	806	704
5	52	34	4510	5350	2830	709	3440	384	648	261	1010	584
6	37	30	4290	5330	2940	592	3380	433	486	218	1120	453
7	26	27	4220	5120	3010	476	3320	368	338	184	1080	355
8	19	50	4260	4890	3090	391	3260	272	242	153	940	301
9	15	115	4320	4690	3140	353	3140	201	179	138	782	264
10	14	147	4210	4420	3110	331	2890	158	191	144	641	237
11	77	137	4050	4000	3020	343	2470	150	310	156	514	214
12	470	99	4200	3430	2880	888	2070	335	401	189	396	194
13	1020	64	4690	2850	2540	1720	1730	717	415	251	333	173
14	1350	38	5340	2370	2160	2080	1420	998	430	342	333	154
15	1390	21	5750	2010	1850	2110	1260	1070	542	393	411	137
16	1350	12	6080	1740	1590	2180	1140	1030	679	525	575	121
17	1330	8.4	9010	1530	1390	2260	1050	1300	816	727	891	178
18	1420	6.5	10600	1360	1250	2200	1080	2070	997	1020	1400	210
19	1600	5.8	10500	1250	1180	2150	1160	2600	1210	1470	1840	348
20	1740	5.6	9810	1160	1420	2760	1140	2710	1290	2130	1940	780
21	1800	5.3	9000	1060	1780	3340	1000	2760	1130	2610	1810	1360
22	1740	5.1	e7200	960	1790	3300	822	2890	866	3030	1530	1810
23	1530	5.1	e6800	1020	1770	3300	653	2980	618	3470	1240	2190
24	1240	6.5	e6600	1420	2000	3300	511	3000	394	3600	1020	2600
25	958	5.9	e6500	1820	2180	3220	368	2990	294	3310	859	2850
26	705	5.6	e6400	2080	2210	3190	282	2920	189	2650	737	2970
27	496	5.4	e6360	2350	2040	3130	227	2850	146	1990	676	3020
28	317	46	e6340	2610	1740	3070	199	2740	132	1490	734	3020
29	202	784	6160	2770	---	3020	182	2640	167	1120	925	3000
30	129	2420	6140	2850	---	3100	161	2410	238	882	1130	2930
31	89	---	6090	2960	---	3680	---	2060	---	717	1200	---
TOTAL	21653	4288.2	187110	96370	65460	61632	54075	45710	18223	34544	28596	34125
MEAN	698.5	142.9	6036	3109	2338	1988	1802	1475	607.4	1114	922.5	1138
MAX	1800	2420	10600	5980	3400	3680	4240	3000	1680	3600	1940	3020
MIN	14	5.1	3720	960	1180	331	161	142	132	138	333	121
AC-FT	42950	8510	371100	191100	129800	122200	107300	90670	36150	68520	56720	67690





WHITE RIVER BASIN

07077500 CACHE RIVER AT PATTERSON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1952 to May 1955, October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)
OCT 22...	1045	81213	80513	1840	773	4.8	48	7.5	227	16.1	75
JAN 09...	1045	81213	80513	5210	770	12.3	91	7.1	83	3.1	28
MAR 11...	1315	81213	80513	348	775	7.4	63	8.1	111	8.9	37
APR 30...	1150	81213	80513	207	767	5.1	57	7.7	118	20.7	43
JUN 18...	0930	81213	80513	925	761	7.7	84	7.3	187	19.5	60
AUG 29...	0735	81213	80513	893	763	5.5	67	7.5	371	25.7	140

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CAC03) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT 22..	18.0	7.20	11.0	.6	11.0	21	80	15.0	11.0	.22
JAN 09..	7.00	2.50	3.40	.3	3.9	21	38	2.70	2.80	.07
MAR 11..	9.20	3.30	3.40	.4	5.3	22	53	3.90	4.60	.10
APR 30..	11.0	3.70	3.60	.3	5.0	19	46	3.20	4.80	.11
JUN 18..	15.0	5.40	4.60	.6	11.0	27	109	8.50	17.0	.23
AUG 29..	37.0	12.0	4.00	.7	18.0	21	156	14.0	15.0	.31

Date	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT 22...	820	165	122	.04	1.1	.05	--	--	<.02
JAN 09...	703	50	45	<.01	.50	--	--	--	<.02
MAR 11...	68.6	73	63	.17	1.3	.22	.30	1.33	.32
APR 30...	44.2	79	61	.05	1.3	.06	.40	1.77	.41
JUN 18...	420	168	132	.03	1.2	.04	1.19	5.27	1.20
AUG 29...	545	226	194	.01	.70	.01	--	--	.12

## WHITE RIVER BASIN

## 07077500 CACHE RIVER AT PATTERSON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2 (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
OCT 22...	--	<.010	1.1	--	.368	.12	.12	.18	4.5
JAN 09...	--	<.010	--	--	.061	.03	.02	.08	5.5
MAR 11...	.066	.020	1.1	1.6	.123	.04	.04	.26	.9
APR 30...	.033	.010	1.2	1.7	.184	.06	.06	.30	1.6
JUN 18...	.033	.010	1.2	2.4	.184	.05	.06	.20	11
AUG 29...	--	<.010	.69	.82	.276	.10	.09	.15	10

Date	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 22...	160	170	280	90	47	233
JAN 09...	E28	E37	E17	93	43	605
MAR 11...	E74	130	390	99	158	148
APR 30...	E43	56	170	98	128	71.5
JUN 18...	320	560	410	98	129	322
AUG 29...	160	170	140	95	34	82.0

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

WHITE RIVER BASIN

265

07077555 CACHE RIVER NEAR COTTON PLANT

LOCATION.--Lat 35°02'07", long 91°19'19", in SE1/4SW1/4 sec.21, T.5 N.,R.3 W., Woodruff County, Hydrologic Unit 08020302, on left bank on downstream side of bridge on county road, 1.4 mi upstream from Roaring Slough, and 4.2 mi northwest of Cotton Plant.

DRAINAGE AREA.--1,172 mi<sup>2</sup>, of which an estimated 20 mi<sup>2</sup> is probably noncontributing.

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

REVISED RECORDS.--WDR ARKANSAS 1989: 1988(M).

GAGE.--Water-stage recorder. Datum of gage is 164.17 ft above NGVD of 1929. Non-recording gage Oct. 10, 1989 to Sept. 27, 1990 at same site and datum.

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

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	721	850	6270	2740	2260	3960	492	3140	239	2130	785
2	366	533	1020	6230	2970	2240	4160	374	3000	257	1980	815
3	275	324	1290	6190	3180	2180	4410	314	2790	287	1820	860
4	203	183	1660	6100	3330	2090	4490	300	2610	323	1640	874
5	151	129	e2300	6060	3360	1990	4460	294	2440	338	1460	855
6	113	101	e2700	6120	3370	1880	4380	317	2280	327	1270	810
7	85	85	e3200	6010	3360	1770	4290	366	2100	299	1120	737
8	66	74	3340	5860	3350	1640	4210	405	1930	262	1020	651
9	52	66	3610	5730	3360	1520	4160	448	1760	229	966	551
10	43	68	3730	5590	3380	1400	4080	459	1620	207	934	441
11	93	93	e4200	5450	3410	1280	3970	399	1430	196	885	343
12	168	124	e4400	5220	3410	1380	3870	321	1160	202	811	278
13	228	136	e4700	4930	3400	1420	3690	329	946	226	723	238
14	413	128	4630	4580	3340	1440	3430	390	793	251	647	216
15	596	105	4890	4210	3230	1500	3130	482	669	283	564	201
16	711	83	5390	3860	3050	1600	2840	620	581	340	480	193
17	810	64	6880	3580	2820	1730	2650	833	543	382	432	192
18	887	50	7520	3300	2640	1890	2490	1210	548	428	444	195
19	934	41	7800	3060	2510	2030	2340	1340	586	563	516	225
20	970	32	7830	2790	2460	2290	2180	1470	639	684	633	368
21	1010	24	7700	2600	2390	2530	2050	1690	715	825	813	526
22	1050	e30	7570	2470	2320	2800	1940	1890	815	1030	1030	633
23	1110	e30	7460	2380	2280	3150	1840	2060	892	1310	1210	738
24	1160	e30	7250	2340	2250	3370	1720	2210	902	1630	1320	913
25	1200	e44	7040	2270	2220	3490	1580	2370	848	1910	1380	1140
26	1200	e140	6840	2220	2210	3620	1440	2540	746	2140	1340	1400
27	1190	e290	6670	2210	2230	3640	1260	2740	624	2350	1260	1680
28	1150	e430	6530	2240	2250	3640	1060	2930	479	2470	1140	1880
29	1090	e550	6460	2300	---	3630	867	3070	329	2480	1010	2050
30	1000	698	6400	2400	---	3690	672	3170	254	2410	889	2180
31	875	---	6310	2530	---	3850	---	3210	---	2290	809	---
TOTAL	19651	5406	158170	127100	80820	72940	87619	39043	38169	27168	32676	22968
MEAN	633.9	180.2	5102	4100	2886	2353	2921	1259	1272	876.4	1054	765.6
MAX	1200	721	7830	6270	3410	3850	4490	3210	3140	2480	2130	2180
MIN	43	24	850	2210	2210	1280	672	294	254	196	432	192
AC-FT	38980	10720	313700	252100	160300	144700	173800	77440	75710	53890	64810	45560
CFSM	0.54	0.15	4.35	3.50	2.46	2.01	2.49	1.07	1.09	0.75	0.90	0.65
IN.	0.62	0.17	5.02	4.03	2.57	2.32	2.78	1.24	1.21	0.86	1.04	0.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

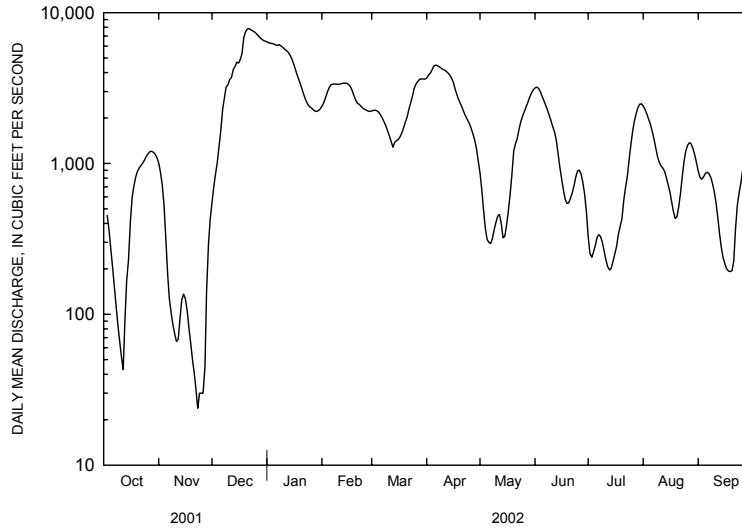
MEAN	551.5	996.8	2267	2353	2387	2437	1801	1174	767.2	678.2	713.8	467.3
MAX	2067	3211	5102	6779	5238	5759	3585	3595	2026	1413	2591	748
(WY)	1991	1997	2002	1991	1989	1989	1997	1991	2000	1994	1998	1991
MIN	55.9	16.6	44.9	579	377	303	515	217	116	274	348	201
(WY)	1988	2000	1990	2001	2000	1996	1995	1987	1988	1990	1990	1987

WHITE RIVER BASIN

07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	470883		711730			
ANNUAL MEAN	1290		1950		1390	
HIGHEST ANNUAL MEAN					2356	1989
LOWEST ANNUAL MEAN					560	1996
HIGHEST DAILY MEAN	7830	Dec 20	7830	Dec 20	9770	Dec 28 1987
LOWEST DAILY MEAN	24	Nov 21	24	Nov 21	7.8	Nov 1 2000
ANNUAL SEVEN-DAY MINIMUM	33	Nov 19	33	Nov 19	8.6	Oct 28 2000
MAXIMUM PEAK FLOW			8100	Dec 21	9950	Dec 28 1987
MAXIMUM PEAK STAGE			20.23	Dec 21	20.23	Dec 21 2001
INSTANTANEOUS LOW FLOW			23	Nov 21	17.8	Dec 1 1999
ANNUAL RUNOFF (AC-FT)	934000		1412000		1007000	
ANNUAL RUNOFF (CFSM)	1.10		1.66		1.19	
ANNUAL RUNOFF (INCHES)	14.95		22.59		16.11	
10 PERCENT EXCEEDS	4700		4400		3440	
50 PERCENT EXCEEDS	553		1400		785	
90 PERCENT EXCEEDS	101		202		136	

<sup>1</sup>Also Nov. 1-2, 2000  
<sup>e</sup>Estimated



WHITE RIVER BASIN

267

07077700 BAYOU DEVIEW NEAR MORTON

LOCATION.--Lat 35°15'07", long 91°06'37", near center of secs.4, 5, 8, and 9, T.7 N.,R.1 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64, 1.0 mi west of Morton, and at mile 39.6.

DRAINAGE AREA.--421 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to May 1973, August 1973 to September 1977, October 1997 to current year in reports of the U.S. Geological Survey. February 1939 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers, Memphis District.

REVISED RECORDS.--WDR ARKANSAS 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 187.71 ft above NGVD of 1929. Non-recording gage prior to Nov. 8, 1949. At datum 0.26 ft below NGVD of 1929 prior to Jan. 1, 1952.

REMARKS.--No estimated daily discharges. Water-discharge records good except discharges below 10 ft<sup>3</sup>/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	1900	2700	1750	443	1780	55	73	1.6	488	235
2	0.0	0.0	2020	2590	1780	347	1790	417	47	0.78	653	178
3	0.0	0.0	2100	2460	1780	298	1750	421	23	0.03	672	108
4	0.0	0.0	2120	2320	1760	248	1680	247	17	0.00	571	64
5	0.0	0.0	2120	2130	1740	194	1600	120	18	0.34	402	39
6	0.0	0.0	2120	1920	1740	178	1460	57	57	2.2	260	21
7	0.0	0.0	2140	1670	1730	251	1250	27	30	3.5	149	13
8	0.0	0.0	2170	1410	1720	253	964	18	10	3.4	67	10
9	0.0	0.0	2150	1150	1670	230	701	13	2.7	2.6	36	8.5
10	0.0	0.0	2110	936	1590	191	515	14	2.1	0.63	26	6.5
11	169	0.0	2060	777	1480	172	380	26	4.9	0.00	22	5.7
12	682	0.0	2100	647	1310	939	269	77	40	0.36	20	3.8
13	983	0.0	2180	528	1100	1320	171	99	73	5.8	21	1.9
14	1240	0.0	2220	432	908	1470	257	343	61	33	206	0.41
15	1370	0.0	2230	367	766	1490	436	497	58	139	614	1.00
16	1400	0.0	2310	322	661	1480	370	360	32	253	804	1.3
17	1250	0.0	2840	284	544	1450	228	395	20	199	986	47
18	854	0.0	2870	261	429	1420	136	926	12	209	1060	324
19	493	0.0	2840	341	392	1430	79	1140	8.2	474	1020	474
20	303	0.0	2810	378	925	1770	56	1220	2.9	1180	848	851
21	162	0.0	2810	339	1240	1910	46	1230	0.78	1530	601	1200
22	76	0.0	2860	304	1360	1940	42	1190	0.12	1640	441	1380
23	33	0.0	2940	730	1380	1910	33	1110	0.00	1670	330	1450
24	12	0.0	3020	1270	1350	1880	28	919	0.00	1660	268	1460
25	4.7	0.01	3080	1590	1270	1850	24	635	0.00	1590	277	1440
26	1.3	5.7	3100	1700	1070	1810	77	408	0.00	1340	435	1380
27	0.67	15	3080	1720	796	1770	126	250	0.41	882	503	1220
28	0.06	282	3020	1710	591	1710	67	142	3.8	532	505	846
29	0.0	1090	2970	1690	---	1630	35	90	4.3	340	454	522
30	0.0	1570	2890	1680	---	1580	20	61	2.1	205	383	338
31	0.0	---	2800	1690	---	1700	---	80	---	170	304	---
TOTAL	9033.73	2962.71	77980	38046	34832	35264	16370	12587	603.31	14067.24	13426	13629.11
MEAN	291.4	98.76	2515	1227	1244	1138	545.7	406.0	20.11	453.8	433.1	454.3
MAX	1400	1570	3100	2700	1780	1940	1790	1230	73	1670	1060	1460
MIN	0.00	0.00	1900	261	392	172	20	13	0.00	0.00	20	0.41
AC-FT	17920	5880	154700	75460	69090	69950	32470	24970	1200	27900	26630	27030
CFSM	0.69	0.23	5.98	2.92	2.95	2.70	1.30	0.96	0.05	1.08	1.03	1.08
IN.	0.80	0.26	6.89	3.36	3.08	3.12	1.45	1.11	0.05	1.24	1.19	1.20

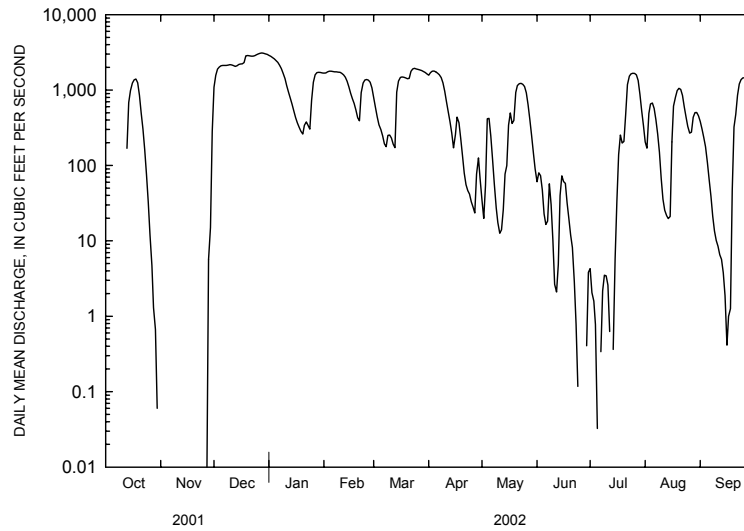
WHITE RIVER BASIN

07077700 BAYOU DEVIEW NEAR MORTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	122.7	349.7	637.1	880.1	1013	1000	767.0	537.8	299.3	159.8	199.7	208.8
MAX	1798	2811	2515	3917	3837	2658	1981	2389	2173	682	1020	1073
(WY)	1950	1958	2002	1950	1956	1945	1957	1958	1945	1967	1966	1965
MIN	0.000	0.000	0.000	12.8	2.96	44.2	24.2	5.55	4.47	0.000	0.065	0.000
(WY)	1957	1954	1963	1964	1963	1941	1963	1948	1941	1954	1947	1943

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	196303.33		268801.10			
ANNUAL MEAN	537.8		736.4		500.3	
HIGHEST ANNUAL MEAN					1312	1950
LOWEST ANNUAL MEAN					141	1941
HIGHEST DAILY MEAN	3100	Dec 26	3100	Dec 26	6640	Nov 23 1957
LOWEST DAILY MEAN	0.00	Apr 30	0.00	Oct 1	0.00	Aug 7 1943
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 30	0.00	Oct 1	0.00	Aug 7 1943
MAXIMUM PEAK FLOW			3110	Dec 25-27	6700	Nov 23 1957
MAXIMUM PEAK STAGE			18.79	Dec 25-27	18.79	Dec 25 2001
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	389400		533200		362500	
ANNUAL RUNOFF (CFSM)	1.28		1.75		1.19	
ANNUAL RUNOFF (INCHES)	17.35		23.75		16.15	
10 PERCENT EXCEEDS	2150		1930		1720	
50 PERCENT EXCEEDS	72		343		108	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



WHITE RIVER BASIN

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07077700 BAYOU DEVIEW NEAR MORTON--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, SOLVED OXYGEN, (MG/L) (00300)	PH DIS-SOLVED WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)		
OCT	22..	1215	81213	80513	106	770	.9	9	7.3	248	17.1	87	21.0	8.40
JAN	09..	1215	81213	80513	1110	770	8.0	60	7.2	98	3.5	33	8.50	2.80
MAR	11..	1445	81213	80513	136	775	8.2	72	7.2	135	10.5	43	11.0	3.80
APR	30..	1000	81213	80513	14	767	4.2	46	7.4	171	20.1	51	13.0	4.50
JUN	18..	1040	81213	80513	7.9	760	6.1	69	7.0	260	21.5	93	23.8	8.05
AUG	29..	0915	81213	80513	464	763	4.8	59	7.2	353	25.8	130	35.0	11.0

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	
OCT	22...	13.0	.4	8.4	15	89	13.0	12.0	.25	53.5	187	130
JAN	09...	4.10	.3	4.0	19	39	4.30	4.90	.09	198	66	52
MAR	11...	4.00	.5	6.9	24	58	6.50	6.30	.12	32.7	89	74
APR	30...	5.30	.6	10.0	27	52	10.0	11.0	.14	3.89	103	87
JUN	18...	4.96	.6	12.5	22	56	11.0	25.4	.21	3.34	156	121
AUG	29...	5.10	.6	15.0	19	128	19.0	17.0	.29	264	211	180

Date	NITRO-GEN AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	
OCT	22...	.03	2.0	.04	--	--	<.02	--	<.010	2.0	--
JAN	09...	.02	.80	.03	--	--	.05	--	<.010	.78	.85
MAR	11...	.15	1.6	.19	--	--	.19	--	<.010	1.5	1.8
APR	30...	.12	1.2	.15	.31	1.37	.32	.033	.010	1.1	1.5
JUN	18...	.04	1.4	.05	.35	1.55	.40	.164	.050	1.4	1.8
AUG	29...	.04	.80	.05	.13	.575	.14	.033	.010	.76	.94

Date	PHOS-PHATE ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	E COLI, MTEC MF WATER (MG/L) 100 ML (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COL/100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COLS./100 ML) (31673)	SED. SUSP. SIEVE # FINER THAN .062 MM (MG/L) (70331)	SED. SUSP. SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	
OCT	22...	.583	.19	.19	.48	8.2	310	970	1100	92	46	13.2
JAN	09...	.123	.06	.04	.14	4.9	50	E33	150	96	57	171
MAR	11...	.184	.05	.06	.33	7.4	E43	E37	140	95	167	61.3
APR	30...	.276	.09	.09	.27	3.7	E37	E30	110	97	90	3.4
JUN	18...	.153	.05	.05	.16	12	E14	E6	46	97	68	1.5
AUG	29...	.245	.09	.08	.15	14	210	200	150	99	37	46.4

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ARKANSAS RIVER BASIN

## 07194800 ILLINOIS RIVER AT SAVOY

**LOCATION.**--Lat 36°06'11", long 94°20'40", in NW<sub>1/4</sub>SE<sub>1/4</sub> 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--June 1979 to December 1981, October 1985 to September 1986, August 1995 to current year. Occasional low-flow discharge measurements 1957-63; occasional discharge measurements 1974-78, 1982-85, and 1990-95.

**REVISED RECORDS.**--WDR Ark. 2000: 1986 (M)(P), 1997-99 (M)

**GAGE.**--Water-stage recorder. Datum of gage is 1,017.90 ft above NGVD of 1929.

**REMARKS.**--No estimated daily discharges. Water-discharge records. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	17	462	177	1010	114	209	164	95	28	13	19
2	10	29	304	169	544	163	187	159	82	30	12	18
3	9.9	1760	226	163	404	168	164	139	71	32	13	17
4	9.6	558	178	158	320	158	149	129	61	51	12	16
5	12	274	145	157	269	185	139	114	469	46	12	15
6	13	176	126	157	255	235	129	104	342	36	12	15
7	14	127	110	154	249	205	865	94	197	33	12	14
8	12	102	98	150	241	186	5090	84	140	29	11	14
9	11	87	85	149	220	202	1270	99	131	26	11	14
10	141	75	76	147	192	185	787	90	151	24	11	13
11	682	66	71	145	168	165	493	76	124	23	12	13
12	289	58	101	143	158	159	383	76	143	24	12	13
13	303	52	146	141	146	146	357	315	355	72	112	13
14	222	48	188	138	134	136	301	141	235	125	2410	12
15	126	45	200	135	129	128	256	103	153	49	558	12
16	85	42	4420	132	121	196	245	88	118	34	257	12
17	63	40	3960	130	115	157	355	496	97	29	157	12
18	49	38	1340	129	109	160	248	356	82	28	108	12
19	40	51	858	136	318	3010	204	220	69	26	81	14
20	34	71	524	142	432	2220	196	166	60	23	62	15
21	30	58	413	140	276	881	173	137	53	21	49	13
22	27	51	355	136	213	533	150	116	47	19	40	12
23	25	47	312	140	183	408	1120	99	43	19	33	12
24	23	52	277	389	162	336	630	161	40	17	29	12
25	22	54	255	266	145	1190	369	162	38	17	36	12
26	21	49	238	221	132	700	349	117	40	16	31	12
27	20	45	226	194	119	480	352	211	37	15	28	11
28	19	57	217	182	114	381	282	210	34	14	24	11
29	18	189	205	173	---	322	221	158	32	16	22	11
30	18	437	192	174	---	272	187	138	29	15	21	11
31	17	---	184	2310	---	239	---	112	---	14	20	---
TOTAL	2375.5	4755	16492	7277	6878	14020	15860	4834	3568	951	4221	400
MEAN	76.63	158.5	532.0	234.7	245.6	452.3	528.7	155.9	118.9	30.68	136.2	13.33
MAX	682	1760	4420	2310	1010	3010	5090	496	469	125	2410	19
MIN	9.6	17	71	129	109	114	129	76	29	14	11	11
AC-FT	4710	9430	32710	14430	13640	27810	31460	9590	7080	1890	8370	793
CFSM	0.46	0.95	3.19	1.41	1.47	2.71	3.17	0.93	0.71	0.18	0.82	0.08
IN.	0.53	1.06	3.67	1.62	1.53	3.12	3.53	1.08	0.79	0.21	0.94	0.09

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979-82, 1986, 1995-02, BY WATER YEAR (WY)

	1979	1980	1981	1982	1986	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	53.42	219.6	155.2	180.8	225.1	238.5	241.6	186.9	225.4	50.40	35.18	66.05	
MAX	180	981	532	882	720	608	533	519	1166	158	136	392	
(WY)	1999	1997	2002	1998	2001	1998	1986	1999	2000	2000	2002	1986	
MIN	10.1	12.4	12.0	6.68	18.3	44.6	52.4	32.7	24.3	5.43	2.23	3.73	
(WY)	2000	2000	1980	1981	1980	1996	2001	1997	1998	1980	1980	1980	



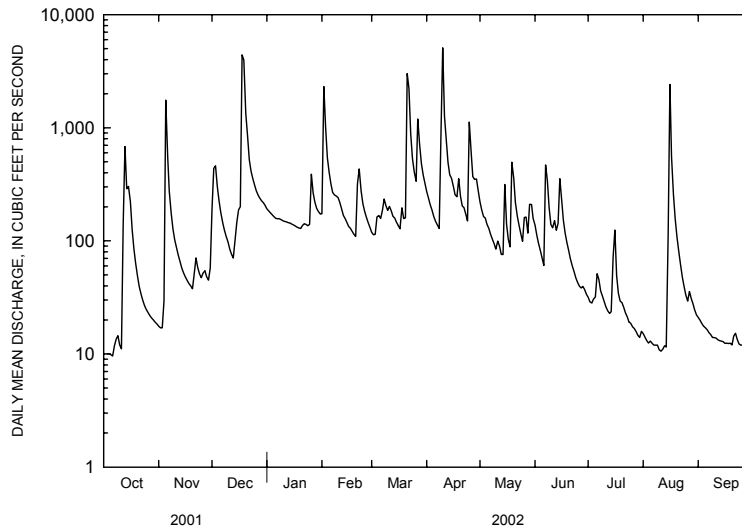
ARKANSAS RIVER BASIN

07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1979-82, 1986, 1995-02

ANNUAL TOTAL	64013.9		81631.5			
ANNUAL MEAN	175.4		223.6		158.3	
HIGHEST ANNUAL MEAN					245	1986
LOWEST ANNUAL MEAN					33.7	1980
HIGHEST DAILY MEAN	4890	Feb 24	5090	Apr 8	10500	Nov 19 1985
LOWEST DAILY MEAN	7.1	Sep 7	9.6	Oct 4	1.8	Aug 10 1980
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 1	11	Oct 1	1.9	Aug 22 1980
MAXIMUM PEAK FLOW			10700	Apr 8	31500	Nov 19 1985
MAXIMUM PEAK STAGE			15.81	Apr 8	<sup>1</sup> 18.42	Nov 19 1985
INSTANTANEOUS LOW FLOW			9.6	Oct 3-5	1.6	Aug 11 1980
ANNUAL RUNOFF (AC-FT)	127000		161900		114700	
ANNUAL RUNOFF (CFSM)	1.05		1.34		0.95	
ANNUAL RUNOFF (INCHES)	14.26		18.18		12.88	
10 PERCENT EXCEEDS	306		385		312	
50 PERCENT EXCEEDS	56		126		41	
90 PERCENT EXCEEDS	11		13		9.6	

<sup>1</sup>From floodmarks



ARKANSAS RIVER BASIN

07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 24...	0930	81213	80513	25	722	6.3	71	7.6	305	18.9	140
DEC 04...	0830	81213	80513	197	738	8.7	86	8.2	221	13.3	98
MAR 06...	1230	81213	80513	242	736	12.2	105	8.2	230	7.4	100
MAY 14...	1030	81213	80513	150	740	6.6	70	7.5	245	16.5	110
JUL 24...	1000	81213	80513	14	738	6.1	78	7.7	307	25.7	140
AUG 29...	0900	81213	80513	22	737	6.4	77	7.9	311	22.7	140

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 24...	51.0	3.00	3.60	.2	5.9	8	8.60	13.0	179	.01
DEC 04...	35.0	2.60	2.90	.2	4.4	9	6.40	13.0	143	.03
MAR 06...	36.0	2.80	2.20	.2	5.1	10	7.20	20.0	139	.02
MAY 14...	38.0	2.70	4.00	.2	4.6	8	6.70	13.0	147	.07
JUL 24...	52.0	2.40	3.30	.2	6.2	9	8.60	7.50	184	.03
AUG 29...	50.0	2.60	3.30	.2	5.7	8	8.30	8.60	177	.01

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL SOLVED (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT 24...	.30	.01	2.19	9.69	2.20	.033	.010	.29	2.5	.092	.02
DEC 04...	.40	.04	--	--	2.30	--	<.010	.37	2.7	--	.03
MAR 06...	.40	.03	--	--	1.40	--	<.010	.38	1.8	.092	.04
MAY 14...	1.0	.09	1.68	7.44	1.70	.066	.020	.93	2.7	.491	.17
JUL 24...	<.20	.04	1.89	8.37	1.90	.033	.010	--	--	.153	.06
AUG 29...	.20	.01	--	--	2.30	--	<.010	.19	2.5	.123	.05

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)
OCT 24...	.03	.03	62	84	170	96	52	3.5
DEC 04...	<.01	.05	210	260	360	96	49	26.1
MAR 06...	.03	.05	88	100	180	98	51	33.3
MAY 14...	.16	.26	E1800	E1700	E2100	91	81	32.8
JUL 24...	.05	.07	260	310	600	84	11	.42
AUG 29...	.04	.06	200	150	260	96	5.0	.30

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

ARKANSAS RIVER BASIN

273

07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE

LOCATION.--Lat 36°05'05", long 94°08'05", in NW1/4NW1/4 sec.2, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110003, downstream of the culvert at Township Street.

DRAINAGE AREA.--1.22 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder.

REMARKS.--Records fair except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.07	0.11	1.5	0.14	3.2	0.33	1.6	1.7	1.0	0.67	e0.00	0.04
2	e0.10	0.11	0.91	0.12	1.3	1.3	1.5	1.7	0.96	0.82	e0.00	0.03
3	e0.06	e6.8	0.65	0.11	0.84	0.53	1.3	1.5	1.1	1.1	e0.08	0.00
4	e0.04	e1.3	0.61	0.11	0.54	0.46	1.2	1.3	1.1	1.3	e0.00	0.00
5	e4.0	e0.50	0.55	0.11	0.53	0.66	1.2	1.1	4.5	0.40	e0.00	0.00
6	e0.65	e0.47	0.44	0.11	0.64	0.66	1.2	1.1	1.6	0.26	e0.00	0.00
7	e0.00	e0.40	0.37	0.11	0.60	0.44	28	1.1	1.2	0.18	e0.00	0.00
8	e0.00	e0.51	0.31	0.11	0.54	0.43	17	1.0	1.1	0.18	e0.00	0.00
9	e0.01	e0.39	0.24	0.12	0.49	0.51	3.6	3.1	1.8	0.12	e0.00	e0.00
10	e22	e0.36	0.18	0.11	0.36	0.25	2.6	1.5	1.6	0.09	0.48	e0.00
11	e7.4	e0.32	0.23	0.11	0.30	0.24	2.2	1.4	1.1	0.07	e0.15	e0.00
12	e1.3	e0.32	2.6	0.11	0.30	0.22	2.0	6.1	3.9	0.17	e0.00	e0.00
13	e4.5	e0.32	0.88	0.11	0.27	0.21	1.8	3.7	4.1	0.07	11	e0.00
14	e1.1	e0.35	1.7	0.11	0.25	0.40	1.7	2.0	1.8	0.00	6.7	e0.00
15	e0.28	e0.38	3.4	0.16	0.22	1.2	1.5	1.7	1.4	0.00	1.3	e0.06
16	e0.23	e0.34	38	0.25	0.17	0.24	2.1	1.6	1.2	0.00	0.82	e0.03
17	e0.12	e0.32	11	0.19	0.16	0.22	1.6	11	1.1	0.00	0.60	e0.05
18	e0.06	e0.25	3.4	0.26	0.16	3.9	1.6	2.8	1.00	0.00	0.50	e0.00
19	e0.03	e2.8	1.7	0.16	2.6	23	1.8	2.0	0.96	0.00	0.39	1.1
20	e0.00	e0.68	1.0	0.11	0.77	14	1.6	1.7	0.90	0.00	0.37	0.20
21	e0.00	e0.24	0.84	0.11	0.51	6.8	1.5	1.5	0.74	0.00	0.34	0.07
22	e0.00	e0.20	0.67	0.12	0.77	4.5	1.4	1.5	0.67	e0.00	0.24	0.02
23	e0.03	e0.67	0.43	1.7	0.30	3.2	13	1.5	0.85	e0.04	0.22	0.00
24	e0.04	e0.41	0.37	0.54	0.29	2.3	3.0	3.2	0.96	e0.03	0.17	0.00
25	e0.05	e0.19	0.40	0.34	0.25	9.3	2.0	1.7	1.2	e0.10	0.38	0.00
26	0.11	e0.08	0.32	0.24	0.20	3.0	3.6	1.5	0.94	e0.00	0.21	0.00
27	0.11	e0.06	0.36	0.24	0.18	2.4	2.5	1.4	0.93	e0.00	0.16	0.00
28	0.11	e2.1	0.32	0.23	0.18	2.0	2.0	1.6	0.83	e0.00	0.12	0.00
29	0.11	e2.1	0.25	0.23	---	1.9	1.6	1.4	0.84	e0.23	0.09	0.00
30	0.11	e2.1	0.16	2.3	---	1.7	1.5	1.3	0.77	e0.01	0.07	0.00
31	0.11	---	0.16	17	---	1.6	---	1.1	---	e0.00	0.06	---
TOTAL	42.73	25.18	73.95	25.77	16.92	87.90	109.2	66.8	42.15	5.84	24.45	1.60
MEAN	1.378	0.839	2.385	0.831	0.604	2.835	3.640	2.155	1.405	0.188	0.789	0.053
MAX	22	6.8	38	17	3.2	23	28	11	4.5	1.3	11	1.1
MIN	0.00	0.06	0.16	0.11	0.16	0.21	1.2	1.0	0.67	0.00	0.00	0.00
AC-FT	85	50	147	51	34	174	217	132	84	12	48	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

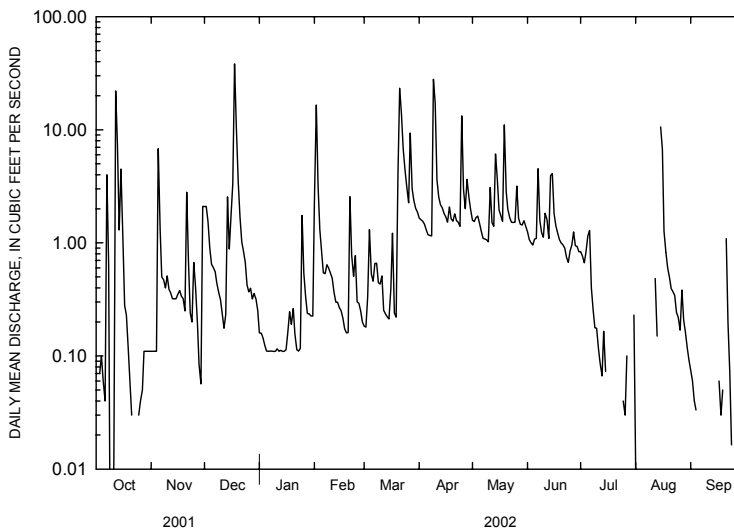
MEAN	1.018	1.457	0.959	1.707	1.912	2.773	1.560	1.299	1.938	0.308	0.294	0.516
MAX	3.07	4.92	2.39	6.53	3.68	7.02	3.64	2.15	5.50	0.59	0.79	1.08
(WY)	1999	1997	2002	1998	1997	1998	2002	2002	2000	2000	2002	1998
MIN	0.11	0.085	0.11	0.25	0.44	0.40	0.19	0.78	0.23	0.073	0.000	0.053
(WY)	2000	2000	1997	2000	2000	2001	2000	1997	1998	1998	2000	2002

ARKANSAS RIVER BASIN

07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	393.85		522.49			
ANNUAL MEAN	1.079		1.431		1.306	
HIGHEST ANNUAL MEAN					1.83	1998
LOWEST ANNUAL MEAN					0.81	2000
HIGHEST DAILY MEAN	38	Dec 16	38	Dec 16	80	Jan 4 1998
LOWEST DAILY MEAN	0.00	Apr 25	0.00	Oct 7	0.00	Sep 19 1996
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 25	0.00	Jul 14	0.00	Sep 28 1996
MAXIMUM PEAK FLOW			154	Apr 23	<sup>1</sup> 553	Jun 30 1999
MAXIMUM PEAK STAGE			2.66	Apr 23	4.54	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	781		1040		946	
10 PERCENT EXCEEDS	2.0		2.8		3.2	
50 PERCENT EXCEEDS	0.41		0.40		0.30	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

<sup>1</sup>From rating curve extended above 100 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow  
<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

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07194880 OSAGE CREEK NEAR CAVE SPRINGS

LOCATION.--Lat 36°16'53", long 94°13'40", in NE1/4NE1/4 sec.36, T.19 N., R.31 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 112, 1.4 mi north of Cave Springs.

DRAINAGE AREA.--34.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to September 1993, April 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1131.59 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Some regulation by City of Rogers sewage treatment facility, 1.5 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	34	37	92	27	37	67	78	40	27	18
2	16	18	28	37	60	116	38	66	71	55	27	16
3	15	17	25	37	51	50	37	60	67	89	26	18
4	17	15	22	36	46	44	36	58	64	189	25	17
5	65	15	22	35	42	44	35	55	162	93	24	17
6	30	17	21	34	40	45	34	53	86	52	25	17
7	22	17	22	33	40	43	166	53	70	46	24	17
8	19	16	19	32	40	43	677	53	65	43	23	18
9	18	14	17	31	39	38	152	148	69	41	22	17
10	85	15	17	30	37	36	114	71	87	39	21	16
11	147	14	16	29	34	34	100	59	64	38	19	16
12	99	15	56	28	33	33	94	193	190	39	19	16
13	53	15	42	26	32	32	88	286	229	38	40	16
14	42	13	37	27	31	31	79	99	100	37	108	15
15	33	13	44	27	31	30	74	85	79	35	39	15
16	29	14	664	25	29	29	91	76	66	34	33	16
17	28	15	388	26	29	30	100	551	74	33	30	17
18	26	14	138	26	28	34	75	158	65	42	28	17
19	25	64	96	25	50	225	72	100	58	45	27	22
20	23	28	79	24	41	125	68	85	54	39	24	22
21	21	23	72	24	34	70	64	77	53	35	23	20
22	21	20	62	24	33	59	62	73	51	33	22	18
23	21	17	56	34	32	54	91	71	49	33	21	17
24	21	18	53	45	29	48	72	93	48	33	21	15
25	20	18	49	32	28	85	62	73	54	30	24	15
26	20	17	47	29	27	57	95	60	61	30	21	15
27	20	17	46	28	27	51	82	59	48	27	21	16
28	18	20	44	28	26	49	66	461	48	28	20	16
29	16	30	41	28	---	47	61	186	47	32	20	17
30	17	49	39	28	---	42	68	111	42	30	19	14
31	17	---	38	246	---	40	---	86	---	29	18	---
TOTAL	1020	594	2334	1151	1061	1691	2890	3726	2299	1407	841	506
MEAN	32.90	19.80	75.29	37.13	37.89	54.55	96.33	120.2	76.63	45.39	27.13	16.87
MAX	147	64	664	246	92	225	677	551	229	189	108	22
MIN	15	13	16	24	26	27	34	53	42	27	18	14
AC-FT	2020	1180	4630	2280	2100	3350	5730	7390	4560	2790	1670	1000
CFSM	0.95	0.57	2.17	1.07	1.09	1.57	2.78	3.46	2.21	1.31	0.78	0.49
IN.	1.09	0.64	2.50	1.23	1.14	1.81	3.10	3.99	2.46	1.51	0.90	0.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991-93, 2000-02, BY WATER YEAR (WY)

MEAN	28.90	47.81	77.00	63.40	60.75	45.94	70.39	63.22	85.40	39.17	21.39	33.20
MAX	43.5	77.7	160	135	108	75.8	96.3	120	217	73.2	27.1	98.4
(WY)	1991	1993	1993	1991	2001	1993	2002	2002	2000	2000	2002	1993
MIN	17.8	19.8	22.4	33.3	37.9	22.8	26.6	28.2	21.0	15.8	13.9	16.9
(WY)	1993	2002	2001	2001	2002	1992	2001	1992	1991	1991	1991	2002

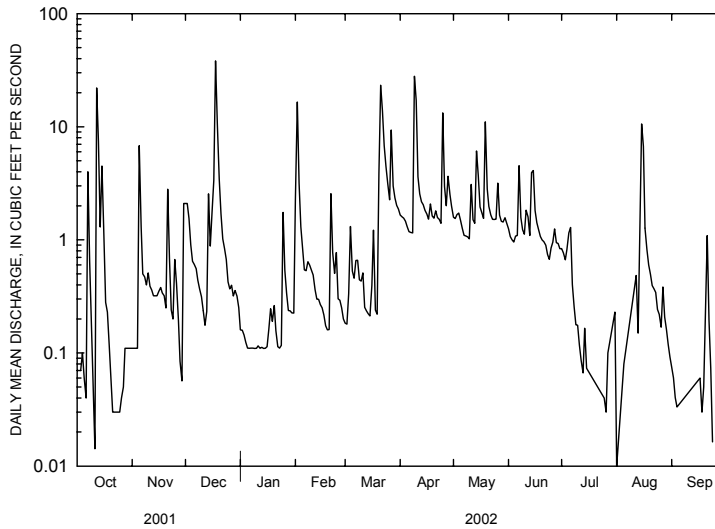
ARKANSAS RIVER BASIN

07194880 OSAGE CREEK NEAR CAVE SPRINGS--CONTINUED

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1991-93, 2000-02

ANNUAL TOTAL	14723		19520			
ANNUAL MEAN	40.34		53.48		51.05	
HIGHEST ANNUAL MEAN					77.0	1993
LOWEST ANNUAL MEAN					35.6	2001
HIGHEST DAILY MEAN	1100	Feb 24	677	Apr 8	1630	Dec 15 1992
LOWEST DAILY MEAN	13	Aug 23	13	Nov 14	11	Sep 15 1991
ANNUAL SEVEN-DAY MINIMUM	14	Nov 9	14	Nov 9	12	Oct 6 1991
MAXIMUM PEAK FLOW			1580	Apr 8	2980	Jun 21 2000
MAXIMUM PEAK STAGE			7.69	Apr 8	9.85	Jun 21 2000
INSTANTANEOUS LOW FLOW			11	Nov 11	8.3	<sup>1</sup> Oct 10 1991
ANNUAL RUNOFF (AC-FT)	29200		38720		36980	
ANNUAL RUNOFF (CFSM)	1.16		1.54		1.47	
ANNUAL RUNOFF (INCHES)	15.78		20.93		19.99	
10 PERCENT EXCEEDS	64		92		87	
50 PERCENT EXCEEDS	26		34		31	
90 PERCENT EXCEEDS	16		17		16	

<sup>1</sup>Also Oct. 11-12, 18, 20, 21, 22, 1991



ARKANSAS RIVER BASIN

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07195000 OSAGE CREEK NEAR ELM SPRINGS

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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to September 1975, July 1995 to current year. October 1976 to September 1979 a crest-stage partial-record station. Occasional discharge measurements 1977-79 and 1982-95. Monthly discharge only for some periods, published in WSP 1731.

REVISED RECORDS.--WDR Ark.1970: Drainage area. WDR Ark. 1974: 1969.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1979 water stage recorder about 400 ft downstream at present datum. Altitude of gage is 1,052 ft by barometer.

REMARKS.--No estimated daily discharges. Water-discharge records good. Low flow slightly regulated by operation of small lake at Cave Springs, and City of Rogers sewage treatment plant. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	81	123	155	398	142	209	210	241	78	85	77
2	80	83	98	155	281	306	204	213	197	92	87	72
3	79	88	94	154	237	203	195	193	177	105	72	80
4	80	76	92	151	221	190	189	179	163	263	63	84
5	152	77	90	143	212	199	184	172	318	185	89	83
6	109	83	91	137	206	204	176	186	207	106	92	82
7	85	83	86	140	196	193	391	180	167	92	89	76
8	84	83	77	141	190	191	1970	180	146	95	93	70
9	85	63	67	140	179	179	549	319	144	93	86	78
10	189	49	70	136	167	163	419	217	168	91	79	80
11	391	44	71	133	166	168	361	186	140	89	69	80
12	362	47	144	126	166	172	345	345	284	101	80	80
13	187	51	144	118	161	163	321	684	418	93	206	78
14	139	52	137	123	157	160	281	343	209	74	540	72
15	122	51	125	126	155	158	269	292	163	78	183	66
16	115	52	1650	123	148	150	273	268	139	78	148	74
17	110	49	1380	122	140	142	296	992	143	77	127	81
18	105	44	579	122	143	161	248	470	134	86	112	80
19	99	122	416	116	202	633	238	337	122	101	113	95
20	87	88	341	111	199	572	225	304	115	81	111	94
21	79	79	304	115	169	365	208	284	114	77	104	82
22	81	68	270	117	167	312	205	265	113	86	99	72
23	85	61	236	124	156	277	288	249	101	88	96	80
24	84	66	219	174	144	249	240	300	103	96	90	81
25	84	62	206	136	145	503	211	258	107	94	101	81
26	83	66	201	123	143	336	262	220	125	89	97	79
27	76	69	197	117	140	301	247	212	102	78	96	79
28	69	84	188	122	138	270	208	1050	92	69	95	72
29	74	99	177	125	---	254	199	550	90	100	91	67
30	78	144	165	130	---	228	201	318	77	102	89	74
31	80	---	163	623	---	212	---	252	---	95	84	---
TOTAL	3609	2164	8201	4578	5126	7756	9612	10228	4819	3032	3566	2349
MEAN	116.4	72.13	264.5	147.7	183.1	250.2	320.4	329.9	160.6	97.81	115.0	78.30
MAX	391	144	1650	623	398	633	1970	1050	418	263	540	95
MIN	69	44	67	111	138	142	176	172	77	69	63	66
AC-FT	7160	4290	16270	9080	10170	15380	19070	20290	9560	6010	7070	4660
CFSM	0.90	0.55	2.03	1.14	1.41	1.92	2.46	2.54	1.24	0.75	0.88	0.60
IN.	1.03	0.62	2.35	1.31	1.47	2.22	2.75	2.93	1.38	0.87	1.02	0.67

ARKANSAS RIVER BASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

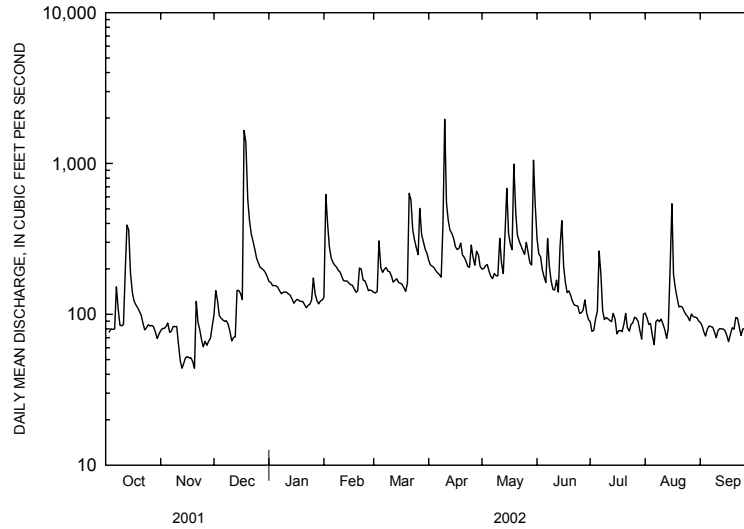
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-75, 1995-02, BY WATER YEAR (WY)

MEAN	75.33	118.4	104.4	105.5	141.2	166.4	166.9	197.5	168.0	107.6	70.99	67.85
MAX	310	474	390	417	457	538	533	972	694	318	244	214
(WY)	1971	1974	1974	1998	1951	1975	1957	1961	1974	1999	1961	1975
MIN	13.2	23.3	20.9	20.4	23.8	24.5	20.8	40.2	25.0	14.2	11.3	12.4
(WY)	1957	1956	1956	1956	1964	1956	1956	1964	1954	1954	1954	1956

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1951-75, 1995-02

ANNUAL TOTAL	56323		65040		123.9		
ANNUAL MEAN	154.3		178.2		236		
HIGHEST ANNUAL MEAN					29.1		
LOWEST ANNUAL MEAN					1974		
HIGHEST DAILY MEAN	3500	Feb 24	1970	Apr 8	6540	May 19	1961
LOWEST DAILY MEAN	44	Nov 11	44	Nov 11	5.3	Sep 5	1954
ANNUAL SEVEN-DAY MINIMUM	49	Nov 10	49	Nov 10	6.1	Aug 31	1954
MAXIMUM PEAK FLOW			4450	Apr 8	1 <sup>1</sup> 22500	May 19	1961
MAXIMUM PEAK STAGE			9.66	Apr 8	16.66	May 19	1961
INSTANTANEOUS LOW FLOW			39	Nov 11,18	4.7	Sep 4	1954
ANNUAL RUNOFF (AC-FT)	111700		129000		89770		
ANNUAL RUNOFF (CFSM)	1.19		1.37		0.95		
ANNUAL RUNOFF (INCHES)	16.12		18.61		12.95		
10 PERCENT EXCEEDS	238		305		223		
50 PERCENT EXCEEDS	106		134		76		
90 PERCENT EXCEEDS	76		76		26		

<sup>1</sup>From rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow





ARKANSAS RIVER BASIN

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07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (PER-CENT) (00301)	PH WATER WHOLE FIELD (STAND-ARD) UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
OCT	23...	1330	81213	80513	81	723	9.6	110	7.7	425	19.5	140
DEC	03...	1430	81213	80513	125	738	10.2	99	8.2	399	12.6	140
MAR	07...	0930	81213	80513	179	738	11.1	98	8.0	331	8.6	120
MAY	15...	1300	81213	80513	275	737	8.0	82	7.8	315	15.2	130
JUL	24...	1200	81213	80513	140	738	8.4	101	7.9	410	22.9	140
AUG	28...	1430	81213	80513	101	734	8.0	98	8.4	429	23.7	130

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	
OCT	23...	52.0	2.20	7.40	1	35.0	34	33.0	23.0	270	.02
DEC	03...	51.0	2.10	6.40	.9	25.0	27	24.0	18.0	245	.03
MAR	07...	47.0	1.80	4.30	.8	20.0	25	22.0	15.0	213	.03
MAY	15...	47.0	1.90	4.50	.5	14.0	19	14.0	13.0	194	<.01
JUL	24...	52.0	1.90	7.00	1	27.0	29	25.0	21.0	253	<.01
AUG	28...	50.0	1.90	7.20	1	32.0	33	29.0	25.0	261	.01

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	
OCT	23...	.60	.03	--	--	4.30	--	<.010	.58	4.9	5.83	1.40
DEC	03...	.30	.04	--	--	<.02	--	<.010	.27	--	--	.93
MAR	07...	.30	.04	3.79	16.8	3.80	.033	.010	.27	4.1	2.51	.81
MAY	15...	.30	--	--	--	4.40	--	<.010	--	4.7	2.12	.70
JUL	24...	<.20	--	4.19	18.5	4.20	.033	.010	--	--	5.83	1.90
AUG	28...	.40	.01	--	--	4.40	--	<.010	.39	4.8	4.60	1.50

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	
OCT	23...	1.90	1.40	280	300	270	97	75	16.4
DEC	03...	<.01	.95	60	110	93	97	55	18.6
MAR	07...	.82	.85	64	72	74	99	62	30.0
MAY	15...	.69	.74	430	540	600	96	71	52.7
JUL	24...	1.90	2.00	130	180	200	77	6.0	2.3
AUG	28...	1.50	1.50	49	97	110	100	4.0	1.1

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ARKANSAS RIVER BASIN

## 07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS

**LOCATION.**--Lat 36°06'31", long 94°32'00", in SE<sub>1</sub>/4NE<sub>1</sub>/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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--July 1995 to current year. Occasional low-flow measurements in 1971.

**REVISED RECORDS.**--WDR Ark 1997: 1996.

**GAGE.**--Water-stage recorder.

**REMARKS.**--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of May 3, 1990, reached a stage of 25.4 ft, from floodmarks, discharge 66,000 ft<sup>3</sup>/s from rating curve extended above 23,000 ft<sup>3</sup>/s on basis of contracted opening of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	200	809	523	4330	422	815	e640	705	339	214	199
2	130	202	635	495	1710	577	746	e600	625	341	204	187
3	130	1690	512	478	1300	706	670	e580	598	369	198	183
4	128	926	452	459	1040	604	613	560	573	474	192	183
5	134	425	409	446	876	608	573	529	835	589	187	180
6	208	308	386	433	796	684	547	513	1230	443	189	177
7	168	259	361	419	746	689	688	494	769	371	188	174
8	148	234	337	410	700	651	13200	457	637	341	185	166
9	144	226	312	402	653	625	4420	542	607	326	181	161
10	173	218	295	395	609	617	2470	602	618	316	178	165
11	1450	206	288	382	585	588	1720	475	606	307	180	166
12	1190	195	341	370	564	582	1410	443	617	309	177	163
13	766	194	504	354	537	559	1290	1500	1250	367	250	162
14	775	194	506	342	505	532	1150	1080	1040	409	5200	156
15	512	191	543	337	483	509	1020	812	732	351	1970	153
16	407	190	5590	332	462	536	936	701	624	310	989	e150
17	355	187	14400	324	438	527	1080	1440	591	289	718	e148
18	330	183	4790	319	414	501	941	2080	551	282	546	e146
19	307	203	2740	326	482	3190	841	1150	513	292	450	e170
20	286	295	1810	327	1040	6940	803	923	477	287	409	e230
21	263	257	1410	318	729	2760	747	799	450	267	358	194
22	247	243	1190	316	616	1720	685	697	428	251	318	173
23	246	234	1010	325	587	1380	2070	625	408	256	286	159
24	241	264	873	573	551	1180	2010	637	390	252	264	161
25	229	256	782	594	509	2870	1220	812	390	243	272	160
26	222	244	712	508	480	2290	1060	622	408	234	270	157
27	216	238	668	448	451	1590	1140	594	392	228	249	154
28	206	252	624	411	428	1340	959	952	372	223	237	153
29	199	330	587	399	---	1170	e720	1770	373	237	225	152
30	200	600	566	395	---	1030	e680	1030	370	238	215	151
31	200	---	546	2130	---	910	---	833	---	225	208	---
TOTAL	10335	9644	44988	14290	22621	38887	47224	25492	18179	9766	15707	5033
MEAN	333.4	321.5	1451	461.0	807.9	1254	1574	822.3	606.0	315.0	506.7	167.8
MAX	1450	1690	14400	2130	4330	6940	13200	2080	1250	589	5200	230
MIN	125	183	288	316	414	422	547	443	370	223	177	146
AC-FT	20500	19130	89230	28340	44870	77130	93670	50560	36060	19370	31150	9980
CFSM	0.58	0.56	2.52	0.80	1.41	2.18	2.74	1.43	1.05	0.55	0.88	0.29
IN.	0.67	0.62	2.91	0.92	1.46	2.52	3.06	1.65	1.18	0.63	1.02	0.33

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

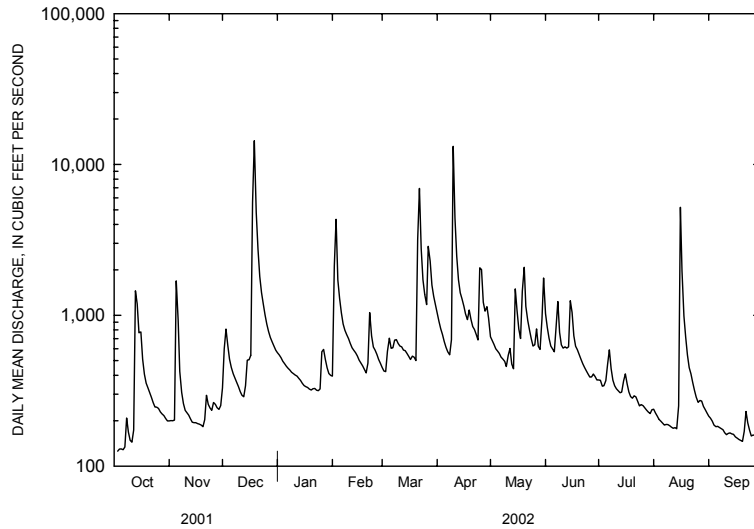
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	263.7	656.1	633.9	697.5	927.1	949.4	787.2	732.6	919.1	402.9	190.6	277.8
MAX	482	2839	1451	2256	2167	1767	1574	1780	3287	1153	248	887
(WY)	1999	1997	2002	1998	2001	1998	2002	1999	2000	1999	1997	1996
MIN	168	166	251	266	242	224	282	311	226	153	125	168
(WY)	2000	1996	1996	2000	1996	1996	2000	1997	1996	1996	1996	2002

SUMMARY STATISTICS FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	262166	
ANNUAL MEAN	718.3	605.7
HIGHEST ANNUAL MEAN		795 1999
LOWEST ANNUAL MEAN		391 1996
HIGHEST DAILY MEAN	14400 Dec 17	19000 Jan 5 1998
LOWEST DAILY MEAN	125 Oct 1	86 Sep 7 1998
ANNUAL SEVEN-DAY MINIMUM	146 Oct 1	93 Sep 5 1998
MAXIMUM PEAK FLOW	21800 Apr 8	32300 Jan 5 1998
MAXIMUM PEAK STAGE	16.81 Apr 8	19.24 Jan 5 1998
INSTANTANEOUS LOW FLOW	120 Oct 1	78 Sep 11 1996
ANNUAL RUNOFF (AC-FT)	520000	438800
ANNUAL RUNOFF (CFSM)	1.25	1.05
ANNUAL RUNOFF (INCHES)	16.96	14.31
10 PERCENT EXCEEDS	1240	1040
50 PERCENT EXCEEDS	450	294
90 PERCENT EXCEEDS	181	146

<sup>e</sup>Estimated



## ARKANSAS RIVER BASIN

## 07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

## WATER-QUALITY RECORDS

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANALYZING SAMPLE NUMBER (CODE 00028)	AGENCY COLLECTING SAMPLE NUMBER (CODE 00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT											
11...	1215	81213	80513	2220	739	6.3	68	7.5	257	17.4	93
23...	1100	81213	80513	249	726	7.7	86	7.6	338	18.1	140
DEC											
03...	1130	81213	80513	490	742	9.5	87	8.1	274	10.4	110
17...	1345	81213	80513	17000	741	9.0	85	6.8	133	11.1	54
JAN											
31...	1450	81213	80513	1710	732	10.2	90	8.3	255	8.2	98
31...	1730	81213	80513	3310	732	10.1	89	8.2	246	8.2	99
FEB											
01...	1100	81213	80513	3580	732	10.1	89	8.1	165	8.1	64
28...	1130	81213	80513	428	742	11.4	92	8.1	296	5.0	120
MAR											
19...	1045	81213	80513	2500	750	10.8	100	8.2	271	11.2	110
20...	0745	81213	80513	8450	754	9.4	86	7.8	150	10.7	59
21...	0700	81213	80513	3020	760	7.9	71	7.7	191	10.4	77
APR											
09...	0815	81213	80513	4580	742	9.8	94	7.8	183	12.1	72
MAY											
09...	1000	81213	80513	415	742	6.8	75	7.9	304	19.0	120
17...	1530	81213	80513	961	735	7.4	79	7.6	269	16.7	110
JUL											
11...	1030	81213	80513	197	740	6.8	85	7.6	319	25.2	130
AUG											
29...	1030	81213	80513	229	740	6.8	83	8.1	349	23.3	130

Date	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT										
11...	34.0	1.90	4.80	.5	11.0	19	11.0	14.0	150	.02
23...	51.0	2.40	4.80	.6	17.0	21	18.0	17.0	204	<.01
DEC										
03...	41.0	2.30	3.90	.4	10.0	16	12.0	14.0	172	<.01
17...	19.0	1.60	3.80	.2	2.8	9	3.80	6.40	83	.06
JAN										
31...	36.0	1.90	3.80	.4	9.4	17	11.0	13.0	154	.10
31...	36.0	2.20	3.20	.4	8.6	15	9.40	17.0	148	.07
FEB										
01...	23.0	1.60	3.30	.3	4.6	13	6.20	8.80	103	.06
28...	44.0	2.00	3.00	.5	12.0	18	13.0	14.0	177	<.01
MAR										
19...	41.0	2.20	2.70	.3	8.4	14	9.50	15.0	154	.03
20...	21.0	1.60	3.10	.2	3.8	12	5.10	7.80	101	.09
21...	28.0	1.80	2.90	.2	4.8	11	6.40	9.50	120	.03
APR										
09...	26.0	1.60	3.10	.2	3.9	10	5.40	8.00	113	.05
MAY										
09...	46.0	2.00	3.60	.4	11.0	16	12.0	11.0	175	<.01
17...	42.0	1.90	3.70	.3	7.6	12	8.90	9.70	157	.04
JUL										
11...	49.0	2.00	4.10	.5	12.0	16	14.0	9.20	184	<.01
AUG										
29...	48.0	2.00	4.60	.7	17.0	22	16.0	15.0	201	<.01

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT											
11...	<.20	.03	--	--	1.70	--	<.010	--	--	1.04	.32
23...	<.20	--	--	--	2.80	--	<.010	--	--	.889	.28
DEC											
03...	.30	--	--	--	2.50	--	<.010	--	2.8	.675	.21
17...	1.1	.08	--	--	1.90	--	<.010	1.0	3.0	.797	.23
JAN											
31...	1.8	.13	--	--	2.40	--	<.010	1.7	4.2	1.07	.35
31...	1.4	.09	--	--	2.00	--	<.010	1.3	3.4	.583	.19
FEB											
01...	1.2	.08	--	--	1.60	--	<.010	1.1	2.8	.583	.19
28...	<.20	--	--	--	3.10	--	<.010	--	--	.705	.23
MAR											
19...	.90	.04	--	--	2.10	--	<.010	.87	3.0	.337	.10
20...	1.3	.12	1.19	5.27	1.20	.033	.010	1.2	2.5	.613	.20
21...	.70	.04	--	--	2.20	--	<.010	.67	2.9	.337	.10
APR											
09...	.60	.06	--	--	2.30	--	<.010	.55	2.9	.399	.14
MAY											
09...	.30	--	--	--	2.70	--	<.010	--	3.0	.889	.29
17...	.50	.05	--	--	2.80	--	<.010	.46	3.3	.828	.26
JUL											
11...	<.20	--	--	--	2.60	--	<.010	--	--	1.32	.38
AUG											
29...	.30	--	--	--	2.50	--	<.010	--	2.8	1.13	.37

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT								
11...	.34	.62	10000	47000	12000	97	339	2030
23...	.29	.19	22	30	92	98	61	41.0
DEC								
03...	.22	.24	88	200	150	94	47	62.2
17...	.26	.44	6700	5200	9900	95	198	9090
JAN								
31...	.35	.62	E17000	E16000	19000	87	357	1650
31...	.19	.40	4300	5100	6900	92	337	3010
FEB								
01...	.19	.35	5900	5700	9700	89	183	1770
28...	.23	.24	30	24	26	96	59	68.2
MAR								
19...	.11	.25	E1300	E1300	E980	93	268	1810
20...	.20	.39	E9400	2400	51000	93	255	5820
21...	.11	.18	1200	930	2500	95	99	807
APR								
09...	.13	.23	2600	6800	4000	92	129	1600
MAY								
09...	.29	.32	110	115	345	83	68	76.2
17...	.27	.31	4400	3250	4240	86	81	210
JUL								
11...	.43	.40	39	46	150	82	7.0	3.7
AUG								
29...	.37	.37	30	22	110	88	9.0	5.6

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

## ARKANSAS RIVER BASIN

## 07195800 FLINT CREEK AT SPRINGTOWN

LOCATION.--Lat 36°15'20", long 94°25'50", in NW1/4 sec.7, T.13 N., R.32 W., Benton County, Hydrologic Unit 11110103, on right bank 20 ft downstream from State Highway 12, 0.8 mi southwest of Springtown.

DRAINAGE AREA.--14.2 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,173.47 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.7	16	14	36	12	17	11	20	7.1	6.0	5.1
2	5.3	7.0	15	14	31	15	16	11	18	7.7	5.8	5.0
3	5.5	10	14	13	29	14	15	10	16	7.9	5.6	4.9
4	5.6	7.5	13	12	25	14	14	9.9	14	13	5.4	5.0
5	10	6.4	12	12	24	14	13	9.3	17	11	5.3	4.9
6	8.0	6.1	11	12	23	16	13	9.0	15	9.6	5.2	5.0
7	6.3	5.9	11	12	21	16	21	8.7	14	8.6	5.1	4.8
8	5.6	5.7	11	11	19	16	97	8.7	12	7.9	5.0	4.8
9	6.3	5.6	9.9	11	18	16	56	12	11	7.6	4.9	5.0
10	22	5.5	9.7	11	17	15	46	10	11	7.4	5.0	5.1
11	22	5.2	9.6	11	16	15	40	9.2	9.9	8.0	5.1	5.0
12	19	5.0	18	11	15	15	35	11	13	7.4	4.9	5.0
13	15	5.0	19	11	14	14	30	21	28	7.7	9.0	4.9
14	12	4.9	20	10	13	14	27	18	24	9.5	23	5.1
15	10	4.8	20	9.8	13	13	24	16	20	9.1	12	5.4
16	9.1	4.8	75	9.7	12	13	22	14	18	8.2	8.8	5.7
17	8.0	4.8	127	9.7	12	12	21	26	16	7.6	7.7	5.7
18	7.4	4.8	73	9.7	11	13	19	25	14	7.3	7.1	5.5
19	6.9	10	55	9.7	15	23	17	22	13	7.2	6.6	6.9
20	6.5	8.1	46	9.7	17	33	17	19	11	7.0	6.1	6.4
21	6.3	6.7	40	9.5	16	31	15	17	10	6.7	5.8	5.8
22	6.4	6.3	34	9.4	16	28	14	15	9.6	6.5	5.5	5.5
23	6.5	8.3	30	10	15	26	16	14	9.1	8.1	5.4	5.4
24	6.6	21	27	13	14	24	15	14	8.5	6.9	5.5	5.3
25	6.5	14	24	11	14	26	14	13	8.3	6.4	6.3	5.2
26	6.3	12	23	11	13	24	14	11	8.2	6.2	5.6	5.2
27	6.3	11	21	11	12	24	14	11	7.9	6.0	5.4	5.0
28	6.3	11	19	11	12	23	13	25	7.6	6.0	5.3	4.8
29	6.3	11	18	11	---	21	12	26	7.3	8.7	5.4	5.0
30	6.3	14	16	12	---	19	12	24	7.1	7.1	5.2	5.1
31	6.4	---	15	33	---	18	---	22	---	6.4	5.2	---
TOTAL	266.0	239.1	852.2	365.2	493	577	699	472.8	398.5	241.8	204.2	157.5
MEAN	8.581	7.970	27.49	11.78	17.61	18.61	23.30	15.25	13.28	7.800	6.587	5.250
MAX	22	21	127	33	36	33	97	26	28	13	23	6.9
MIN	5.3	4.8	9.6	9.4	11	12	12	8.7	7.1	6.0	4.9	4.8
AC-FT	528	474	1690	724	978	1140	1390	938	790	480	405	312
CFSM	0.60	0.56	1.94	0.83	1.24	1.31	1.64	1.07	0.94	0.55	0.46	0.37
IN.	0.70	0.63	2.23	0.96	1.29	1.51	1.83	1.24	1.04	0.63	0.53	0.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

MEAN	10.61	18.20	18.32	14.41	16.18	21.14	21.06	18.21	20.20	9.736	7.829	8.928
MAX	51.8	83.7	63.0	50.7	45.8	57.7	60.5	107	121	42.5	61.5	38.3
(WY)	1987	1974	1988	1998	2001	1973	1965	1990	1974	1999	1961	1986
MIN	2.20	2.56	2.98	2.98	3.20	3.02	3.15	3.29	2.79	1.83	0.77	1.88
(WY)	1983	1967	1967	1981	1967	1967	1981	1967	1966	1964	1980	1967

ARKANSAS RIVER BASIN

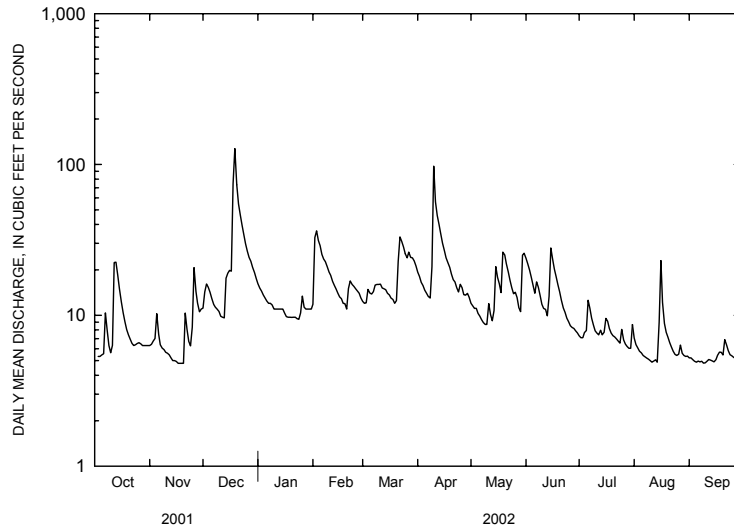
07195800 FLINT CREEK AT SPRINGTOWN--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002	
ANNUAL TOTAL	4828.7		4966.3			
ANNUAL MEAN	13.23		13.61		15.20	
HIGHEST ANNUAL MEAN					34.4 1974	
LOWEST ANNUAL MEAN					3.80 1967	
HIGHEST DAILY MEAN	536	Feb 24	127	Dec 17	1730	Jun 8 1974
LOWEST DAILY MEAN	4.2	Aug 6	4.8	Nov 15	0.00	Aug 3 1980
ANNUAL SEVEN-DAY MINIMUM	4.5	Sep 1	4.9	Nov 12	0.33	Aug 3 1980
MAXIMUM PEAK FLOW			173	Apr 8	<sup>1</sup> 14600	Jun 8 1974
MAXIMUM PEAK STAGE			5.27	Apr 8	<sup>2</sup> 17.51	Jun 8 1974
INSTANTANEOUS LOW FLOW			3.5	Sep 28	<sup>3</sup> 0.00	Aug 3 1980
ANNUAL RUNOFF (AC-FT)	9580		9850		11010	
ANNUAL RUNOFF (CFSM)	0.93		0.96		1.07	
ANNUAL RUNOFF (INCHES)	12.65		13.01		14.54	
10 PERCENT EXCEEDS	20		24		28	
50 PERCENT EXCEEDS	9.0		11		8.5	
90 PERCENT EXCEEDS	4.9		5.2		3.4	

<sup>1</sup>From rating curve extended above 770 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow

<sup>2</sup>From floodmark

<sup>3</sup>Result of pumpage for irrigation upstream from gage







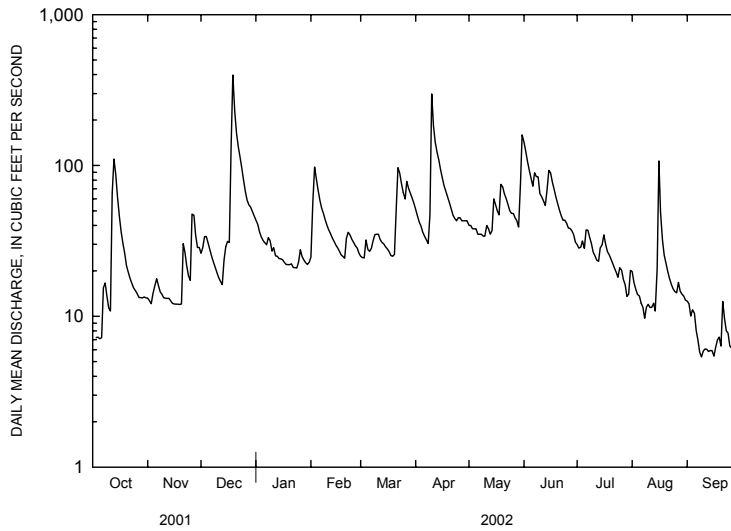
ARKANSAS RIVER BASIN

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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1979 - 2002	
ANNUAL TOTAL	14787.3		14038.1			
ANNUAL MEAN	40.51		38.46		49.05	
HIGHEST ANNUAL MEAN					97.9	1985
LOWEST ANNUAL MEAN					10.7	1981
HIGHEST DAILY MEAN	1390	Feb 24	397	Dec 17	3160	Jun 21 2000
LOWEST DAILY MEAN	4.2	Aug 9	4.5	Sep 30	0.40	Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 4	5.1	Sep 24	0.56	Aug 5 1980
MAXIMUM PEAK FLOW			494	Dec 17	<sup>1</sup> 8750	Jun 21 2000
MAXIMUM PEAK STAGE			5.79	Dec 17	13.58	Jun 21 2000
ANNUAL RUNOFF (AC-FT)	29330		27840		35530	
10 PERCENT EXCEEDS	80		76		102	
50 PERCENT EXCEEDS	22		29		27	
90 PERCENT EXCEEDS	8.0		11		7.2	

<sup>1</sup>From rating curve extended above 3,900 ft<sup>3</sup>/s

<sup>e</sup>Estimated



## ARKANSAS RIVER BASIN

## 07196900 BARON FORK AT DUTCH MILLS

**LOCATION.**--Lat 35°52'48", long 94°29'11", on line between secs.21 and 22, T.14 N., R.33 W., Washington County, Hydrologic Unit 11110103, near right bank on downstream side of bridge on State Highway 59 at Dutch Mills, 2.2 mi downstream from Fly Creek, and 2.9 mi upstream from Arkansas-Oklahoma State line.

**DRAINAGE AREA.**--40.6 mi<sup>2</sup> (corrected.)

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--April 1958 to current year. Prior to October 1969, published as "Barren Fork at Dutch Mills."

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area. WDR Ark. 1993: 1992 (m).

**GAGE.**--Water-stage recorder. Datum of gage is 986.47 ft above NGVD of 1929.

**REMARKS.**--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.3	89	25	176	29	48	35	8.8	4.1	1.6	2.1
2	10	6.3	61	23	93	e37	44	34	7.4	4.0	1.5	1.7
3	9.9	158	49	21	72	34	40	32	6.0	4.4	1.4	1.6
4	9.9	49	42	21	59	33	38	30	5.0	6.3	1.3	1.6
5	12	34	37	22	51	41	36	30	21	5.1	1.2	1.3
6	15	28	34	22	51	46	34	27	19	3.9	1.1	1.1
7	14	25	31	20	51	41	821	24	10	3.2	0.93	1.3
8	13	22	29	19	52	39	982	22	7.2	2.7	1.2	1.9
9	12	22	26	19	49	42	190	27	15	2.5	1.2	1.9
10	111	21	25	18	42	37	113	23	19	2.4	1.1	1.6
11	114	19	24	17	38	36	86	21	14	2.0	1.6	1.7
12	48	18	32	15	36	35	72	20	13	2.3	1.2	1.3
13	204	17	39	15	33	32	64	42	23	12	48	1.1
14	48	16	52	14	31	31	57	28	15	7.0	746	1.0
15	29	15	50	13	30	30	52	22	9.2	4.1	56	0.90
16	22	15	1540	13	29	41	113	20	6.8	3.2	26	0.97
17	17	16	640	13	27	35	94	73	5.2	3.0	18	1.2
18	14	20	193	13	27	96	58	51	3.9	3.1	13	1.8
19	12	34	112	20	127	1220	51	32	3.0	3.0	11	4.5
20	10	37	83	18	89	547	49	26	2.0	2.7	8.3	4.3
21	9.1	33	68	17	59	169	43	22	1.6	1.9	6.1	2.7
22	8.3	32	60	15	48	106	40	18	1.4	1.6	5.1	1.7
23	8.1	34	52	20	42	85	86	15	1.9	1.3	4.3	0.82
24	7.2	41	47	64	39	73	65	21	3.0	1.2	3.8	0.79
25	6.1	41	42	41	35	204	47	21	3.6	1.4	5.9	1.1
26	5.4	39	39	34	31	118	53	16	5.9	1.3	5.1	1.2
27	5.2	38	36	30	29	85	54	23	4.3	1.0	3.7	2.9
28	4.9	49	34	27	28	72	47	21	4.0	0.96	3.0	3.0
29	4.9	68	31	25	---	63	41	17	4.6	1.1	2.4	3.2
30	4.8	95	29	28	---	57	38	14	4.7	1.2	2.0	3.6
31	5.0	---	27	614	---	52	---	11	---	1.5	1.9	---
TOTAL	803.8	1048.6	3653	1276	1474	3566	3556	818	248.5	95.46	984.93	55.88
MEAN	25.93	34.95	117.8	41.16	52.64	115.0	118.5	26.39	8.283	3.079	31.77	1.863
MAX	204	158	1540	614	176	1220	982	73	23	12	746	4.5
MIN	4.8	6.3	24	13	27	29	34	11	1.4	0.96	0.93	0.79
AC-FT	1590	2080	7250	2530	2920	7070	7050	1620	493	189	1950	111
CFSM	0.64	0.86	2.90	1.01	1.30	2.83	2.92	0.65	0.20	0.08	0.78	0.05
IN.	0.74	0.96	3.35	1.17	1.35	3.27	3.26	0.75	0.23	0.09	0.90	0.05

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	26.02	56.90	53.68	48.26	57.67	77.80	78.24	69.09	41.38	16.90	7.562	18.23
MAX	218	347	221	258	163	205	310	307	366	131	62.0	242
(WY)	1971	1986	1988	1998	1975	1973	1990	1990	2000	1958	1992	1974
MIN	0.094	0.51	0.55	0.53	2.16	5.98	6.71	3.25	0.35	0.22	0.000	0.080
(WY)	1964	1964	1964	1964	1964	1967	1963	1977	1963	1963	1980	1980

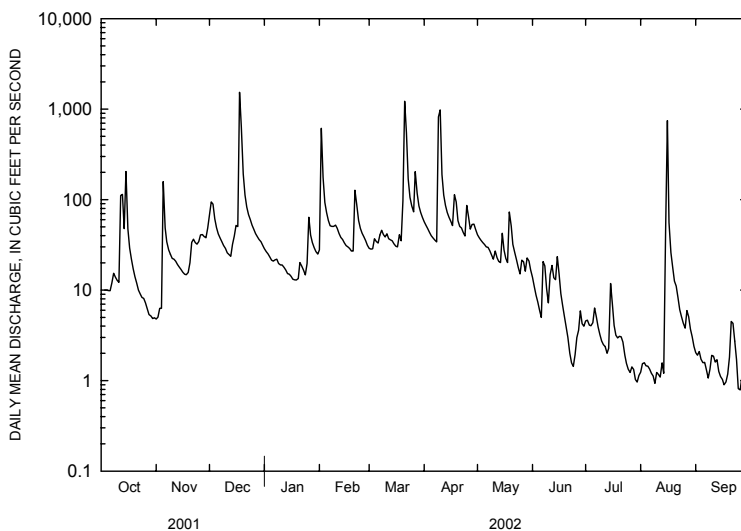
# ARKANSAS RIVER BASIN

## 07196900 BARON FORK AT DUTCH MILLS--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	15314.30		17580.17			
ANNUAL MEAN	41.96		48.16		45.51	
HIGHEST ANNUAL MEAN					104	1993
LOWEST ANNUAL MEAN					3.99	1963
HIGHEST DAILY MEAN	1540	Dec 16	1540	Dec 16	4660	Jun 21 2000
LOWEST DAILY MEAN	0.18	Aug 5	0.79	Sep 24	0.00	Jul 23 1963
ANNUAL SEVEN-DAY MINIMUM	0.67	Aug 1	1.1	Aug 4	0.00	Sep 20 1963
MAXIMUM PEAK FLOW			3750	Apr 7	<sup>1</sup> 20900	Nov 18 1985
MAXIMUM PEAK STAGE			7.49	Apr 7	14.81	Nov 18 1985
INSTANTANEOUS LOW FLOW			0.70	Sep 23-24	0.00	at times
ANNUAL RUNOFF (AC-FT)	30380		34870		32970	
ANNUAL RUNOFF (CFSM)	1.03		1.19		1.12	
ANNUAL RUNOFF (INCHES)	14.03		16.11		15.23	
10 PERCENT EXCEEDS	68		72		87	
50 PERCENT EXCEEDS	18		21		12	
90 PERCENT EXCEEDS	1.5		1.6		0.90	

<sup>1</sup>From rating curve extended above 2,900 ft<sup>3</sup>/s on basis of contracted-opening measurements at 12,900 ft<sup>3</sup>/s and 19,500 ft<sup>3</sup>/s

<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 23...	0930	81213	80513	8.0	726	6.2	70	7.5	362	18.7	160
DEC 03...	0930	81213	80513	51	743	9.2	86	8.1	268	11.0	130
FEB 28...	1030	81213	80513	29	740	13.1	101	8.0	293	3.3	140
MAY 09...	1230	81213	80513	3.4	740	9.2	105	7.9	318	19.9	150
JUL 11...	0900	81213	80513	2.0	738	4.0	51	7.6	285	26.2	120
SEP 04...	1100	81213	80513	1.6	738	4.7	59	7.7	303	25.3	130

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 23...	58.0	3.30	3.40	.2	5.5	7	9.10	20.0	224	.01
DEC 03...	47.0	3.30	2.90	.2	4.9	7	6.80	18.0	174	<.01
FEB 28...	49.0	3.10	1.90	.2	4.4	7	6.70	17.0	174	<.01
MAY 09...	56.0	3.20	2.60	.2	4.6	6	6.60	13.0	186	.02
JUL 11...	45.0	3.00	2.90	.2	6.0	9	8.40	13.0	160	.01
SEP 04...	49.0	3.00	3.20	.2	5.5	8	8.40	13.0	171	.02

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
OCT 23...	.40	.01	3.69	16.3	3.70	.033	.010	.39	4.1	.092
DEC 03...	<.20	--	--	--	2.50	--	<.010	--	--	.092
FEB 28...	<.20	--	2.89	12.8	2.90	.033	.010	--	--	.092
MAY 09...	.30	.03	2.57	11.4	2.60	.099	.030	.28	2.9	.092
JUL 11...	.20	.01	--	--	.32	--	<.010	.19	.52	.061
SEP 04...	.30	.03	.77	3.41	.79	.066	.020	.28	1.1	--

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 23...	.03	.03	.03	190	210	370	97	75	1.6
DEC 03...	.04	.03	.05	190	310	210	96	59	8.1
FEB 28...	.05	.03	.05	48	43	22	95	74	5.8
MAY 09...	.03	.03	.03	150	146	164	80	63	.58
JUL 11...	.03	.02	.03	110	140	180	75	3.0	.02
SEP 04...	<.02	<.01	.03	320	180	160	65	4.0	.02

Remark codes used in this report:  
 < -- Less than

ARKANSAS RIVER BASIN

291

07247000 POTEAU RIVER AT CAUTHRON

LOCATION.--Lat 34°55'08", long 94°17'55", in NW1/4SW1/4 sec.16, T.3 N., R.31 W., Scott County, Hydrologic Unit 11110105, on right bank at downstream side of Scott County Road No. 56 bridge at Cauthron, 200 ft south of junction with State Hwy 28, 2.9 mi downstream from Cross Creek, 7.8 mi downstream from Jones Creek, and at mile 109.0.

DRAINAGE AREA.--203 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1037: 1939(M). WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.53 ft above NGVD of 1929. Prior to May 2, 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. As of September 1974, flow from 92.2 mi<sup>2</sup> upstream from this station is controlled by 16 floodwater-detention reservoirs that have a total combined capacity of 39,082 acre-ft below the flood spillway crests, of which 33,524 acre-ft 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1935 reached a stage of 27.4 ft, from information by local resident.

DISCHARGE FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	8.8	57	122	6150	123	720	116	431	14	4.3	1.6
2	4.9	10	36	105	1800	168	514	99	303	13	4.1	1.8
3	4.6	14	23	91	1520	227	395	84	236	12	4.1	2.1
4	4.7	18	17	78	1240	175	335	75	187	12	4.7	2.0
5	5.3	18	14	78	1080	168	279	69	265	11	4.7	1.6
6	5.6	18	13	129	968	154	235	61	231	11	4.8	1.3
7	5.0	18	31	130	880	142	1350	58	154	9.5	4.0	0.94
8	4.6	18	82	103	880	205	8620	53	121	8.2	3.4	0.54
9	4.7	20	63	93	751	857	2010	63	100	7.2	3.1	0.53
10	5.9	23	34	85	601	563	1480	105	92	6.4	3.1	0.61
11	11	23	23	77	465	429	1210	114	79	6.4	3.3	0.97
12	22	23	83	69	389	588	982	104	68	6.4	3.6	1.3
13	92	22	225	59	320	473	771	1600	55	6.0	3.8	1.4
14	175	22	185	53	267	363	521	546	49	5.8	4.5	1.5
15	59	23	158	51	232	300	411	290	47	13	4.3	1.7
16	23	24	5620	46	210	258	334	212	39	11	5.4	2.3
17	13	25	11400	43	184	224	506	497	32	8.9	6.1	3.2
18	9.4	26	2040	41	160	368	331	545	27	8.5	5.1	3.5
19	8.0	27	1680	40	420	9820	242	265	24	7.8	4.3	4.4
20	7.2	25	1430	40	913	7830	193	194	21	6.7	3.8	20
21	6.9	23	1270	37	509	2150	160	157	19	6.5	3.5	18
22	6.6	23	1130	36	367	1750	133	127	16	6.1	3.3	5.7
23	6.2	26	1010	401	298	1580	118	103	15	5.4	3.1	2.9
24	5.1	33	860	4300	251	1370	109	87	14	33	3.1	1.6
25	4.3	31	597	1690	213	1190	92	74	13	26	3.9	1.1
26	4.7	31	420	1150	181	1240	112	65	15	10	5.3	0.94
27	6.3	31	324	835	150	1040	315	62	32	7.0	6.5	1.0
28	7.0	40	257	575	131	895	199	871	26	5.8	4.7	1.3
29	6.4	68	209	445	---	687	144	1410	18	5.4	3.4	1.3
30	6.6	54	170	373	---	583	134	1350	15	5.8	2.5	1.3
31	7.0	---	143	6820	---	801	---	738	---	4.8	1.9	---
TOTAL	536.8	765.8	29604	18195	21530	36721	22955	10194	2744	300.6	125.7	88.43
MEAN	17.32	25.53	955.0	586.9	768.9	1185	765.2	328.8	91.47	9.697	4.055	2.948
MAX	175	68	11400	6820	6150	9820	8620	1600	431	33	6.5	20
MIN	4.3	8.8	13	36	131	123	92	53	13	4.8	1.9	0.53
AC-FT	1060	1520	58720	36090	42700	72840	45530	20220	5440	596	249	175

ARKANSAS RIVER BASIN

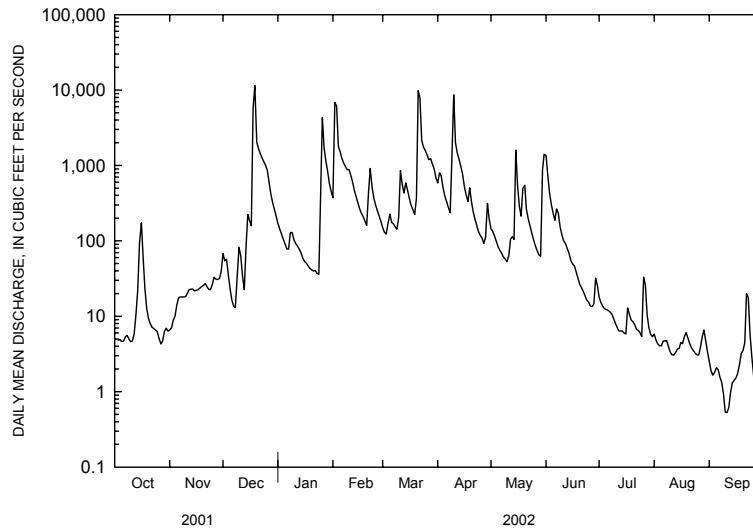
07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	103.5	282.0	376.0	310.1	414.5	447.8	348.5	459.2	214.6	56.21	18.80	21.57
MAX	1423	1900	1078	1075	1298	1185	1092	2080	846	314	93.7	166
(WY)	1985	1997	1983	1998	2001	2002	1991	1990	1986	1981	1996	1996
MIN	0.015	2.09	2.02	14.1	35.6	59.9	42.5	13.6	2.36	0.41	0.81	0.19
(WY)	1979	1996	1990	1981	1996	1986	1976	1977	1988	1980	1976	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	117864.7		143760.33			
ANNUAL MEAN	322.9		393.9		1253.6	
HIGHEST ANNUAL MEAN					432 1985	
LOWEST ANNUAL MEAN					48.7 1976	
HIGHEST DAILY MEAN	11400	Dec 17	11400	Dec 17	16900	May 3 1990
LOWEST DAILY MEAN	1.3	Aug 23	0.53	Sep 9	0.00	Aug 30 1976
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 19	0.88	Sep 6	0.00	Oct 7 1978
MAXIMUM PEAK FLOW			16300	Dec 17	24000	May 3 1990
MAXIMUM PEAK STAGE			20.42	Dec 17	22.17	May 3 1990
INSTANTANEOUS LOW FLOW			0.48	Sep 8-10	0.00	at times
ANNUAL RUNOFF (AC-FT)	233800		285100		183700	
10 PERCENT EXCEEDS	880		935		619	
50 PERCENT EXCEEDS	35		53		53	
90 PERCENT EXCEEDS	3.3		3.5		1.9	

<sup>1</sup>Prior to regulation, water years 1940-74, 218 ft<sup>3</sup>/s  
<sup>2</sup>Maximum discharge for period of record, 32,200 ft<sup>3</sup>/s May 20, 1960  
<sup>3</sup>Maximum gage height for period of record, 23.76 May 20, 1960



ARKANSAS RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 27, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST-CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 16...	1330	81213	80513	24	756	6.3	65	8.3	421	15.7
DEC 10...	1030	81213	80513	53	750	6.3	55	7.4	190	8.8
FEB 25...	0930	81213	80513	145	746	8.1	73	7.7	62	9.9
MAY 21...	1030	81213	80513	167	754	7.7	80	7.5	62	16.9
JUL 10...	1200	81213	80513	8.7	749	5.0	68	7.9	129	29.8
SEP 03...	1300	81213	80513	2.1	748	5.8	77	7.5	275	29.2

Date	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
OCT 16...	32	6.20	4.10	15.0	4	58.0	71	53.0	48.0	243
DEC 10...	27	5.40	3.40	7.30	2	22.0	57	19.0	20.0	118
FEB 25...	14	2.60	1.80	1.60	.6	5.0	41	4.60	7.90	40
MAY 21...	15	2.80	1.90	1.70	.5	4.5	37	3.80	6.40	33
JUL 10...	23	4.30	3.00	3.30	1	14.0	53	12.0	12.0	77
SEP 03...	97	14.0	15.0	3.30	1	22.0	32	5.40	58.0	175

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 16...	.03	.90	.04	.96	4.25	.98	.066	.020	.87
DEC 10...	.04	.60	.05	--	--	.55	--	<.010	.56
FEB 25...	<.01	.30	--	--	--	.16	--	<.010	--
MAY 21...	.01	.60	.01	--	--	.14	--	<.010	.59
JUL 10...	<.01	.70	--	--	--	<.02	--	<.010	--
SEP 03...	.02	.30	.03	--	--	<.02	--	<.010	.28

Date	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 16...	1.9	7.05	2.50	2.30	2.60	56	46	120	95	67	4.3
DEC 10...	1.1	.061	1.30	.02	1.40	62	55	110	85	38	5.4
FEB 25...	.46	.399	.11	.13	.13	140	210	230	93	23	9.0
MAY 21...	.74	.153	.04	.05	.11	77	103	207	95	25	11.3
JUL 10...	--	.245	.07	.08	.16	28	71	250	94	30	.70
SEP 03...	--	--	<.02	<.01	.02	13	13	38	95	40	.23

Remark codes used in this report:  
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## ARKANSAS RIVER BASIN

## 07249400 JAMES FORK NEAR HACKETT

**LOCATION.**--Lat 35°09'45", long 94°24'25", in NW1/4NW1/4 sec.34, T.6 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, near left bank on downstream side of bridge on State Highway 45, 1.7 mi south of Hackett, 2.0 mi downstream from Elder Branch, 2.0 mi upstream from small tributary, and 3.6 mi upstream from Arkansas-Oklahoma State line.

**DRAINAGE AREA.**--147 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--April 1958 to current year.

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 457.71 ft above NGVD of 1929. Prior to Oct. 1, 1990, at datum 2.00 ft higher.

**REMARKS.**--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

## DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.5	3.2	25	46	4730	61	352	74	229	12	44	3.1
2	e1.9	3.1	18	42	722	107	221	54	164	13	20	3.0
3	e1.7	3.2	15	37	462	136	167	40	120	16	13	2.8
4	e1.6	3.6	14	34	333	114	132	34	90	25	10	2.8
5	e1.5	3.5	14	37	258	120	112	29	821	14	8.8	2.6
6	e1.3	3.3	13	50	268	97	98	25	521	12	7.3	2.1
7	e1.1	3.5	11	51	334	83	1230	22	257	11	6.1	1.6
8	e1.0	3.6	11	40	353	89	9960	17	183	10	5.2	1.1
9	e0.90	3.9	10	36	260	2690	2190	58	149	8.8	4.6	0.97
10	3.3	3.7	11	33	201	611	706	35	134	7.8	4.2	0.92
11	288	3.4	12	30	157	470	450	22	114	7.1	4.0	0.67
12	177	3.2	15	27	141	777	333	20	93	6.2	3.8	1.1
13	226	2.8	47	24	125	390	261	1130	85	6.2	4.6	1.8
14	162	1.9	56	22	109	281	217	281	77	6.6	14	1.6
15	70	1.9	64	20	103	220	178	139	66	6.6	23	1.5
16	41	2.0	e1560	18	115	186	160	92	57	6.6	19	1.8
17	28	2.6	4870	17	102	161	243	256	49	6.3	11	2.2
18	22	3.3	1480	16	87	345	168	327	43	6.0	8.9	2.2
19	17	3.7	475	17	244	9850	126	146	37	6.9	7.5	3.2
20	14	6.2	296	18	463	8170	104	94	33	8.0	6.5	5.2
21	11	4.6	223	18	204	1480	88	70	30	6.3	5.7	4.9
22	9.5	3.3	185	16	143	659	75	53	27	5.3	5.1	3.6
23	8.1	4.1	e150	29	118	470	66	41	24	4.8	4.6	2.7
24	6.3	5.0	e130	1030	105	374	70	26	22	4.4	4.2	2.1
25	5.4	3.9	e110	520	92	468	54	25	20	4.2	5.4	1.7
26	4.8	12	e90	274	77	842	58	21	19	3.8	5.0	1.6
27	4.3	7.6	e80	197	66	399	261	53	18	3.6	4.6	1.5
28	4.1	7.4	74	156	61	308	146	1060	16	3.4	4.1	1.4
29	3.9	8.6	64	128	---	255	86	3270	14	3.3	3.8	1.4
30	3.7	15	56	122	---	231	69	719	13	235	3.5	1.5
31	3.4	---	50	4160	---	442	---	356	---	181	3.2	---
TOTAL	1126.30	137.1	10229	7265	10433	30886	18381	8589	3525	651.2	274.7	64.66
MEAN	36.33	4.570	330.0	234.4	372.6	996.3	612.7	277.1	117.5	21.01	8.861	2.155
MAX	288	15	4870	4160	4730	9850	9960	3270	821	235	44	5.2
MIN	0.90	1.9	10	16	61	61	54	17	13	3.3	3.2	0.67
AC-FT	2230	272	20290	14410	20690	61260	36460	17040	6990	1290	545	128
CFSM	0.25	0.03	2.24	1.59	2.53	6.78	4.17	1.88	0.80	0.14	0.06	0.01
IN.	0.29	0.03	2.59	1.84	2.64	7.82	4.65	2.17	0.89	0.16	0.07	0.02



ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

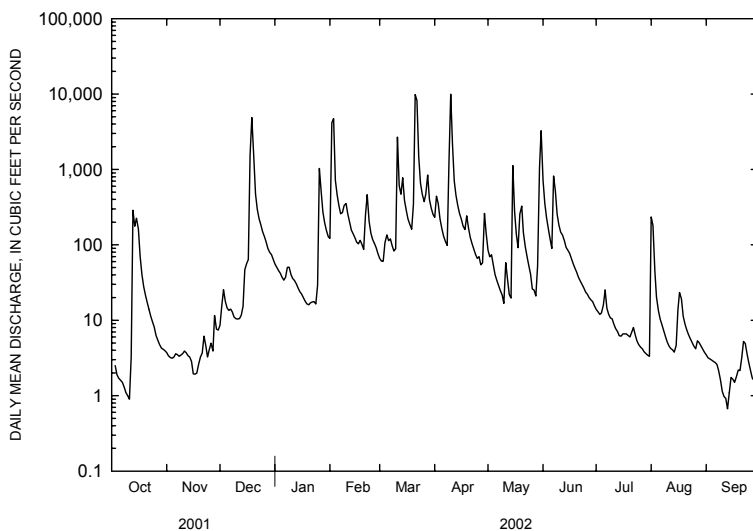
MEAN	71.31	155.7	207.3	167.2	221.2	283.4	237.8	279.4	100.3	39.14	10.79	19.37
MAX	867	915	760	820	727	996	1047	1203	342	430	81.7	159
(WY)	1985	1997	1972	1998	2001	2002	1973	1990	1989	1961	1981	1996
MIN	0.000	0.000	0.40	0.50	1.08	0.92	31.4	20.5	3.14	1.69	0.015	0.000
(WY)	1964	1964	1967	1964	1967	1967	1982	2000	1966	1964	1980	1963

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	61709.10		91561.96			
ANNUAL MEAN	169.1		250.9		147.8	
HIGHEST ANNUAL MEAN					308 1973	
LOWEST ANNUAL MEAN					29.5 1976	
HIGHEST DAILY MEAN	4870	Dec 17	9960	Apr 8	17100	May 14 1968
LOWEST DAILY MEAN	0.30	Jul 25	0.67	Sep 11	0.00	Aug 17 1963
ANNUAL SEVEN-DAY MINIMUM	0.87	Jul 22	1.2	Sep 7	0.00	Aug 17 1963
MAXIMUM PEAK FLOW			16100	Mar 19	<sup>1</sup> 30000	May 14 1968
MAXIMUM PEAK STAGE			24.10	Mar 19	<sup>2</sup> 25.00	May 14 1968
INSTANTANEOUS LOW FLOW			0.36	Sep 11	0.00	at times
ANNUAL RUNOFF (AC-FT)	122400		181600		107100	
ANNUAL RUNOFF (CFSM)	1.15		1.71		1.01	
ANNUAL RUNOFF (INCHES)	15.62		23.17		13.66	
10 PERCENT EXCEEDS	349		380		280	
50 PERCENT EXCEEDS	23		27		31	
90 PERCENT EXCEEDS	1.9		2.8		1.6	

<sup>1</sup>From rating curve extended above 20,000 ft<sup>3</sup>/s

<sup>2</sup>At present datum

<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL AS CACO3 (MG/L) (00900)
OCT 16...	1400	81213	80513	39	758	7.0	71	8.2	139	15.4	42
DEC 10...	1430	81213	80513	12	751	8.6	75	7.8	383	8.8	150
FEB 25...	1200	81213	80513	93	750	9.3	84	8.1	174	10.1	59
MAY 21...	1400	81213	80513	65	752	6.5	68	7.6	138	17.2	46
JUL 10...	0900	81213	80513	5.6	750	7.1	95	7.6	319	29.6	120
SEP 03...	1030	81213	80513	2.9	750	4.9	63	7.5	299	26.7	27

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG C SOLVED DIS-SOLVED (MG/L) (70300)	NITRO-GEN AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 16...	7.20	5.90	2.50	.6	8.8	30	3.70	27.0	89	.02
DEC 10...	24.0	21.0	2.70	.6	18.0	21	6.40	92.0	237	.04
FEB 25...	9.60	8.40	1.60	.6	9.7	26	5.10	37.0	106	.01
MAY 21...	7.90	6.30	1.80	.5	8.1	27	3.50	26.0	89	.04
JUL 10...	18.0	18.0	2.20	.7	18.0	24	4.30	65.0	180	.02
SEP 03...	4.50	3.90	8.70	3	38.0	68	29.0	32.0	150	.01

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT 16...	.50	.03	--	--	.53	--	<.010	.48	1.0
DEC 10...	<.20	.05	--	--	.11	--	<.010	--	--
FEB 25...	.30	.01	.18	.797	.19	.033	.010	.29	.49
MAY 21...	.50	.05	--	--	.10	--	<.010	.46	.60
JUL 10...	<.20	.03	--	--	<.02	--	<.010	--	--
SEP 03...	.70	.01	--	--	<.02	--	<.010	.69	--

Date	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, WATER MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 16...	.031	.04	.01	.06	130	110	210	97	64	6.8
DEC 10...	--	<.02	<.01	.02	45	42	120	94	64	2.1
FEB 25...	--	.04	<.01	.05	110	110	210	94	43	10.8
MAY 21...	--	<.02	<.01	.02	110	160	147	96	53	9.3
JUL 10...	--	<.02	<.01	.02	24	52	230	98	10	.15
SEP 03...	.061	.04	.02	.09	32	40	76	83	10	.08

Remark codes used in this report:  
 < -- Less than

ARKANSAS RIVER BASIN

297

07249800 LEE CREEK AT SHORT, OKLAHOMA

LOCATION.--Lat 35°33'57", long 94°31'56", in SE1/4 on line between secs. 27 and 34, T.13 N., R.26 E., Indian Meridian, Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on right bank at right downstream end of bridge on State Highway 101, 0.5 mi west of Short, Oklahoma.

DRAINAGE AREA.--236 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1999 to current year. Occasional low-flow measurements water years 1958-63 and 1987-89.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

REVISIONS.--The maximum discharge for the water year 2000 has been revised to 59,200 ft<sup>3</sup>/s, June 21, 2000, gage height 25.07 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	8.0	457	136	2910	263	692	281	27	7.7	4.8	5.7
2	1.0	7.5	372	121	1480	280	610	236	33	6.6	5.9	4.6
3	1.8	13	241	108	1100	293	526	198	26	5.8	6.7	4.0
4	2.3	115	171	97	869	255	446	172	21	5.6	5.9	3.2
5	4.2	93	129	91	713	253	390	149	128	5.0	5.9	2.5
6	7.7	56	108	89	643	320	345	128	655	4.3	6.0	1.9
7	8.8	39	89	85	591	360	3760	110	272	6.8	6.4	1.4
8	9.0	31	76	80	576	334	13500	94	134	7.7	6.0	1.5
9	9.2	25	64	75	552	355	2760	88	92	6.3	5.4	0.92
10	12	21	e55	71	486	416	1600	89	225	5.2	4.8	0.70
11	1070	18	e40	67	404	371	1220	90	167	4.2	4.8	0.86
12	668	16	e50	63	353	402	1000	74	109	3.6	4.4	1.1
13	737	14	108	59	315	386	857	72	83	5.1	6.6	0.62
14	610	12	218	56	275	352	747	77	146	6.0	623	0.28
15	256	12	288	52	250	328	659	81	116	4.0	529	0.08
16	138	11	7860	49	231	357	582	64	79	4.6	170	0.36
17	88	9.7	8510	46	208	355	619	62	57	6.2	79	0.04
18	62	9.0	2250	46	188	372	537	69	42	13	44	0.00
19	46	9.2	1360	49	699	9980	468	106	32	15	28	0.34
20	35	9.4	970	49	1480	8180	523	80	25	12	20	0.67
21	27	9.1	762	52	963	2280	485	60	20	11	15	0.42
22	22	13	641	55	742	1440	410	48	16	9.9	12	0.49
23	19	15	539	88	621	1140	408	39	13	9.1	16	0.60
24	e16	15	432	1200	541	954	688	33	12	8.1	e14	0.72
25	13	14	356	863	468	2740	537	29	9.8	7.5	e12	0.70
26	12	15	301	641	389	2000	470	27	8.9	7.3	30	0.65
27	11	16	261	519	324	1370	509	28	8.0	6.6	20	0.57
28	9.6	21	232	434	284	1140	476	30	7.1	6.2	14	0.64
29	9.5	108	213	372	---	938	399	31	6.9	5.6	11	0.60
30	9.0	273	179	343	---	833	328	45	6.9	5.4	8.4	0.50
31	8.6	---	155	4370	---	809	---	58	---	4.8	6.8	---
TOTAL	3923.8	1027.9	27487	10426	18655	39856	36551	2748	2577.6	216.2	1725.8	36.66
MEAN	126.6	34.26	886.7	336.3	666.2	1286	1218	88.65	85.92	6.974	55.67	1.222
MAX	1070	273	8510	4370	2910	9980	13500	281	655	15	623	5.7
MIN	1.0	7.5	40	46	188	253	328	27	6.9	3.6	4.4	0.00
AC-FT	7780	2040	54520	20680	37000	79050	72500	5450	5110	429	3420	73
CFSM	0.54	0.15	3.76	1.43	2.82	5.45	5.16	0.38	0.36	0.03	0.24	0.01
IN.	0.62	0.16	4.33	1.64	2.94	6.28	5.76	0.43	0.41	0.03	0.27	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

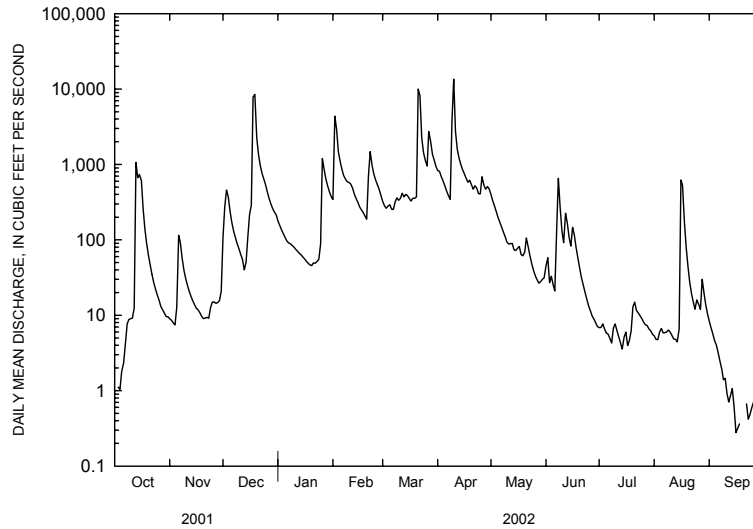
MEAN	61.44	191.5	437.7	287.0	732.0	667.5	509.7	323.0	635.9	62.93	20.53	1.684
MAX	127	530	887	459	1488	1286	1218	724	1741	175	55.7	3.56
(WY)	2002	2001	2002	2001	2001	2002	2002	2000	2000	2000	2002	2001
MIN	0.49	9.99	168	66.0	65.9	358	111	88.6	80.5	6.97	1.00	0.27
(WY)	2000	2000	2000	2000	2000	2001	2001	2002	2001	2002	2001	2000

ARKANSAS RIVER BASIN

07249800 LEE CREEK AT SHORT, OKLAHOMA--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	110351.86		145230.96			
ANNUAL MEAN	302.3		397.9		324.5	
HIGHEST ANNUAL MEAN					398	2002
LOWEST ANNUAL MEAN					284	2001
HIGHEST DAILY MEAN	8510	Dec 17	13500	Apr 8	25600	Jun 21 2000
LOWEST DAILY MEAN	0.00	Aug 19	0.00	Sep 18	0.00	Sep 16 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 19	0.25	Sep 13	0.00	Oct 15 1999
MAXIMUM PEAK FLOW			25600	Apr 8	<sup>1</sup> 59200	Jun 21 2000
MAXIMUM PEAK STAGE			19.82	Apr 8	25.07	Jun 21 2000
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	218900		288100		235100	
ANNUAL RUNOFF (CFSM)	1.28		1.69		1.38	
ANNUAL RUNOFF (INCHES)	17.39		22.89		18.68	
10 PERCENT EXCEEDS	653		753		691	
50 PERCENT EXCEEDS	39		64		62	
90 PERCENT EXCEEDS	1.4		4.3		1.1	

<sup>1</sup>From rating curve extended above 17,000 ft<sup>3</sup>/s on basis of HEC-RAS V. 3.0 measurement of peak flow  
<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

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07249870 LITTLE LEE CREEK NEAR GREASY, OKLAHOMA

LOCATION.--Lat 35°39'07", long 94°37'18", in NE1/4NW1/4 sec.35, T.14 N., R.25 E., Adair County, Oklahoma, Hydrologic Unit 11110104, on right bank downstream from bridge on graveled county road, 4.6 mi southeast of Greasy, Oklahoma, 5.9 mi northwest of Nicut, Oklahoma, and 8.3 mi west of the Oklahoma-Arkansas State Line.

DRAINAGE AREA.--51.3 mi<sup>2</sup>.

PERIOD OF RECORD.--September 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good except discharges above 200 ft<sup>3</sup>/s, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	10	76	25	348	44	172	50	13	4.3	2.1	4.2
2	2.0	10	44	23	207	49	158	43	12	5.2	2.1	3.8
3	1.9	12	33	21	152	47	141	39	11	5.1	2.2	3.5
4	1.8	16	27	19	117	47	129	36	9.7	4.3	1.8	3.1
5	1.9	16	24	20	96	54	121	32	22	3.9	1.7	3.0
6	1.8	14	22	20	88	61	115	29	24	3.7	1.9	2.6
7	1.8	13	20	19	85	58	1170	26	18	3.3	1.5	2.5
8	1.5	13	18	18	81	55	1350	24	14	3.0	1.0	2.6
9	1.4	12	17	18	75	54	330	45	33	3.0	0.19	2.0
10	66	12	16	18	65	49	217	37	29	3.2	0.14	1.6
11	154	11	15	17	56	49	169	29	21	2.8	2.3	1.3
12	66	11	20	16	52	52	138	27	17	2.5	3.2	1.2
13	242	11	29	15	47	49	121	43	17	9.2	10	0.82
14	58	10	37	15	42	47	106	35	15	8.4	242	0.62
15	30	10	37	15	41	46	93	28	13	8.0	60	0.37
16	23	10	1630	15	38	53	130	25	12	6.7	31	0.09
17	19	10	759	14	36	51	160	34	10	6.6	19	0.06
18	17	9.8	247	14	34	113	110	41	9.0	7.1	14	0.00
19	16	13	145	14	231	1650	100	33	8.2	7.0	11	1.0
20	15	15	102	14	222	804	109	27	7.4	6.3	9.0	0.43
21	13	15	81	14	143	363	92	22	6.9	5.7	7.7	0.43
22	13	14	70	14	107	263	79	19	6.3	5.2	6.9	0.53
23	12	14	59	44	89	219	88	17	5.9	4.8	6.2	0.18
24	12	16	51	208	78	192	85	17	5.5	4.5	5.6	0.09
25	12	17	45	133	67	607	69	17	5.2	4.1	6.8	0.00
26	11	16	40	104	56	336	76	17	5.2	3.8	5.6	0.00
27	11	15	37	86	50	257	79	18	5.2	3.3	5.3	0.00
28	11	31	35	67	46	218	72	18	4.9	2.8	5.2	0.00
29	10	58	32	52	---	192	62	17	4.5	2.9	5.0	0.00
30	10	76	28	51	---	203	55	16	4.3	2.5	4.8	0.05
31	10	---	26	652	---	195	---	15	---	2.6	4.5	---
TOTAL	847.3	510.8	3822	1775	2749	6477	5896	876	369.2	145.8	479.73	36.07
MEAN	27.3	17.0	123	57.3	98.2	209	197	28.3	12.3	4.70	15.5	1.20
MAX	242	76	1630	652	348	1650	1350	50	33	9.2	242	4.2
MIN	1.4	9.8	15	14	34	44	55	15	4.3	2.5	0.14	0.00
AC-FT	1680	1010	7580	3520	5450	12850	11690	1740	732	289	952	72

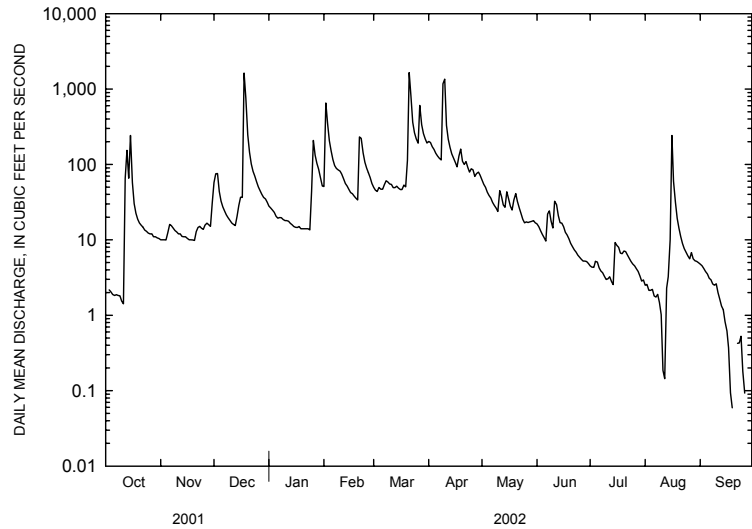
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	17.3	51.2	82.4	60.9	155	124	108	31.3	19.4	5.20	7.87	2.08
MAX	27.3	85.3	123	64.6	211	209	197	34.4	26.5	5.69	15.5	2.95
(WY)	2002	2001	2002	2001	2002	2002	2002	2001	2001	2001	2002	2001
MIN	7.19	17.0	41.5	57.3	98.2	38.3	18.7	28.3	12.3	4.70	0.26	1.20
(WY)	2001	2002	2001	2002	2002	2001	2001	2002	2002	2002	2001	2002

ARKANSAS RIVER BASIN

07249870 LITTLE LEE CREEK NEAR GREASY, OKLAHOMA--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	16973.31		23983.90			
ANNUAL MEAN	46.5		65.7		54.6	
HIGHEST ANNUAL MEAN					65.7	2002
LOWEST ANNUAL MEAN					43.5	2001
HIGHEST DAILY MEAN	1630	Dec 16	1650	Mar 19	1650	Mar 19 2002
LOWEST DAILY MEAN	0.00	Aug 13	0.00	Sep 18	0.00	Aug 13 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 18	0.02	Sep 24	0.00	Aug 18 2001
MAXIMUM PEAK FLOW			4180	Apr 7	4180	Apr 7 2002
MAXIMUM PEAK STAGE			9.38	Apr 7	9.38	Apr 7 2002
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	33670		47570		39540	
10 PERCENT EXCEEDS	79		142		117	
50 PERCENT EXCEEDS	16		17		18	
90 PERCENT EXCEEDS	1.1		2.0		1.7	



ARKANSAS RIVER BASIN

301

07249910 LITTLE LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°34'32", long 94°33'20", in SW1/4NW1/4 sec.28, T.13 N., R.26 W., Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on downstream right abutment of bridge on Oklahoma State Road 101, 500 ft southeast of junction of Oklahoma State Roads 101 and 64B, approximately 2 mi northwest of Short, Oklahoma, and 6.9 mi west of the Arkansas-Oklahoma State Line.

DRAINAGE AREA.--97.5 mi<sup>2</sup>.

PERIOD OF RECORD.--September 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

REVISIONS.--Maximum discharge for 2001 water year 6,950 ft<sup>3</sup>/s, February 24, 2001. Previously published as undetermined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.66	19	232	38	619	55	193	48	21	9.0	2.1	4.2
2	0.32	19	150	36	317	57	167	43	19	9.3	1.8	3.8
3	0.31	21	107	34	218	57	139	40	18	9.5	2.0	3.5
4	0.11	25	85	32	157	54	119	38	17	9.6	1.3	3.1
5	0.0	32	72	31	122	59	106	35	20	8.9	0.66	2.6
6	0.0	30	63	31	108	66	96	33	25	8.2	0.15	2.1
7	0.0	28	57	30	101	66	2100	31	22	7.4	0.0	1.5
8	0.0	26	52	29	96	63	3320	29	20	6.7	0.0	1.5
9	0.0	25	48	28	89	62	553	33	23	6.1	0.0	1.2
10	3.8	24	44	28	78	59	292	36	29	5.5	0.0	0.83
11	362	23	42	27	68	59	198	32	26	4.8	0.0	0.57
12	210	22	47	26	63	65	147	30	23	4.3	0.0	0.31
13	488	21	80	26	58	63	116	33	22	5.1	0.09	0.10
14	211	20	120	25	54	61	96	34	21	7.4	130	0.0
15	103	20	134	24	52	60	82	30	20	9.1	50	0.0
16	68	19	3670	24	49	69	75	28	19	8.4	29	0.0
17	55	18	1970	23	47	66	148	29	18	9.2	21	0.0
18	47	18	608	23	45	107	88	34	16	12	16	0.0
19	41	19	328	25	319	3560	76	32	15	11	13	0.0
20	37	24	209	25	357	1960	85	29	14	8.8	10	0.0
21	34	28	150	25	210	620	73	27	14	7.9	8.9	0.0
22	32	30	119	25	147	397	64	25	13	7.1	8.0	0.0
23	30	28	94	68	115	305	72	24	12	6.3	7.3	0.0
24	28	31	78	330	96	250	80	23	12	5.7	6.8	0.0
25	26	35	68	171	82	1020	65	23	11	5.3	8.0	0.0
26	25	36	60	116	70	576	65	22	12	4.7	7.0	0.0
27	24	34	55	91	62	388	72	22	11	4.2	6.2	0.0
28	23	46	51	77	57	304	67	22	10	3.7	5.5	0.0
29	22	136	48	68	---	249	58	22	9.9	3.4	5.1	0.0
30	21	201	43	65	---	231	52	22	9.4	3.1	4.8	0.0
31	20	---	40	1200	---	229	---	22	---	2.7	4.5	---
TOTAL	1912.20	1058	8924	2801	3856	11237	8864	931	522.3	214.4	349.20	25.31
MEAN	61.68	35.27	287.9	90.35	137.7	362.5	295.5	30.03	17.41	6.916	11.26	0.844
MAX	488	201	3670	1200	619	3560	3320	48	29	12	130	4.2
MIN	0.00	18	40	23	45	54	52	22	9.4	2.7	0.00	0.00
AC-FT	3790	2100	17700	5560	7650	22290	17580	1850	1040	425	693	50

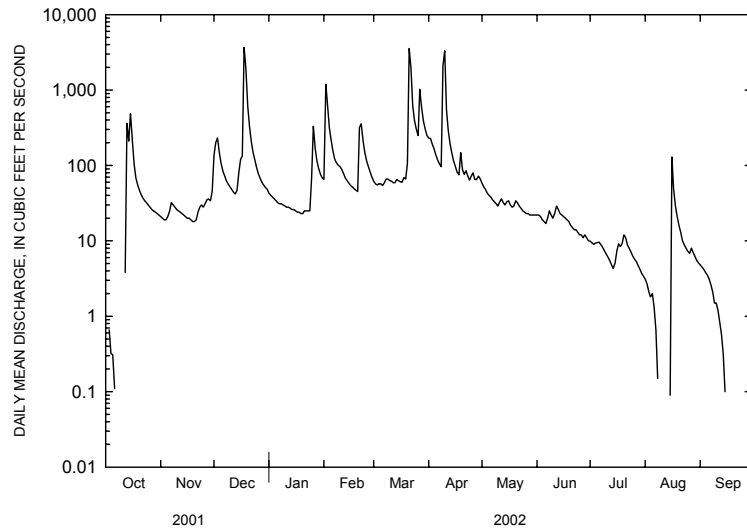
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	41.98	138.2	204.2	124.8	321.2	229.6	169.4	72.10	27.04	4.687	5.670	0.995
MAX	61.7	241	288	159	505	362	295	114	36.7	6.92	11.3	1.15
(WY)	2002	2001	2002	2001	2001	2002	2002	2001	2001	2002	2002	2001
MIN	22.3	35.3	121	90.4	138	96.6	43.3	30.0	17.4	2.46	0.075	0.84
(WY)	2001	2002	2001	2002	2002	2001	2001	2002	2002	2001	2001	2002

ARKANSAS RIVER BASIN

07249910 LITTLE LEE CREEK NEAR SHORT, OKLAHOMA

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	40009.12		40694.41			
ANNUAL MEAN	109.6		111.5		110.2	
HIGHEST ANNUAL MEAN					111	2002
LOWEST ANNUAL MEAN					109	2001
HIGHEST DAILY MEAN	3670	Dec 16	3670	Dec 16	3670	Dec 16 2001
LOWEST DAILY MEAN	0.00	Aug 12	0.00	Oct 5	0.00	Oct 2 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 19	0.00	Sep 14	0.00	Oct 2 2000
MAXIMUM PEAK FLOW			9120	Apr 8	9120	Apr 8 2002
MAXIMUM PEAK STAGE			10.99	Apr 8	10.99	Apr 8 2002
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	79360		80720		79860	
10 PERCENT EXCEEDS	187		199		201	
50 PERCENT EXCEEDS	30		29		31	
90 PERCENT EXCEEDS	0.10		0.62		0.03	





ARKANSAS RIVER BASIN

303

07249985 LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°31'02", long 94°27'51", in NW1/4NE1/4 sec.17, 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.

DRAINAGE AREA.--420 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to June 1937, October 1950 to current year. Prior to October 1992, published as "07250000 Lee Creek near Van Buren".

REVISED RECORDS.--WSP 1211: 1931(M). WSP 1441: 1935(M). WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 429.44 ft above NGVD of 1929. Prior to October 1992 recording gage 3.2 mi downstream at datum 21.40 ft lower. September 1930 to June 1937, nonrecording gage at former site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORDS.--Flood of Apr. 15, 1945, reached a stage of about 35.0 ft, from floodmarks at former site and datum, discharge about 112,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	36	806	236	5830	457	1200	393	71	12	0.00	15
2	7.5	35	683	210	2940	494	1040	329	58	14	0.00	12
3	7.3	195	481	187	2030	502	879	278	48	12	0.16	10
4	6.9	165	364	168	1510	454	746	241	41	10	0.16	9.1
5	6.6	181	287	163	1190	475	657	209	94	9.3	0.00	7.1
6	6.4	123	243	163	1070	561	586	181	673	8.1	0.00	5.2
7	6.2	e97	204	155	1000	608	7190	155	339	6.3	0.00	3.3
8	6.1	82	174	146	960	575	23500	136	198	9.4	0.00	2.1
9	6.0	73	150	140	904	571	5180	140	152	10	0.00	1.3
10	7.7	66	131	133	789	612	2960	148	261	9.6	0.00	0.34
11	1300	60	118	127	672	588	2070	139	247	6.6	0.00	0.00
12	1070	55	137	119	598	668	1580	119	174	4.8	0.00	0.00
13	1260	52	247	114	539	639	1270	125	138	7.7	0.76	0.00
14	1060	49	473	109	480	589	1060	127	161	12	664	0.00
15	503	47	581	104	443	559	898	125	145	8.1	685	0.00
16	292	44	11600	100	413	601	781	105	109	5.6	259	0.00
17	189	43	14900	96	375	595	942	106	85	8.8	144	0.00
18	137	41	4690	96	342	824	760	112	68	20	94	0.00
19	108	41	2690	106	1400	16300	664	144	55	48	67	0.00
20	90	41	1750	106	2980	14500	733	121	46	26	51	0.00
21	77	44	1300	106	1750	4750	666	98	39	18	41	0.00
22	68	47	1060	108	1280	2930	560	81	33	13	33	0.00
23	62	55	869	120	1040	2170	595	69	28	11	28	0.00
24	56	56	702	2010	884	1730	879	62	23	10	23	0.00
25	51	56	590	1400	760	4990	686	57	20	7.9	33	0.00
26	47	60	507	988	640	4170	646	54	19	5.4	30	0.00
27	44	60	443	789	547	2720	714	57	19	3.5	44	0.00
28	42	74	395	664	486	2070	662	60	16	1.6	34	0.00
29	40	254	358	576	---	1670	551	66	14	0.18	26	0.00
30	38	592	307	543	---	1470	460	69	13	0.00	21	0.00
31	37	---	266	6870	---	1450	---	82	---	0.00	18	---
TOTAL	6639.6	2824	47506	16952	33852	71292	61115	4188	3387	318.88	2296.08	65.44
MEAN	214.2	94.13	1532	546.8	1209	2300	2037	135.1	112.9	10.29	74.07	2.181
MAX	1300	592	14900	6870	5830	16300	23500	393	673	48	685	15
MIN	6.0	35	118	96	342	454	460	54	13	0.00	0.00	0.00
AC-FT	13170	5600	94230	33620	67150	141400	121200	8310	6720	632	4550	130
CFSM	0.51	0.22	3.65	1.30	2.88	5.48	4.85	0.32	0.27	0.02	0.18	0.01
IN.	0.59	0.25	4.21	1.50	3.00	6.31	5.41	0.37	0.30	0.03	0.20	0.01

ARKANSAS RIVER BASIN

07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

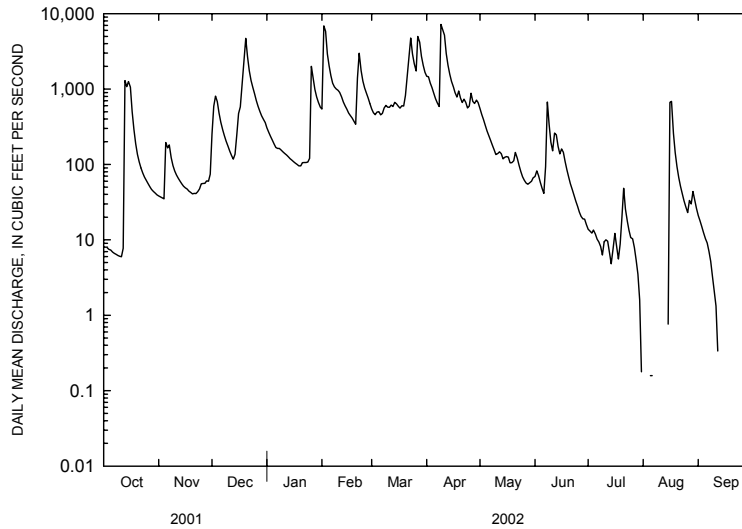
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-37, 1951-02, BY WATER YEAR (WY)

MEAN	231.2	545.2	576.3	565.5	770.0	1078	1077	916.4	461.5	127.1	46.04	128.2
MAX	2837	3572	2378	2831	2824	3100	3657	3516	4450	1909	583	1678
(WY)	1971	1974	1988	1998	1989	1973	1957	1957	1935	1958	1958	1974
MIN	0.000	0.13	1.95	3.31	18.8	25.2	94.6	41.3	7.00	0.19	0.000	0.000
(WY)	1957	1957	1967	1956	1967	1967	1954	1977	1936	1936	1934	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1931-37, 1951-02	
ANNUAL TOTAL	197559.78		250436.00			
ANNUAL MEAN	541.3		686.1		542.0	
HIGHEST ANNUAL MEAN					1090 1935	
LOWEST ANNUAL MEAN					92.5 1954	
HIGHEST DAILY MEAN	14900	Dec 17	23500	Apr 8	41100	Jun 21 2000
LOWEST DAILY MEAN	0.00	Aug 23	0.00	Jul 30	0.00	Sep 8 1932
ANNUAL SEVEN-DAY MINIMUM	0.17	Aug 20	0.00	Aug 5	0.00	Sep 8 1932
MAXIMUM PEAK FLOW			38800	Apr 8	80600	May 6 1960
MAXIMUM PEAK STAGE			19.36	Apr 8	<sup>1</sup> 30.30	May 6 1960
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	391900		496700		392700	
ANNUAL RUNOFF (CFSM)	1.29		1.63		1.29	
ANNUAL RUNOFF (INCHES)	17.50		22.18		17.53	
10 PERCENT EXCEEDS	1120		1290		1240	
50 PERCENT EXCEEDS	84		120		132	
90 PERCENT EXCEEDS	2.9		0.59		2.2	

<sup>1</sup>At former site and datum

<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

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07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

WATER-QUALITY RECORDS

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

REMARKS.--Water-quality data for this station for the period October 1995 to September 1997 published under station number 07250085.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL AS CACO3 (00900)
OCT 17...	1300	81213	80513	185	757	8.6	85	7.8	113	14.5	44
DEC 11...	1300	81213	80513	121	753	11.4	97	8.1	110	7.8	44
MAR 05...	1000	81213	80513	455	757	11.7	89	8.2	76	3.8	29
MAY 08...	1400	81213	80513	134	747	6.8	82	7.7	95	23.4	39
JUL 12...	0900	81213	80513	4.8	750	5.5	73	8.1	119	29.0	48
SEP 04...	0830	81213	80513	9.5	753	4.1	52	7.9	101	27.7	40

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 17...	15.0	1.70	1.30	.2	3.0	12	4.10	6.60	66	<.01
DEC 11...	15.0	1.60	1.00	.2	3.4	14	4.70	6.50	67	.08
MAR 05...	9.50	1.30	.70	.2	2.2	14	3.10	5.50	47	<.01
MAY 08...	13.0	1.50	1.10	.2	2.4	12	2.80	5.10	52	.01
JUL 12...	16.0	2.00	1.40	.2	3.3	13	3.60	4.70	75	.03
SEP 04...	13.0	1.90	1.40	.2	3.2	14	4.40	4.70	59	.01

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04) (00660)
OCT 17...	<.20	--	.39	<.010	--
DEC 11...	<.20	.10	.34	<.010	.153
MAR 05...	<.20	--	.20	<.010	--
MAY 08...	<.20	.01	.07	<.010	--
JUL 12...	<.20	.04	<.02	<.010	--
SEP 04...	<.20	.01	<.02	<.010	--

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COLS./100 ML) (31673)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 17...	.02	<.01	.02	66	44	100	<.1	98	24	12.0
DEC 11...	<.02	.05	<.02	E8	E9	E15	<.1	91	21	6.9
MAR 05...	<.02	<.01	<.02	E12	E9	E7	<.1	92	20	24.6
MAY 08...	<.02	<.01	<.02	E6	E8	26	<.1	94	20	7.2
JUL 12...	<.02	<.01	<.02	28	E14	50	1.6	100	3.0	.04
SEP 04...	<.02	<.01	<.02	25	43	40	<.1	81	6.0	.15

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ARKANSAS RIVER BASIN

## 07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN

**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 mi<sup>2</sup>.

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

**GAGE.**--Water-stage recorder. Datum of gage is 400.00 ft above NGVD of 1929.

**REMARKS.**--No estimated daily discharges. Records good. Records given herein represent spillway flow and power releases 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. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	18	515	194	5990	40	853	381	36	0.00	0.00	0.00
2	0.00	8.4	519	170	2190	340	685	318	28	0.00	0.00	0.00
3	0.00	181	361	150	1410	253	580	280	14	0.00	0.00	0.00
4	0.00	108	272	131	1070	227	457	239	2.6	0.00	0.00	0.00
5	0.00	139	220	131	828	255	394	203	59	0.00	0.00	0.00
6	0.00	94	182	125	735	324	371	166	462	0.00	0.00	0.00
7	0.00	70	159	112	657	378	4800	136	286	0.00	0.00	0.00
8	0.00	58	132	114	645	359	25300	113	150	0.00	0.00	0.00
9	0.00	46	117	114	642	333	5810	124	110	0.00	0.00	0.00
10	0.00	44	101	127	509	361	2700	116	161	0.00	0.00	0.00
11	0.00	40	86	122	395	360	1780	121	202	0.00	0.00	0.00
12	0.00	35	118	116	388	424	1080	101	132	0.00	0.00	0.00
13	604	30	161	96	356	383	1120	85	88	0.00	0.00	0.00
14	867	26	311	83	302	439	1050	85	77	0.00	0.00	0.00
15	417	24	408	64	289	296	767	90	94	0.00	192	0.00
16	235	23	9150	64	272	370	736	78	70	0.00	243	0.00
17	165	24	16100	57	508	383	855	82	47	0.00	128	0.00
18	130	26	4060	61	492	341	712	71	31	0.00	74	0.00
19	98	19	1850	71	454	13000	619	99	19	0.00	46	0.00
20	74	12	1090	71	2140	17000	741	93	7.9	0.00	31	0.00
21	62	18	926	68	1300	4300	736	67	1.3	0.00	19	0.00
22	53	25	721	70	910	2280	549	52	0.00	0.00	7.1	0.00
23	43	37	594	91	754	1610	526	40	0.00	0.00	0.00	0.00
24	27	35	474	1260	706	1290	793	35	0.00	0.00	0.00	0.00
25	7.6	30	395	1030	723	3600	626	31	0.00	0.00	2.1	0.00
26	11	42	370	699	471	3690	593	48	0.00	0.00	9.1	0.00
27	11	34	236	549	365	2120	675	44	0.00	0.00	12	0.00
28	16	57	307	455	228	1180	659	44	0.00	0.00	11	0.00
29	21	131	274	398	---	1140	571	60	0.00	0.00	2.1	0.00
30	26	361	253	379	---	978	466	72	0.00	0.00	0.00	0.00
31	25	---	221	5610	---	1030	---	16	---	0.00	0.00	---
TOTAL	2892.60	1795.4	40683	12782	25729	59084	57604	3490	2077.80	0.00	776.40	0.00
MEAN	93.31	59.85	1312	412.3	918.9	1906	1920	112.6	69.26	0.000	25.05	0.000
MAX	867	361	16100	5610	5990	17000	25300	381	462	0.00	243	0.00
MIN	0.00	8.4	86	57	228	40	371	16	0.00	0.00	0.00	0.00
AC-FT	5740	3560	80690	25350	51030	117200	114300	6920	4120	0.00	1540	0.00

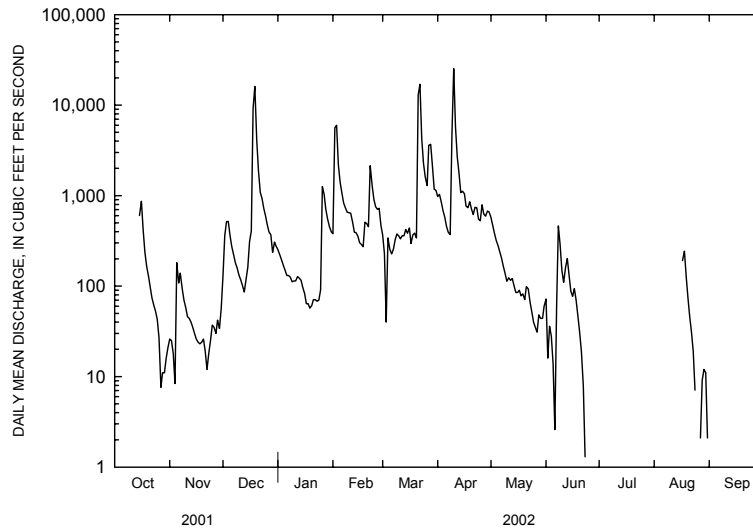
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
MEAN	112.3	842.8	720.0	735.8	875.1	1005	1066	686.1	550.5	100.1	13.08	58.86
MAX	454	3274	1666	2661	2339	1906	2178	1732	2754	481	54.6	307
(WY)	1994	1997	1993	1998	2001	2002	1993	1995	2000	1999	1994	1996
MIN	0.000	0.000	158	58.3	94.0	199	122	75.6	33.1	0.000	0.000	0.000
(WY)	1993	2000	2000	2000	1996	1996	2001	1997	1998	1998	1993	1995

ARKANSAS RIVER BASIN

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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	156999.20		206914.20			
ANNUAL MEAN	430.1		566.9		560.6	
HIGHEST ANNUAL MEAN					833	1993
LOWEST ANNUAL MEAN					315	1996
HIGHEST DAILY MEAN	16100	Dec 17	25300	Apr 8	37800	Jun 21 2000
LOWEST DAILY MEAN	0.00	Jul 3	0.00	Oct 1	0.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 3	0.00	Oct 1	0.00	Oct 1 1992
MAXIMUM PEAK FLOW			37400	Apr 8	72400	Jun 21 2000
MAXIMUM PEAK STAGE			24.66	Apr 8	26.99	Jun 21 2000
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	311400		410400		406200	
10 PERCENT EXCEEDS	728		916		1240	
50 PERCENT EXCEEDS	57		85		123	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



## ARKANSAS RIVER BASIN

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

**LOCATION.**--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, Hydrologic Unit 11110104, in metal shelter on dam and at mile 308.9.

**DRAINAGE AREA.**--150,547 mi<sup>2</sup>, of which 22,241 mi<sup>2</sup> is probably noncontributing.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren. Gage-height records collected from 1879 to December 1955 at Fort Smith, 16.3 mi upstream, are contained in reports of National Weather Service.

**REVISED RECORDS.**--WSP 1211: 1934-36. WSP 1561: 1554. WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage and gate position recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, and Oct. 1, 1934, to Dec. 20, 1969, recording gage at site 7.9 mi upstream at datum 372.36 ft higher.

**REMARKS.**--No estimated daily discharges. Water-discharge records fair. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct. 19, 1988, the Arkansas Electric Cooperative Corporation hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1833, that of Apr. 16, 1945, and maximum discharge since at least 1833, that of May 12, 1943. Flood in June 1833 reached a stage of 38.0 ft on Fort Smith gage, from records collected by National Weather Service. Flood of Apr. 16, 1927, reached a stage of 35.0 ft, former site and datum, from information by local resident.

## DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5540	5310	3320	11200	72900	11400	26100	31800	47500	19600	17000	4520
2	5540	11800	3220	20800	62100	19100	43300	36400	49500	33700	15800	4840
3	4540	7550	9780	15500	48000	7520	53500	26200	37500	36900	11400	11500
4	7130	26200	2150	15500	41300	12800	35500	24100	37900	37300	11000	10700
5	11700	14900	3650	7510	41100	8460	41200	15200	48000	27700	13300	9260
6	6600	12400	7760	14900	43400	18600	18300	22600	70800	25800	15500	11200
7	3290	11800	4150	9850	26300	9720	45500	28600	70100	30500	12900	4580
8	9140	13800	10300	10500	22700	12600	151000	30500	64100	27900	16700	430
9	8080	13500	4460	5790	35000	12800	125000	47600	55300	28400	16500	5390
10	18300	242	10100	3140	35900	9180	86000	76600	43800	36800	5340	1920
11	39800	3010	7150	4430	15200	9160	75200	77500	54500	17500	10600	2180
12	28500	12500	4840	2650	23500	29900	63300	81000	54700	16100	10000	5350
13	19300	4390	5590	3840	33800	12600	56800	79600	55200	12400	11700	2400
14	29300	6090	10800	9390	17400	16700	56500	81900	82000	18100	24400	3280
15	9150	6420	5870	11500	21400	12000	55100	82800	56100	8990	17200	531
16	8560	4170	42200	6280	15600	11600	56300	81700	36000	11200	8390	8300
17	14600	2430	109000	8140	9680	3300	54000	86700	34600	13700	10400	2030
18	10200	3630	55800	6960	12700	11900	48500	118000	49200	27800	8380	2050
19	14600	10300	59700	4110	23800	92000	51500	117000	61300	11800	16800	4900
20	17300	5110	48600	1810	45900	141000	58500	104000	76300	16500	14800	508
21	5110	4860	28200	3510	28000	78100	50200	69400	89800	11000	9130	7610
22	12200	1030	24500	5010	24500	80000	38700	72300	91600	19900	12200	19600
23	11300	2320	12400	2900	22000	54700	47400	69700	81100	23400	11700	18200
24	16500	9360	25200	16300	11100	42800	61600	55600	74300	12600	7260	10400
25	13400	306	13700	8230	20300	57400	58000	67300	53700	16200	9150	9470
26	11900	3740	17900	12500	14800	62500	45600	56800	52300	10600	8780	3270
27	12300	4850	15000	7770	9200	45300	32900	15300	41600	11500	4820	8970
28	10600	10600	18300	12500	9260	48100	32800	14800	35100	9620	4780	4040
29	10600	17900	12100	23100	---	40200	27800	26300	31400	9480	7210	3400
30	11600	7260	12800	17800	---	32500	33700	45100	34000	26900	10600	9190
31	16700	---	20500	31300	---	33100	---	50400	---	28800	4150	---
TOTAL	403380	237778	609040	314720	786840	1037040	1629800	1792800	1669300	638690	357890	190019
MEAN	13010	7926	19650	10150	28100	33450	54330	57830	55640	20600	11540	6334
MAX	39800	26200	109000	31300	72900	141000	151000	118000	91600	37300	24400	19600
MIN	3290	242	2150	1810	9200	3300	18300	14800	31400	8990	4150	430
AC-FT	800100	471600	1208000	624200	1561000	2057000	3233000	3556000	3311000	1267000	709900	376900

ARKANSAS RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	26290	37760	37020	33140	35230	59450	60380	65790	61370	32120	16300	15090
MAX	224500	161200	139700	127000	87650	147200	164300	187500	191500	104800	62670	54130
(WY)	1987	1975	1993	1998	1993	1987	1973	1990	1995	1999	1992	1989
MIN	1446	1329	3187	696	2656	5658	2910	12160	4688	4457	4378	3341
(WY)	1981	1981	1981	1981	1981	1981	1981	1971	1988	1988	1991	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	11921358		9667297			
ANNUAL MEAN	32660		26490		139990	
HIGHEST ANNUAL MEAN					87670	1993
LOWEST ANNUAL MEAN					7737	1981
HIGHEST DAILY MEAN	157000	Feb 25	151000	Apr 8	397000	May 5 1990
LOWEST DAILY MEAN	46	Aug 31	242	Nov 10	20.00	Nov 2 1975
ANNUAL SEVEN-DAY MINIMUM	1330	Aug 30	2990	Sep 8	364	Jan 14 1981
MAXIMUM PEAK FLOW			173000	Apr 8	401000	May 5 1990
MAXIMUM PEAK STAGE			391.64	Apr 8	5401.75	May 5 1990
ANNUAL RUNOFF (AC-FT)	23650000		19180000		28970000	
10 PERCENT EXCEEDS	84400		62300		109000	
50 PERCENT EXCEEDS	17300		15500		23600	
90 PERCENT EXCEEDS	4090		4300		3510	

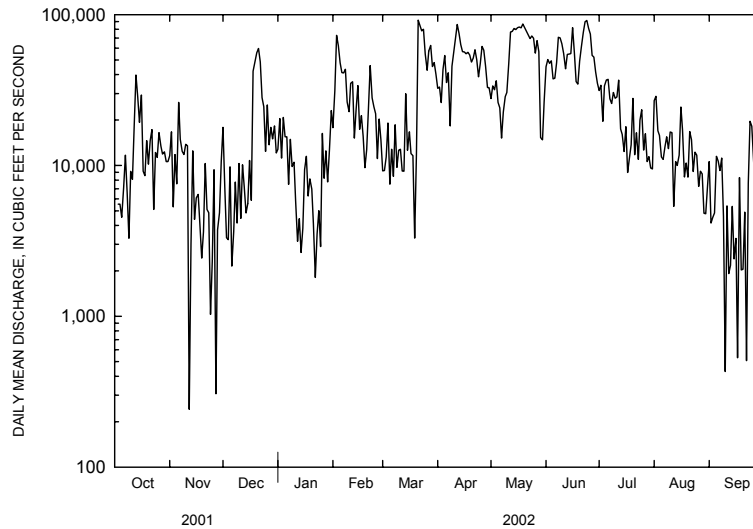
<sup>1</sup>Prior to regulation, water years 1928-69, 30,200 ft<sup>3</sup>/s

<sup>2</sup>Also minimum daily discharge for period of record

<sup>3</sup>Also Feb. 1, 1981; Oct. 17, 1987; Dec. 9, 1989; Nov. 11-12, 1993; and Jan. 9, 13, 1994

<sup>4</sup>Maximum discharge for period of record, 850,000 ft<sup>3</sup>/s, May 12, 1943

<sup>5</sup>Maximum gage height for period of record, 38.10 ft, Apr. 16, 1945, at former site and datum



ARKANSAS RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE (FIELD-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 17...	1400	81213	80513	24200	757	7.6	81	7.8	503	18.0	130
DEC 11...	0900	81213	80513	14100	755	8.6	77	8.2	460	10.4	120
MAR 05...	1230	81213	80513	12200	757	12.5	100	8.2	408	5.7	110
MAY 28...	0930	81213	80513	320	750	7.8	90	8.0	429	21.3	130
JUL 22...	1500	81213	80513	24000	752	7.4	100	7.9	567	30.3	130
SEP 04...	1330	81213	80513	6070	752	7.2	98	8.4	720	30.3	140

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG C SOLVED DIS-SOLVED (MG/L) (70300)	NITRO-GEN AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 17...	36.0	10.0	3.90	2	48.0	43	68.0	52.0	295	.02
DEC 11...	35.0	9.00	4.10	2	39.0	40	53.0	45.0	264	.11
MAR 05...	32.0	8.00	3.30	1	36.0	40	52.0	41.0	238	.04
MAY 28...	39.0	7.00	3.50	1	36.0	37	53.0	39.0	248	.04
JUL 22...	39.0	8.40	4.40	2	63.0	50	89.0	44.0	332	.02
SEP 04...	41.0	9.40	4.80	3	80.0	54	120	47.0	400	.01

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
OCT 17...	.50	.03	--	--	.19	--	<.010	.48	.69	.123
DEC 11...	.40	.14	--	--	.27	--	<.010	.29	.67	.153
MAR 05...	.60	.05	--	--	.19	--	<.010	.56	.79	.031
MAY 28...	.50	.05	--	--	.58	--	<.010	.46	1.1	.092
JUL 22...	.40	.03	.23	1.02	.29	.197	.060	.38	.69	.184
SEP 04...	.70	.01	--	--	<.02	--	<.010	.69	--	.153

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, WTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 17...	.04	.04	.09	74	100	E35	14.0	97	93	6080
DEC 11...	.04	.05	.07	22	21	24	5.7	97	71	2700
MAR 05...	<.02	.01	.04	24	37	E15	8.0	97	70	2310
MAY 28...	<.02	.03	.06	50	60	130	6.8	97	99	85.5
JUL 22...	.07	.06	.11	26	65	26	15.0	75	14	907
SEP 04...	.06	.05	.10	<1	4	12	16.0	66	10	164

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value



ARKANSAS RIVER BASIN

311

07250935 JONES CREEK AT WINFREY

LOCATION.--Lat 35°44'10", long 94°06'10", in SE1/4SW1/4 sec.5, T.12 N., R.29 W., Crawford County, Hydrologic Unit 11110201, near left bank in pasture 300 ft upstream of bridge on Winfrey Valley Cutoff, 3 mi northeast of junctions of U.S. Highway 71 and Winfrey Valley Cutoff, and 10.6 mi northeast of Mountainburg.

DRAINAGE AREA.--19.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	0.33	9.1	2.3	170	23	25	25	5.5	0.22	0.00	0.00
2	0.15	0.29	9.2	1.8	96	26	21	21	4.3	0.25	0.00	0.00
3	0.03	0.92	7.8	1.5	73	24	16	19	3.5	0.28	0.00	0.00
4	0.00	0.75	6.6	1.3	57	23	13	17	2.9	0.31	0.00	0.00
5	0.00	3.2	5.8	1.3	47	24	11	14	136	0.66	0.00	0.00
6	0.00	2.8	7.2	1.4	43	25	8.8	12	61	0.64	0.00	0.00
7	0.00	2.3	7.4	1.2	39	25	831	10	33	0.49	0.00	0.00
8	0.00	1.8	6.6	1.0	36	24	1070	8.9	22	0.30	0.00	0.00
9	0.00	1.6	5.7	0.93	33	25	355	12	19	0.15	0.00	0.00
10	2.4	1.3	5.0	0.91	29	23	194	8.7	16	0.02	0.00	0.00
11	33	1.1	4.5	0.81	25	24	132	7.3	13	0.00	0.00	0.00
12	20	0.93	11	0.72	23	25	97	6.8	12	0.00	0.00	0.00
13	38	0.81	19	0.66	21	24	75	14	16	0.00	0.00	0.00
14	22	0.73	20	0.59	20	23	63	10	13	0.33	80	0.00
15	11	0.63	18	0.53	18	30	53	7.9	9.1	0.35	15	0.00
16	6.7	0.55	629	0.48	17	42	50	7.0	7.2	0.06	6.5	0.00
17	4.3	0.49	290	0.46	16	37	50	13	5.7	0.09	3.8	0.00
18	3.0	0.44	82	0.47	14	66	42	13	4.6	0.59	2.6	0.00
19	2.3	0.67	43	0.62	80	910	41	10	3.6	0.71	1.8	0.00
20	1.8	0.47	29	0.57	72	421	43	8.1	2.9	0.50	1.3	0.00
21	1.5	0.39	22	0.54	52	144	38	6.9	2.3	0.38	1.0	0.00
22	1.2	0.35	18	0.49	44	88	32	5.7	1.8	0.24	0.69	0.00
23	1.1	0.40	13	14	38	67	48	4.8	1.4	0.21	0.52	0.00
24	0.90	0.70	10	36	34	52	46	4.4	1.1	2.3	0.40	0.00
25	0.80	0.60	8.4	20	30	238	38	3.9	1.2	1.8	0.51	0.00
26	0.74	2.4	7.0	15	26	103	39	3.7	0.97	1.1	0.24	0.00
27	0.65	2.6	5.8	12	23	69	37	3.3	0.68	0.72	0.12	0.00
28	0.58	3.3	5.0	11	21	53	38	3.4	0.54	0.45	0.02	0.00
29	0.52	4.6	4.1	9.3	---	43	32	15	0.42	0.35	0.00	0.00
30	0.43	8.1	3.3	11	---	36	28	14	0.32	0.20	0.00	0.00
31	0.38	---	2.8	507	---	30	---	8.0	---	0.05	0.00	---
TOTAL	153.75	45.55	1315.3	655.88	1197	2767	3566.8	317.8	401.03	13.75	114.50	0.00
MEAN	4.960	1.518	42.43	21.16	42.75	89.26	118.9	10.25	13.37	0.444	3.694	0.000
MAX	38	8.1	629	507	170	910	1070	25	136	2.3	80	0.00
MIN	0.00	0.29	2.8	0.46	14	23	8.8	3.3	0.32	0.00	0.00	0.00
AC-FT	305	90	2610	1300	2370	5490	7070	630	795	27	227	0.00

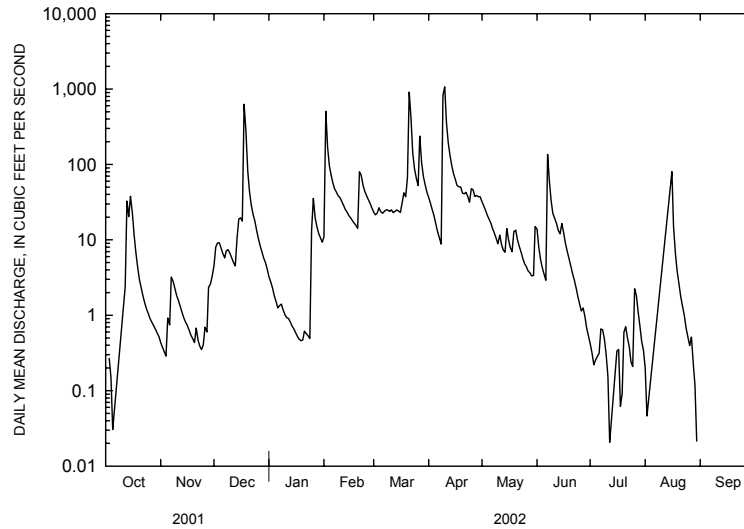
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	3.176	17.47	29.65	23.81	76.96	53.75	63.09	7.298	7.810	1.003	1.847	0.870
MAX	4.96	33.4	42.4	26.5	111	89.3	119	10.3	13.4	1.56	3.69	1.74
(WY)	2002	2001	2002	2001	2001	2002	2002	2002	2002	2001	2002	2001
MIN	1.39	1.52	16.9	21.2	42.8	18.2	7.29	4.35	2.25	0.44	0.000	0.000
(WY)	2001	2002	2001	2002	2002	2001	2001	2001	2001	2002	2001	2002

ARKANSAS RIVER BASIN

07250935 JONES CREEK AT WINFREY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	6534.93		10548.36			
ANNUAL MEAN	17.90		28.90		23.48	
HIGHEST ANNUAL MEAN					28.9	2002
LOWEST ANNUAL MEAN					18.1	2001
HIGHEST DAILY MEAN	629	Dec 16	1070	Apr 8	1070	Apr 8 2002
LOWEST DAILY MEAN	0.00	Jul 10	0.00	Oct 4	0.00	Oct 7 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 27	0.00	Aug 1	0.00	Oct 7 2000
MAXIMUM PEAK FLOW			5070	Apr 7	5070	Apr 7 2002
MAXIMUM PEAK STAGE			9.02	Apr 7	9.02	Apr 7 4003
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	12960		20920		17010	
10 PERCENT EXCEEDS	41		49		52	
50 PERCENT EXCEEDS	3.3		3.9		5.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	





## ARKANSAS RIVER BASIN

## 07250965 FROG BAYOU NEAR WINFREY--CONTINUED

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	15629.17	
ANNUAL MEAN	42.82	
HIGHEST DAILY MEAN	573	Feb 15
LOWEST DAILY MEAN	0.00	Sep 01
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 01
MAXIMUM PEAK FLOW	837	Feb 15
MAXIMUM PEAK STAGE	8.51	Feb 15
INSTANTANEOUS LOW FLOW	0.00	Sep 07
ANNUAL RUNOFF (AC-FT)	31000	
10 PERCENT EXCEEDS	111	
50 PERCENT EXCEEDS	21	
90 PERCENT EXCEEDS	0.15	

e Estimated

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.7	49	23	320	69	107	---	---	---	---	---
2	3.3	4.6	50	21	201	92	99	---	---	---	---	---
3	3.2	5.2	43	19	162	87	83	---	---	---	---	---
4	3.0	4.8	36	18	138	82	71	---	---	---	---	---
5	2.8	5.0	31	18	123	87	62	---	---	---	---	---
6	2.6	6.4	31	18	115	90	55	---	---	---	---	---
7	2.3	7.0	30	17	106	89	---	---	---	---	---	---
8	2.1	6.8	27	16	103	87	---	---	---	---	---	---
9	1.9	6.4	24	16	98	93	---	---	---	---	---	---
10	16	6.2	21	15	86	88	---	---	---	---	---	---
11	163	5.9	19	15	75	87	---	---	---	---	---	---
12	93	5.6	32	14	69	93	---	---	---	---	---	---
13	128	5.4	75	13	62	88	---	---	---	---	---	---
14	101	5.2	81	13	56	83	---	---	---	---	---	---
15	56	5.0	76	13	53	86	---	---	---	---	---	---
16	34	4.9	625	12	50	100	---	---	---	---	---	---
17	23	4.7	526	12	46	93	---	---	---	---	---	---
18	17	4.6	255	11	43	114	---	---	---	---	---	---
19	14	4.8	173	13	163	790	---	---	---	---	---	---
20	12	4.5	133	12	179	552	---	---	---	---	---	---
21	10	4.5	110	12	143	265	---	---	---	---	---	---
22	9.0	4.3	96	12	124	186	---	---	---	---	---	---
23	8.1	4.4	75	52	113	152	---	---	---	---	---	---
24	7.4	5.3	61	181	104	132	---	---	---	---	---	---
25	6.8	11	52	119	96	483	---	---	---	---	---	---
26	6.4	15	45	97	83	292	---	---	---	---	---	---
27	6.0	15	40	79	71	196	---	---	---	---	---	---
28	5.6	19	36	68	66	159	---	---	---	---	---	---
29	5.3	26	33	59	---	136	---	---	---	---	---	---
30	5.1	39	29	62	---	127	---	---	---	---	---	---
31	4.9	---	25	535	---	119	---	---	---	---	---	---
TOTAL	756.3	251.2	2939	1585	3048	5197	---	---	---	---	---	---
MEAN	24.40	8.373	94.81	51.13	108.9	167.6	---	---	---	---	---	---
MAX	163	39	625	535	320	790	---	---	---	---	---	---
MIN	1.9	4.3	19	11	43	69	---	---	---	---	---	---
AC-FT	1500	498	5830	3140	6050	10310	---	---	---	---	---	---

ARKANSAS RIVER BASIN

07250965 FROG BAYOU NEAR WINFREY--CONTINUED

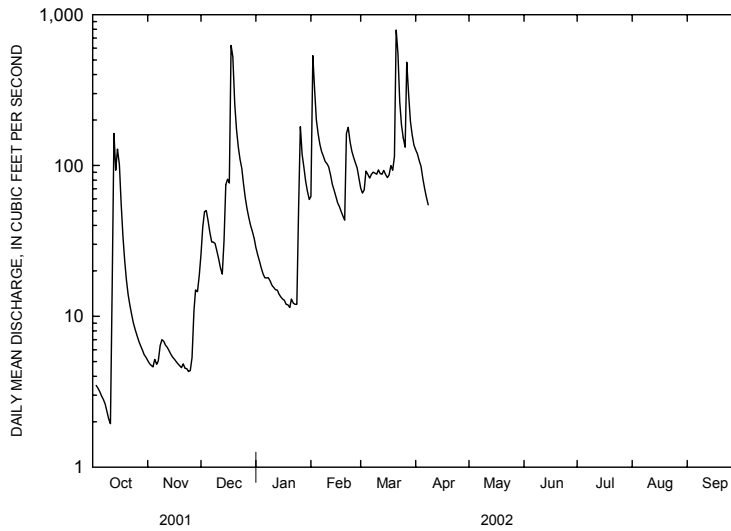
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	13.06	45.14	67.35	59.35	148.8	116.8	36.27	23.58	11.49	3.939	0.322	5.504
MAX	24.4	81.9	94.8	67.6	189	168	36.3	23.6	11.5	3.94	0.32	5.50
(WY)	2002	2001	2002	2001	2001	2002	2001	2001	2001	2001	2001	2001
MIN	1.72	8.37	39.9	51.1	109	65.9	36.3	23.6	11.5	3.94	0.32	5.50
(WY)	2001	2002	2001	2002	2002	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

ANNUAL TOTAL	15828.40
ANNUAL MEAN	43.37
HIGHEST ANNUAL MEAN	
LOWEST ANNUAL MEAN	
HIGHEST DAILY MEAN	625 Dec 16
LOWEST DAILY MEAN	0.00 Sep 1
ANNUAL SEVEN-DAY MINIMUM	0.00 Sep 1
MAXIMUM PEAK STAGE	
INSTANTANEOUS LOW FLOW	
ANNUAL RUNOFF (AC-FT)	31400
10 PERCENT EXCEEDS	107
50 PERCENT EXCEEDS	18
90 PERCENT EXCEEDS	1.0



## ARKANSAS RIVER BASIN

## 07250974 JACK CREEK NEAR WINFREY

**LOCATION.**--Lat 35°42'19", long 94°05'21", in NW1/4NW1/4 sec.21, T.12 N., R.29 W., Crawford County, Hydrologic Unit 11110201, 2100 ft upstream of mouth at Lake Shepherd Springs, 8.7 mi northeast of junction of U.S. Hwy 71 and State Hwy 282, and 11.3 mi northeast of Mountainburg.

**DRAINAGE AREA.**--19.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 2001 to current year.

**GAGE.**--Water-stage recorder.

**REMARKS.**--Water-discharge records fair except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.43	e0.46	9.8	1.6	47	7.4	17	4.2	3.2	e0.38	e0.37	e0.34
2	e0.44	e0.46	7.7	1.4	32	10	15	4.0	2.5	e0.37	e0.41	e0.39
3	e0.44	e0.58	6.0	1.3	25	9.1	12	3.5	1.5	e0.38	e0.37	e0.37
4	e0.44	e0.64	4.6	1.1	19	8.9	9.9	3.3	e3.5	e0.47	e0.41	e0.37
5	e0.44	e1.0	3.6	1.2	15	9.6	8.5	3.0	e29	e0.64	e0.33	e0.37
6	e0.44	e0.95	3.8	1.4	13	9.9	7.5	2.8	21	e0.67	e0.37	e0.37
7	e0.44	e0.84	3.5	1.2	11	9.8	223	2.3	11	e0.53	e0.33	e0.36
8	e0.44	e0.75	3.0	1.1	10	9.4	172	1.7	6.4	e0.54	e0.33	e0.37
9	e0.45	e0.75	2.4	1.0	9.4	9.7	57	2.9	5.4	e0.35	e0.33	e0.36
10	e1.5	e0.65	2.0	1.0	8.3	8.2	36	2.1	4.9	e0.18	e0.37	e0.36
11	27	e0.65	1.8	0.95	7.0	9.0	27	e1.9	4.3	e0.11	e0.33	e0.36
12	9.4	e0.63	4.1	0.85	6.5	10	20	e2.1	4.0	e0.13	e0.28	e0.37
13	22	e0.54	12	0.81	e5.9	9.8	15	3.4	3.9	e0.11	e1.8	e0.37
14	11	e0.54	13	0.75	e5.2	9.7	12	2.3	3.2	e0.50	e14	e0.37
15	5.5	e0.54	12	0.73	e4.6	9.3	9.1	e2.1	2.6	e0.53	e3.3	e0.37
16	3.6	e0.55	122	0.68	4.2	8.3	8.0	e1.9	1.9	e0.30	e1.6	e0.34
17	2.3	e0.54	79	0.65	3.7	7.6	6.8	e3.1	e1.7	e0.34	e1.0	e0.37
18	1.6	e0.44	40	0.68	3.4	12	6.0	e3.1	e1.4	e0.64	e0.92	e0.37
19	1.2	e0.54	28	0.80	24	155	6.3	e2.5	e1.3	e0.65	e0.70	e0.36
20	0.86	e0.46	19	0.82	28	88	6.3	e2.1	e1.0	e0.64	e0.57	e0.37
21	0.65	e0.45	15	0.81	21	45	6.0	e1.8	e0.92	e0.52	e0.47	e0.37
22	0.53	e0.44	12	0.75	17	32	5.4	e1.6	e0.89	e0.54	e0.46	e0.36
23	e0.54	e0.45	8.9	8.2	14	26	6.9	e1.5	e0.76	e0.46	e0.46	e0.34
24	e0.54	e0.54	6.8	25	12	21	6.3	e1.3	e0.76	e0.98	e0.35	e0.38
25	e0.59	e0.54	5.4	16	11	79	5.7	e1.3	e0.76	e0.98	e0.47	e0.39
26	e0.59	e0.85	4.4	13	8.6	52	5.9	e1.1	e0.64	e0.77	e0.37	e0.36
27	e0.59	e1.0	3.7	10	7.3	36	5.7	e1.0	e0.64	e0.68	e0.37	e0.36
28	e0.59	e1.0	3.3	8.7	6.5	29	5.4	e1.3	e0.57	e0.56	e0.36	e0.38
29	e0.59	9.7	2.8	7.4	---	23	5.0	e3.5	e0.54	e0.48	e0.37	e0.36
30	e0.48	12	2.2	7.7	---	22	4.5	6.2	e0.47	e0.48	e0.36	e0.36
31	e0.43	---	1.9	80	---	20	---	4.1	---	e0.38	e0.36	---
TOTAL	96.04	39.48	443.7	197.58	379.6	795.7	731.2	79.0	120.65	15.29	32.52	10.97
MEAN	3.10	1.32	14.3	6.37	13.6	25.7	24.4	2.55	4.02	0.49	1.05	0.37
MAX	27	12	122	80	47	155	223	6.2	29	0.98	14	0.39
MIN	0.43	0.44	1.8	0.65	3.4	7.4	4.5	1.0	0.47	0.11	0.28	0.34
MED	0.59	0.56	5.4	1.1	11	10	7.7	2.3	1.8	0.50	0.37	0.37
AC-FT	190	78	880	392	753	1580	1450	157	239	30	65	22

ARKANSAS RIVER BASIN

07250974 JACK CREEK NEAR WINFREY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

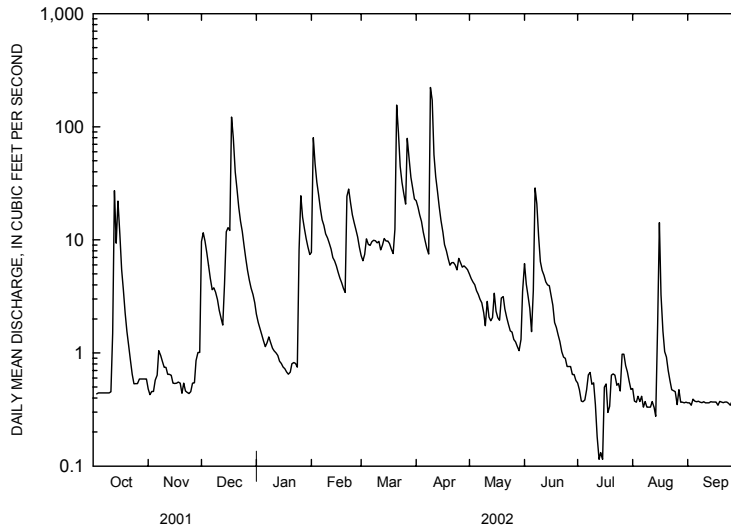
MEAN	3.10	1.32	14.3	6.37	13.6	25.7	24.4	2.55	4.02	0.49	1.05	0.37
MAX	3.10	1.32	14.3	6.37	13.6	25.7	24.4	2.55	4.02	0.49	1.05	0.37
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	3.10	1.32	14.3	6.37	13.6	25.7	24.4	2.55	4.02	0.49	1.05	0.37
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL TOTAL	2941.73
ANNUAL MEAN	8.06
HIGHEST DAILY MEAN	223 Apr 7
LOWEST DAILY MEAN	0.11 Jul 11
ANNUAL SEVEN-DAY MINIMUM	0.27 Jul 10
MAXIMUM PEAK FLOW	2180 Apr 7
MAXIMUM PEAK STAGE	7.40 Apr 7
INSTANTANEOUS LOW FLOW	0.00 at times
ANNUAL RUNOFF (AC-FT)	5830
10 PERCENT EXCEEDS	19
50 PERCENT EXCEEDS	1.6
90 PERCENT EXCEEDS	0.37

<sup>e</sup>Estimated



## ARKANSAS RIVER BASIN

## 07252000 MULBERRY RIVER NEAR MULBERRY

**LOCATION.**--Lat 35°34'38", long 94°00'56", in SE1/4SW1/4 sec.31, T.11 N., R.28 W., Franklin County, Hydrologic Unit 11110201, on left bank 0.6 mi upstream from Mill Creek, 5.7 mi north of Mulberry, and at mile 11.3.

**DRAINAGE AREA.**--373 mi<sup>2</sup>.

**PERIOD OF RECORD.**--May 1938 to September 1994, October 1998 to current year. Annual maximum, water years 1995-98.

**REVISED RECORDS.**--WSP 1007: 1943. WSP 1211: 1941-42. WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 432.75 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 19, 1940, nonrecording gage at site 500 ft downstream at present datum.

**REMARKS.**--Records good except estimated daily discharges, which are poor. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of December 1927 reached a stage of 22.0 ft, discharge, about 59,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	27	776	e221	4630	398	1160	598	863	105	119	24
2	12	26	578	e196	2850	890	1010	523	618	103	96	22
3	11	27	457	e181	1980	1380	858	462	473	106	80	19
4	9.5	30	378	e160	1490	1130	742	413	371	92	65	17
5	8.7	30	316	78	1170	1010	668	364	640	89	55	16
6	7.9	28	282	73	1010	924	605	321	927	85	47	14
7	7.2	26	278	68	884	834	3950	285	574	75	40	12
8	7.3	25	295	60	791	756	25500	256	427	61	34	11
9	8.8	25	346	53	719	2570	5260	249	345	50	30	10
10	19	25	301	50	641	2130	3020	248	464	43	27	9.6
11	593	26	274	48	557	1650	2190	236	1620	38	25	8.7
12	665	25	302	48	502	2090	1720	219	838	35	22	8.2
13	736	24	1100	56	457	1660	1380	213	706	48	33	7.3
14	932	23	1040	52	419	1370	1160	211	548	45	565	6.8
15	474	23	898	50	392	1170	993	193	421	54	563	6.3
16	310	22	6530	52	369	1170	888	168	336	56	328	6.0
17	232	21	14200	49	338	1030	1650	211	281	57	242	6.2
18	186	20	4190	50	314	965	1250	760	236	1300	192	6.0
19	154	21	2410	52	403	e16800	1070	468	200	1330	158	7.9
20	128	21	1580	53	1290	e5250	1430	356	165	669	131	7.6
21	106	22	1170	51	1040	e1600	1230	293	141	448	109	9.2
22	87	21	946	44	854	e793	1050	248	120	329	88	12
23	75	21	781	34	740	e570	1040	211	100	258	72	12
24	61	381	648	379	665	e310	1510	180	82	431	61	9.8
25	53	624	548	635	591	e4740	1180	161	71	329	66	8.0
26	45	384	e521	529	522	7570	1040	144	168	246	53	6.7
27	40	299	e464	539	456	3490	984	132	238	199	47	5.9
28	36	259	278	519	413	2380	882	125	186	164	41	5.4
29	33	390	234	504	---	1800	750	3840	154	137	36	4.9
30	31	772	203	497	---	1470	653	2720	136	130	32	4.6
31	29	---	e250	4070	---	1380	---	1350	---	131	28	---
TOTAL	5110.4	3668	42574	9451	26487	71280	66823	16158	12449	7243	3485	304.1
MEAN	164.9	122.3	1373	304.9	946.0	2299	2227	521.2	415.0	233.6	112.4	10.14
MAX	932	772	14200	4070	4630	16800	25500	3840	1620	1330	565	24
MIN	7.2	20	203	34	314	310	605	125	71	35	22	4.6
AC-FT	10140	7280	84450	18750	52540	141400	132500	32050	24690	14370	6910	603
CFSM	0.44	0.33	3.68	0.82	2.54	6.16	5.97	1.40	1.11	0.63	0.30	0.03
IN.	0.51	0.37	4.25	0.94	2.64	7.11	6.66	1.61	1.24	0.72	0.35	0.03



ARKANSAS RIVER BASIN

07252000 MULBERRY RIVER NEAR MULBERRY--CONTINUED

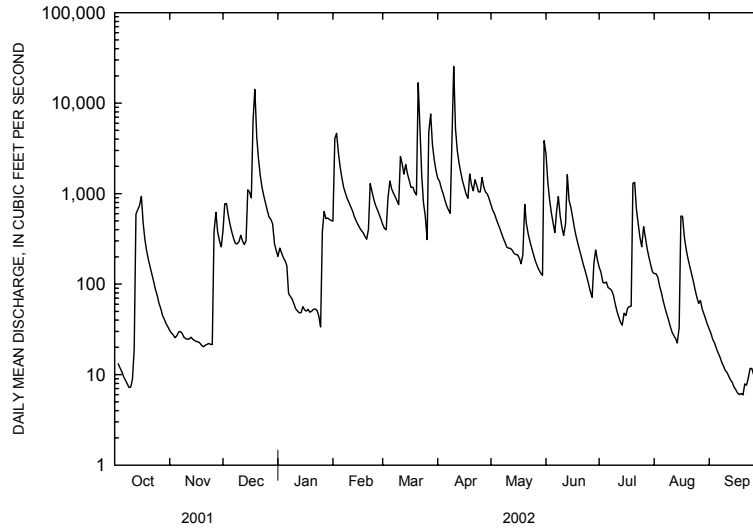
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938-94, 1999-02, BY WATER YEAR (WY)

MEAN	169.1	541.7	660.9	620.0	893.1	1082	1118	963.0	416.0	117.4	64.46	80.63
MAX	1566	2280	2997	3083	2873	4124	3576	4233	2592	908	952	1497
(WY)	1985	1974	1983	1949	1951	1945	1945	1990	2000	1950	1950	1974
MIN	0.000	0.033	2.45	5.34	47.0	75.7	263	88.7	9.68	2.72	0.061	0.000
(WY)	1954	1954	1990	1964	1967	1967	1971	1977	1977	1963	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938-94, 1999-02	
ANNUAL TOTAL	172644.5		265032.5			
ANNUAL MEAN	473.0		726.1		555.8	
HIGHEST ANNUAL MEAN					1226 1945	
LOWEST ANNUAL MEAN					185 1954	
HIGHEST DAILY MEAN	14200	Dec 17	25500	Apr 8	40900	May 3 1990
LOWEST DAILY MEAN	1.2	Sep 7	4.6	Sep 30	0.00	Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 1	6.5	Sep 24	0.00	Aug 25 1943
MAXIMUM PEAK FLOW			37800	Apr 8	170200	Dec 3 1982
MAXIMUM PEAK STAGE			17.86	Apr 8	23.66	Dec 3 1982
INSTANTANEOUS LOW FLOW			4.1	Sep 30	0.00	at times
ANNUAL RUNOFF (AC-FT)	342400		525700		402700	
ANNUAL RUNOFF (CFSM)	1.27		1.95		1.49	
ANNUAL RUNOFF (INCHES)	17.22		26.43		20.25	
10 PERCENT EXCEEDS	900		1400		1320	
50 PERCENT EXCEEDS	168		249		183	
90 PERCENT EXCEEDS	6.6		18		3.7	

<sup>1</sup>From rating curve extended above 38,000 ft<sup>3</sup>/s

<sup>e</sup>Estimated



## ARKANSAS RIVER BASIN

## 07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER

**LOCATION.**--Lat 35°30'21", long 93°10'53", in SE1/4NW1/4 sec.25, T.10 N., R.21 W., Pope County, Hydrologic Unit 11110202, on right bank 11.9 mi downstream from Indian Creek, 7.2 mi north of Dover, and at mile 23.3.

**DRAINAGE AREA.**--297 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1950 to September 1995, October 1998 to current year. Annual maximum, water years 1996-1998. Prior to October 1967, published as "Piney Creek near Dover". Prior to October 1992, published as "07257000 Big Piney Creek near Dover".

**REVISED RECORDS.**--WDR Ark. 1972: 1949(M), 1953(M), 1957(M), 1961(M), 1966(M), 1968-69(M).

**GAGE.**--Water-stage recorder. Datum of gage is 439.75 ft above NGVD of 1929.

**REMARKS.**--Records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	14	454	175	7800	310	825	491	672	37	94	13
2	4.2	13	326	161	3480	940	698	429	487	53	80	11
3	3.8	14	245	148	2110	1480	591	372	377	53	67	11
4	3.4	13	200	137	1460	1140	497	327	301	59	56	9.1
5	4.3	12	169	130	1080	948	438	289	249	68	48	7.6
6	4.8	13	157	138	871	807	394	255	358	64	41	6.2
7	4.9	13	161	143	739	698	425	228	291	54	36	5.4
8	4.1	12	251	138	652	612	10600	205	224	47	30	4.7
9	3.5	12	358	130	602	7920	4460	209	188	37	27	3.8
10	9.2	12	280	125	554	3360	2300	243	185	32	23	3.9
11	27	12	229	122	490	1990	1540	222	240	33	21	3.0
12	269	e12	263	119	436	1910	1150	198	235	27	19	2.5
13	212	e12	956	113	399	1570	895	249	227	30	19	2.2
14	364	e11	713	108	362	1250	730	310	219	41	416	2.1
15	213	e11	548	104	332	1020	616	266	190	46	477	2.0
16	141	e11	6120	101	312	852	533	227	161	46	266	1.9
17	103	e11	12000	96	288	723	566	270	139	111	186	2.0
18	78	e11	3950	92	266	624	533	405	122	2150	141	1.4
19	60	e10	2110	97	281	13900	468	360	107	1310	112	1.8
20	49	e10	1320	100	774	14300	453	301	93	632	90	3.2
21	41	e10	940	101	764	4700	438	260	80	407	73	3.0
22	35	e12	729	103	640	2450	391	226	70	292	59	2.8
23	31	e12	594	241	554	1650	617	196	62	216	48	2.4
24	27	e49	477	2500	496	1250	1330	173	54	229	40	2.2
25	24	e262	395	1490	449	2740	966	157	50	243	35	2.1
26	21	e179	340	1040	407	7740	761	146	44	177	30	2.1
27	19	126	301	804	356	3220	743	142	42	139	26	2.2
28	18	132	270	654	319	2010	678	1800	41	114	23	2.3
29	16	305	245	552	---	1450	578	2420	44	94	20	2.2
30	16	502	219	478	---	1120	506	1630	41	102	17	2.0
31	15	---	195	11400	---	966	---	1020	---	104	15	---
TOTAL	1826.2	1828	35515	21840	27273	85650	35720	14026	5593	7047	2635	121.1
MEAN	58.91	60.93	1146	704.5	974.0	2763	1191	452.5	186.4	227.3	85.00	4.037
MAX	364	502	12000	11400	7800	14300	10600	2420	672	2150	477	13
MIN	3.4	10	157	92	266	310	391	142	41	27	15	1.4
AC-FT	3620	3630	70440	43320	54100	169900	70850	27820	11090	13980	5230	240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-95, 1999-02, BY WATER YEAR (WY)

MEAN	125.2	416.9	552.0	453.8	649.2	862.1	853.6	678.4	280.4	73.73	38.32	45.58
MAX	1467	2419	3325	1663	2107	2763	2937	2528	1836	342	413	499
(WY)	1985	1995	1983	1993	2001	2002	1957	1990	2000	1961	1958	1970
MIN	0.000	0.000	5.86	7.03	47.9	125	120	67.1	14.0	0.76	0.000	0.000
(WY)	1954	1954	1990	1964	1963	1967	1963	1988	1977	1985	1980	1954

# ARKANSAS RIVER BASIN

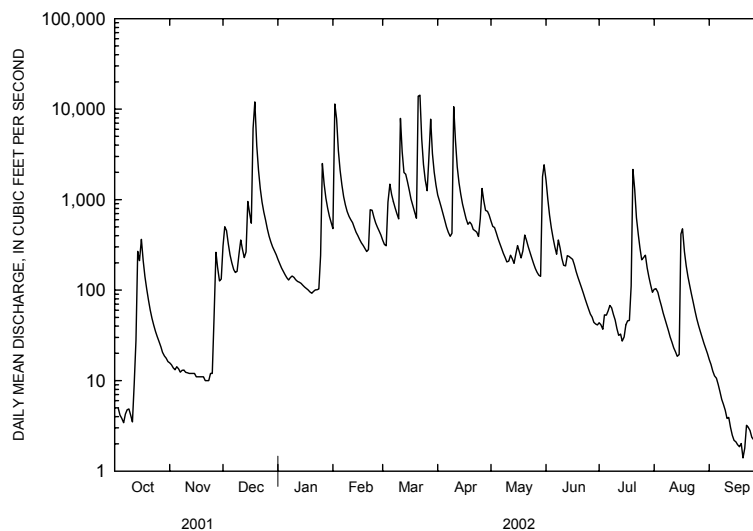
## 07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951-95, 1999-02	
ANNUAL TOTAL	144395.2		239074.3			
ANNUAL MEAN	395.6		655.0		420.5	
HIGHEST ANNUAL MEAN					823	1973
LOWEST ANNUAL MEAN					141	1963
HIGHEST DAILY MEAN	15300	Feb 16	14300	Mar 20	43500	Dec 3 1982
LOWEST DAILY MEAN	1.6	Sep 7	1.4	Sep 18	0.00	Oct 2 1952
ANNUAL SEVEN-DAY MINIMUM	2.5	Sep 2	1.9	Sep 13	0.00	Sep 12 1953
MAXIMUM PEAK FLOW			29600	Jan 31	<sup>1</sup> 111000	Dec 3 1982
MAXIMUM PEAK STAGE			15.31	Jan 31	<sup>2</sup> 33.87	Dec 3 1982
INSTANTANEOUS LOW FLOW			1.2	Sep 18,19	0.00	at times
ANNUAL RUNOFF (AC-FT)	286400		474200		304600	
10 PERCENT EXCEEDS	735		1320		988	
50 PERCENT EXCEEDS	105		195		128	
90 PERCENT EXCEEDS	7.5		9.2		2.8	

<sup>1</sup>From rating curve extended above 45,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow

<sup>2</sup>At site and datum then in use

<sup>e</sup>Estimated





ARKANSAS RIVER BASIN

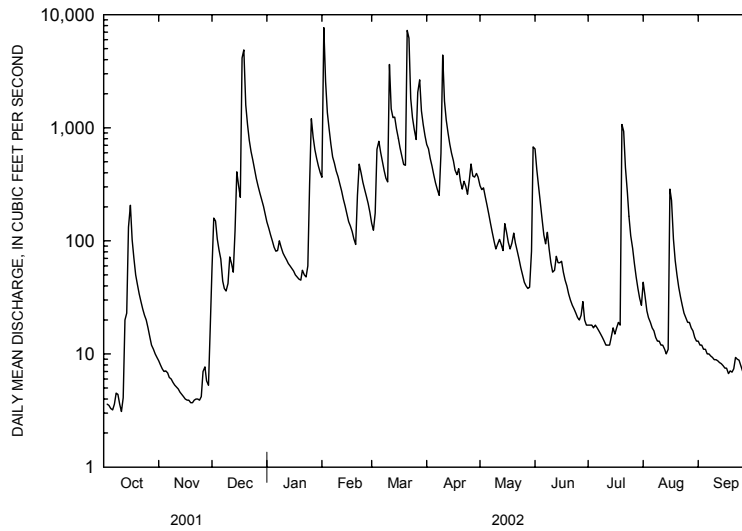
07257200 LITTLE PINEY CREEK NEAR LAMAR--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL MEAN	323	
HIGHEST DAILY MEAN	7670	Jan 31
LOWEST DAILY MEAN	3.1	Oct 9
ANNUAL SEVEN-DAY MINIMUM	3.7	Oct 3
MAXIMUM PEAK FLOW	18600	Jan 31
MAXIMUM PEAK STAGE	13.73	Jan 31
INSTANTANEOUS LOW FLOW	12.8	Oct 5
ANNUAL RUNOFF (AC-FT)	234100	
ANNUAL RUNOFF (CFSM)	2.10	
ANNUAL RUNOFF (INCHES)	28.51	
10 PERCENT EXCEEDS	718	
50 PERCENT EXCEEDS	66	
90 PERCENT EXCEEDS	6.5	

<sup>1</sup>Also period of record



## ARKANSAS RIVER BASIN

## 07257500 ILLINOIS BAYOU NEAR SCOTTSVILLE

**LOCATION.**--Lat 35°27'58", long 93°02'28", in SE1/4SW1/4 sec.31, T.10 N., R.19 W., Pope County, Hydrologic Unit 11110202, on downstream side of bridge on State Highway 164, 1.3 mi north of Scottsville, and 3.1 mi downstream from North Fork Illinois Bayou.

**DRAINAGE AREA.**--242 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1947 to September 1970, October 1999 to current year. Annual maximum water years 1971-99.

**GAGE.**--Water-stage recorder. Datum of gage is 447.54 ft above NGVD of 1929. Prior to Mar. 25, 1948, non-recording gage at same site and datum.

**REMARKS.**--No estimated daily discharges. Records good. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of May 10, 1943, reached a stage of 24.6 ft, from floodmark set by local residents (discharge, 77,000 ft<sup>3</sup>/s).

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	8.5	429	131	4830	308	756	413	397	9.1	28	1.7
2	1.5	8.3	288	117	1930	1460	660	354	312	9.4	20	1.5
3	1.4	8.1	219	105	1300	1640	546	306	253	8.6	14	1.4
4	1.2	22	178	93	935	1100	466	269	208	7.1	9.8	1.2
5	1.5	33	144	91	727	863	411	238	178	7.0	7.1	1.1
6	1.6	27	149	117	648	711	367	210	192	6.2	5.3	1.4
7	1.4	22	166	136	560	606	410	186	158	5.6	3.9	1.1
8	1.4	19	238	122	541	526	8710	165	124	4.9	3.1	0.95
9	1.3	16	273	113	507	6260	2740	208	106	4.4	2.4	0.93
10	1.5	15	224	110	461	2320	1640	281	126	4.7	1.9	0.92
11	3.2	14	190	106	399	1860	1200	268	196	4.2	1.6	0.91
12	3.2	13	197	98	366	2420	924	242	165	4.1	1.3	0.90
13	593	12	489	90	331	1590	749	351	139	4.5	7.5	0.89
14	286	11	480	86	296	1210	636	372	186	6.4	447	0.87
15	156	10	421	81	277	935	536	300	186	11	236	0.87
16	99	9.6	8190	74	260	745	478	250	137	8.7	131	0.87
17	69	9.0	13300	68	237	626	1130	460	109	12	82	0.88
18	52	8.6	2620	66	216	557	852	660	83	2370	55	0.88
19	41	8.8	1470	75	366	8210	675	470	63	910	38	1.1
20	34	8.2	945	82	1150	9290	563	378	46	430	27	1.8
21	28	7.6	696	80	771	2910	477	313	38	283	19	1.5
22	24	7.2	558	96	611	1730	408	262	32	208	13	1.1
23	21	7.2	454	386	519	1290	713	224	27	191	8.8	0.99
24	19	315	370	5390	458	1000	845	192	24	141	6.3	0.93
25	15	185	314	1950	405	2540	658	171	22	103	5.5	0.93
26	13	115	273	1260	353	5110	598	165	18	75	4.0	0.91
27	12	77	242	921	305	2100	636	155	15	54	3.3	0.91
28	11	83	218	724	278	1480	584	1160	13	40	2.8	0.90
29	9.9	377	195	596	---	1120	480	1080	11	29	2.4	0.89
30	9.5	667	171	501	---	911	436	709	9.9	46	2.1	0.88
31	8.8	---	149	10400	---	888	---	527	---	37	1.8	---
TOTAL	1522.0	2124.1	34250	24265	20037	64316	30284	11339	3573.9	5034.9	1190.9	32.11
MEAN	49.10	70.80	1105	782.7	715.6	2075	1009	365.8	119.1	162.4	38.42	1.070
MAX	593	667	13300	10400	4830	9290	8710	1160	397	2370	447	1.8
MIN	1.2	7.2	144	66	216	308	367	155	9.9	4.1	1.3	0.87
AC-FT	3020	4210	67930	48130	39740	127600	60070	22490	7090	9990	2360	64
CFSM	0.20	0.29	4.58	3.25	2.97	8.61	4.19	1.52	0.49	0.67	0.16	0.00
IN.	0.23	0.33	5.29	3.75	3.09	9.93	4.67	1.75	0.55	0.78	0.18	0.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948-70, 2000-02, BY WATER YEAR (WY)

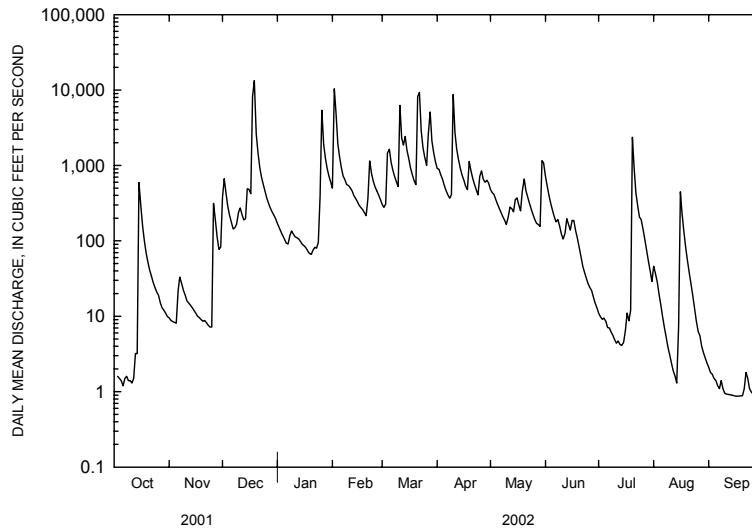
MEAN	81.60	217.2	396.8	533.2	669.2	756.3	712.4	596.0	181.7	90.92	65.68	58.01
MAX	627	1252	1513	2918	1666	2075	2116	1828	929	499	576	634
(WY)	1950	1952	1969	1949	2001	2002	1957	1961	1957	1950	1950	1970
MIN	0.002	0.043	0.68	16.3	51.9	147	105	83.4	15.8	1.21	0.56	0.000
(WY)	2000	1954	1954	1964	1963	1956	1963	2001	1966	1953	1952	2000

ARKANSAS RIVER BASIN

07257500 ILLINOIS BAYOU NEAR SCOTTSDALE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948-70, 2000-02	
ANNUAL TOTAL	117878.57		197968.91			
ANNUAL MEAN	323.0		542.4		361.7	
HIGHEST ANNUAL MEAN					693	1950
LOWEST ANNUAL MEAN					142	1954
HIGHEST DAILY MEAN	13300	Dec 17	13300	Dec 17	38500	Jan 24 1949
LOWEST DAILY MEAN	0.79	Sep 7	0.87	Sep 14	0.00	Sep 17 1953
ANNUAL SEVEN-DAY MINIMUM	0.97	Sep 2	0.88	Sep 12	0.00	Sep 17 1953
MAXIMUM PEAK FLOW			30200	Jan 31	<sup>1</sup> 130000	Dec 3 1982
MAXIMUM PEAK STAGE			17.66	Jan 31	27.49	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.86	Sep 15,16,19	0.00	at times
ANNUAL RUNOFF (AC-FT)	233800		392700		262100	
ANNUAL RUNOFF (CFSM)	1.34		2.25		1.50	
ANNUAL RUNOFF (INCHES)	18.20		30.56		20.39	
10 PERCENT EXCEEDS	549		1120		825	
50 PERCENT EXCEEDS	76		155		99	
90 PERCENT EXCEEDS	2.0		1.5		1.4	

<sup>1</sup>From rating curve extended above 56,100 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow



## ARKANSAS RIVER BASIN

## 07258000 ARKANSAS RIVER AT DARDANELLE

**LOCATION.**--Lat 35°13'34", long 93°08'58", in SW1/4 sec.29, T.7 N., R.20 W., Pope County, Hydrologic Unit 11110203, near left bank on upstream side of bridge on State Highway 7 at Dardanelle, 1.0 mi upstream from Whig Creek, 2.0 mi downstream from Dardanelle Dam, 4.7 mi downstream from Illinois Bayou, and at mile 219.5.

**DRAINAGE AREA.**--153,670 mi<sup>2</sup>, of which 22,241 mi<sup>2</sup> is probably noncontributing.

**PERIOD OF RECORD.**--July 1937 to September 1994, October 2000 to current year. Annual maximum 1995-2000. Gage-height records collected at same site since 1886 are contained in reports of National Weather Service.

**REVISED RECORDS.**--WRD Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 280.16 ft above NGVD of 1929. Prior to Jan. 11, 1939, nonrecording gage at same site at datum 10.0 ft higher. Jan. 11, 1939, to Dec. 10, 1970, water-stage recorder at same site at datum 10.0 ft higher. Feb. 13, 1969, to May 16, 1985, totalizing flow meters on each turbine in Dardanelle Dam, 2.0 mi upstream.

**REMARKS.**--No estimated daily discharges. Water-discharge records good except for those below 10,000 ft<sup>3</sup>/s, which are fair. Flow regulated upstream by many locks, dams, and reservoirs. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Apr. 19, 1927, reached a stage of 43.0 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6960	15500	5220	18900	152000	15300	35600	31700	58500	26900	26600	2210
2	4730	10500	5980	22400	107000	26500	36300	31900	53000	25800	12800	5360
3	2590	8260	10300	16800	75500	24500	48700	38600	56500	37000	15100	7770
4	6420	18500	4120	15900	44800	16500	59700	27100	36300	36200	11600	6750
5	6440	23300	3450	8460	43200	14000	35500	9860	36700	29600	6770	11200
6	4210	13800	6370	13900	56300	16900	32900	17100	62900	25300	8670	8310
7	13300	7290	9290	12400	52600	22900	32300	26100	75500	23800	15200	2430
8	6180	14000	6530	13000	25200	15900	162000	34500	76800	33300	10100	50
9	3130	15100	10800	3720	20800	67500	239000	36000	68500	28500	17600	4380
10	17800	3750	12800	4740	36400	15600	186000	64700	56000	28600	5220	1090
11	45700	2220	6250	5330	35500	20600	121000	84200	49400	24900	11600	1100
12	35900	4730	9680	4120	14100	52900	99400	81500	57600	12500	8050	50
13	17900	9880	9220	3780	29300	31400	83900	95600	65300	11600	10000	2940
14	31100	5580	14100	8170	37500	22000	71800	91700	63100	20000	26300	2780
15	24300	5090	8860	13800	12900	21200	69300	90500	73200	9400	26000	50
16	3270	3540	67600	12200	24800	23000	58200	87600	57100	7840	10800	4940
17	9160	50	201000	4180	11400	5430	72500	90900	36700	22600	11900	3880
18	15800	3860	167000	5910	13400	18000	68500	104000	36300	20900	4260	1820
19	12700	11700	86500	2350	22500	125000	60700	126000	46600	42900	20700	5420
20	9520	5080	63400	1480	52200	240000	65400	134000	69400	13300	13800	2130
21	13700	4190	51200	4990	53500	214000	67400	114000	82000	10600	8710	4190
22	3930	942	14700	5680	22400	128000	56100	75600	91600	17800	11900	15700
23	8700	2140	17300	5300	31100	98900	50200	73000	90300	27300	13500	17900
24	16100	2540	20400	42500	10000	61300	65800	84200	84200	20400	7270	8800
25	21400	4350	19500	10800	24800	62400	76700	64700	70200	10100	7330	15700
26	20200	5230	25400	18500	31600	123000	69700	70900	56800	13800	10800	50
27	5520	5320	12900	23400	4880	90700	51900	52100	55800	12800	7830	5640
28	50	8720	19800	13900	7910	59200	26000	19500	39300	8500	5120	332
29	13300	22000	13200	25700	---	65200	28700	20800	32700	2350	121	5850
30	9690	8280	11600	28400	---	44700	36600	62900	22800	17400	9220	6510
31	8080	---	18500	78600	---	37000	---	64300	---	35000	4740	---
TOTAL	397780	245442	932970	449310	1053590	1779530	2167800	2005560	1761100	656990	359611	155332
MEAN	12830	8181	30100	14490	37630	57400	72260	64700	58700	21190	11600	5178
MAX	45700	23300	201000	78600	152000	240000	239000	134000	91600	42900	26600	17900
MIN	50	50	3450	1480	4880	5430	26000	9860	22800	2350	121	50
AC-FT	789000	486800	1851000	891200	2090000	3530000	4300000	3978000	3493000	1303000	713300	308100



ARKANSAS RIVER BASIN

07258000 ARKANSAS RIVER AT DARDANELLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970-94, 2001-02, BY WATER YEAR (WY)

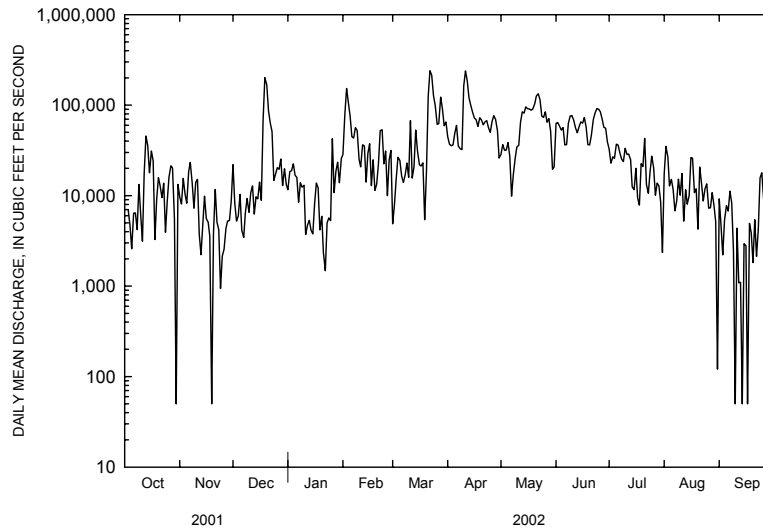
MEAN	27180	39050	41960	35630	41260	65370	65420	65350	58480	26070	14220	15360
MAX	218900	166600	145500	123700	101000	158200	184700	211100	127800	58700	59480	49900
(WY)	1987	1975	1993	1993	2001	1987	1973	1990	1982	1993	1992	1989
MIN	1334	1207	3612	946	4213	8587	4520	16140	5117	5252	3990	3818
(WY)	1981	1981	1990	1981	1981	1972	1981	1981	1988	1991	1991	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970-94, 2001-02	
ANNUAL TOTAL	13173272		11965015			
ANNUAL MEAN	36090		32780		<sup>1</sup> 41240	
HIGHEST ANNUAL MEAN					88010 1993	
LOWEST ANNUAL MEAN					9312 1981	
HIGHEST DAILY MEAN	205000	Feb 17	240000	Mar 20	419000	May 4 1990
LOWEST DAILY MEAN	50	Apr 30	50	Oct 28	40	Sep 18 1982
ANNUAL SEVEN-DAY MINIMUM	921	Aug 31	1720	Sep 7	540	Nov 6 1980
MAXIMUM PEAK FLOW			258000		<sup>2</sup> 433000	
MAXIMUM PEAK STAGE			30.34		<sup>3</sup> 42.14	
ANNUAL RUNOFF (AC-FT)	26130000		23730000		29880000	
10 PERCENT EXCEEDS	97800		76700		109000	
50 PERCENT EXCEEDS	18500		18500		25300	
90 PERCENT EXCEEDS	2500		4160		3040	

<sup>1</sup>Prior to regulation, water years 1938-69, 34,760 ft<sup>3</sup>/s

<sup>2</sup>Maximum discharge for period of record, 683,000 ft<sup>3</sup>/s, May 13, 1943

<sup>3</sup>Maximum gage height, 43.60 ft, in gage well, 44.1 ft from outside gage, May 25, 1943, present datum



## ARKANSAS RIVER BASIN

## 07258500 PETIT JEAN RIVER NEAR BOONEVILLE

**LOCATION.**--Lat 35°06'25", long 93°55'25", in NW1/4NW1/4 sec.18, T.5 N., R.27 W., Logan County, Hydrologic Unit 11110204, on right bank at downstream side of bridge on State Highway 23, 0.5 mi downstream from Fletcher Creek, 2.3 mi south of Booneville.

**DRAINAGE AREA.**--241 mi<sup>2</sup>.

**PERIOD OF RECORD.**--November 1938 to September 1984, October 1999 to current year. Annual maximum water years 1985-99. Prior to October 1965, published as "Petit Jean Creek near Booneville".

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 423.39 ft above NGVD of 1929.

**REMARKS.**--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	13	45	69	8450	120	376	116	419	3.8	4.9	0.71
2	2.2	13	25	61	1690	238	272	82	275	3.7	3.3	0.79
3	1.9	12	16	52	1020	272	208	62	194	9.4	1.9	0.82
4	1.7	12	13	47	631	221	161	54	140	11	1.4	0.80
5	2.0	10	10	52	469	203	130	48	704	3.5	1.1	0.77
6	2.8	9.6	16	120	460	182	108	40	517	3.1	1.1	0.72
7	3.1	9.9	28	123	507	158	1180	34	256	2.6	0.92	0.67
8	3.4	9.2	28	96	541	206	12000	28	178	2.4	0.77	0.59
9	3.8	8.8	31	80	462	4210	3470	293	129	2.4	0.64	0.52
10	4.9	8.5	25	73	397	1060	1560	157	170	2.1	0.55	0.45
11	97	7.9	19	66	330	783	886	92	110	1.8	0.50	0.40
12	166	7.0	88	57	296	956	556	76	73	1.7	0.41	0.35
13	499	6.6	274	51	267	614	470	1710	55	1.6	0.40	0.30
14	312	6.2	249	46	234	452	341	593	43	1.6	14	0.27
15	162	6.0	231	40	214	354	265	327	33	1.9	13	0.24
16	92	5.8	6240	35	223	319	215	219	25	1.6	7.3	0.20
17	52	5.4	13900	31	194	264	407	258	21	1.9	3.0	0.28
18	32	5.2	3190	29	166	581	292	402	17	4.5	1.6	0.40
19	21	5.5	1240	30	632	13100	205	237	13	32	1.1	0.63
20	16	5.2	644	32	906	12000	164	159	10	12	0.87	4.1
21	13	5.1	415	30	493	2970	130	122	8.9	3.9	0.71	1.8
22	10	5.0	329	30	359	1690	103	93	7.5	2.2	0.57	1.3
23	8.1	5.2	269	523	295	1020	89	68	6.2	1.8	0.49	0.94
24	7.1	5.4	214	3050	249	741	86	54	5.3	1.6	0.40	0.75
25	13	15	181	1210	209	553	70	44	5.6	1.4	10	0.58
26	16	6.6	156	676	173	670	81	52	119	1.2	1.4	0.51
27	15	3.3	131	476	136	461	311	63	24	1.0	0.89	0.44
28	15	6.0	117	373	119	364	238	893	9.8	0.83	0.82	0.40
29	15	13	103	315	---	298	146	2830	6.7	0.74	0.77	0.33
30	15	50	86	281	---	285	150	1260	4.8	1.1	0.76	0.34
31	14	---	75	8240	---	408	---	697	---	7.4	0.68	---
TOTAL	1618.7	281.4	28388	16394	20122	45753	24670	11163	3579.8	127.77	76.25	21.40
MEAN	52.22	9.380	915.7	528.8	718.6	1476	822.3	360.1	119.3	4.122	2.460	0.713
MAX	499	50	13900	8240	8450	13100	12000	2830	704	32	14	4.1
MIN	1.7	3.3	10	29	119	120	70	28	4.8	0.74	0.40	0.20
AC-FT	3210	558	56310	32520	39910	90750	48930	22140	7100	253	151	42
CFSM	0.22	0.04	3.80	2.19	2.98	6.12	3.41	1.49	0.50	0.02	0.01	0.00
IN.	0.25	0.04	4.38	2.53	3.11	7.06	3.81	1.72	0.55	0.02	0.01	0.00

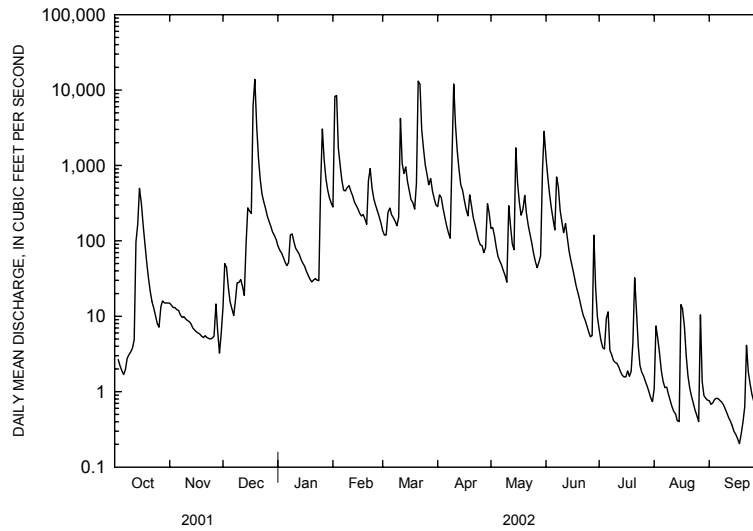
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 -84, 2000-02, BY WATER YEAR (WY)

MEAN	59.93	178.3	287.0	296.3	428.0	520.8	468.4	468.3	144.4	62.55	31.37	43.03
MAX	465	1576	1615	1854	1587	2610	1913	1779	1053	730	567	401
(WY)	1968	1973	1983	1949	1945	1945	1957	1968	1945	1961	1957	1945
MIN	0.000	0.000	0.013	0.000	8.81	21.1	43.3	15.6	1.76	0.13	0.000	0.000
(WY)	1947	1964	1964	1956	1967	1940	1982	1977	1972	1954	1980	1939

ARKANSAS RIVER BASIN

07258500 PETIT JEAN RIVER NEAR BOONEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939-84, 2000-02	
ANNUAL TOTAL	113587.07		152195.32			
ANNUAL MEAN	311.2		417.0		247.9	
HIGHEST ANNUAL MEAN					657	1945
LOWEST ANNUAL MEAN					46.2	1956
HIGHEST DAILY MEAN	13900	Dec 17	13900	Dec 17	28600	Apr 16 1939
LOWEST DAILY MEAN	0.00	Aug 3	0.20	Sep 16	0.00	Aug 19 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 3	0.29	Sep 11	0.00	Aug 31 1939
MAXIMUM PEAK FLOW			16500	Mar 20	43200	Apr 16 1939
MAXIMUM PEAK STAGE			21.68	Mar 20	23.42	Apr 16 1939
INSTANTANEOUS LOW FLOW			0.18	Sep 16	0.00	at times
ANNUAL RUNOFF (AC-FT)	225300		301900		179600	
ANNUAL RUNOFF (CFSM)	1.29		1.73		1.03	
ANNUAL RUNOFF (INCHES)	17.53		23.49		13.98	
10 PERCENT EXCEEDS	594		631		478	
50 PERCENT EXCEEDS	22		44		34	
90 PERCENT EXCEEDS	0.04		0.77		0.20	



## ARKANSAS RIVER BASIN

## 07260000 DUTCH CREEK AT WALTREAK

**LOCATION.**--Lat 34°59'15", long 93°36'47", in SE1/4NW1/4 sec.24, T.4 N., R.25 W., Yell County, Hydrologic Unit 11110204, on left bank 0.2 mi north of Waltreak and 21.0 mi upstream from mouth.

**DRAINAGE AREA.**--81.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1945 to September 1975, October 1999 to current year. Annual maximum 1976-99. Monthly discharge only for some periods published in WSP-1311.

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 371.48 ft above NGVD of 1929.

**REMARKS.**--No estimated daily discharges. Records fair. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in 1927 reached a stage of 19.5 ft, discharge about 14,600 ft<sup>3</sup>/s, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.46	11	61	24	1060	51	101	45	89	1.4	0.50	0.0
2	0.38	12	41	22	387	87	88	41	63	1.6	0.50	0.0
3	0.36	12	31	19	252	102	75	38	46	2.1	0.32	0.0
4	0.25	12	25	18	176	92	69	33	34	1.9	0.18	0.0
5	0.27	11	20	17	136	91	63	27	26	1.5	0.01	0.0
6	0.37	10	38	21	128	87	59	22	21	1.7	0.0	0.0
7	0.26	10	56	27	121	82	143	19	17	2.1	0.0	0.0
8	0.19	9.6	61	30	131	74	2840	16	14	1.7	0.0	0.0
9	0.12	11	58	29	128	281	607	20	12	1.3	0.0	0.0
10	0.12	12	52	28	116	255	307	19	12	0.94	0.0	0.0
11	0.74	13	42	27	100	191	198	20	10	0.88	0.0	0.0
12	1.3	12	118	25	91	376	146	17	8.8	0.73	0.0	0.0
13	132	13	219	24	82	254	117	344	7.7	0.58	0.0	0.0
14	90	13	201	22	72	180	100	215	6.8	0.85	2.2	0.0
15	42	13	150	20	65	140	86	124	6.0	0.93	2.4	0.0
16	26	13	4140	19	61	114	78	92	5.7	0.68	2.2	0.0
17	20	13	4450	18	54	98	141	80	5.2	0.67	1.8	0.0
18	17	12	626	17	48	94	114	119	4.8	2.0	1.2	0.0
19	14	11	325	15	121	4400	89	88	4.5	2.9	0.78	0.0
20	12	11	209	14	408	2630	80	70	5.8	2.1	0.39	0.0
21	12	9.6	158	13	208	585	71	58	6.2	1.8	0.20	0.0
22	10	9.0	132	42	138	318	64	47	3.9	1.6	0.15	0.0
23	9.7	9.8	111	422	110	222	59	36	3.2	2.0	0.09	0.0
24	10	14	93	859	93	170	53	29	2.9	6.7	0.06	0.0
25	9.8	14	79	512	80	139	48	25	5.5	3.6	0.46	0.0
26	10	14	65	276	67	134	50	22	3.4	2.5	0.79	0.0
27	12	13	52	186	57	115	65	22	2.8	1.8	0.73	0.0
28	11	27	47	141	50	100	65	45	2.4	1.4	0.49	0.0
29	10	82	38	116	---	90	56	207	2.0	1.1	0.22	0.0
30	12	79	33	99	---	87	49	343	1.7	0.77	0.05	0.0
31	11	---	28	3070	---	96	---	140	---	0.63	0.0	---
TOTAL	475.32	506.0	11759	6172	4540	11735	6081	2423	433.3	52.46	15.72	0.0
MEAN	15.33	16.87	379.3	199.1	162.1	378.5	202.7	78.16	14.44	1.692	0.507	0.000
MAX	132	82	4450	3070	1060	4400	2840	344	89	6.7	2.4	0.00
MIN	0.12	9.0	20	13	48	51	48	16	1.7	0.58	0.00	0.00
AC-FT	943	1000	23320	12240	9010	23280	12060	4810	859	104	31	0.00
CFSM	0.19	0.21	4.66	2.45	1.99	4.65	2.49	0.96	0.18	0.02	0.01	0.00
IN.	0.22	0.23	5.37	2.82	2.07	5.36	2.78	1.11	0.20	0.02	0.01	0.00

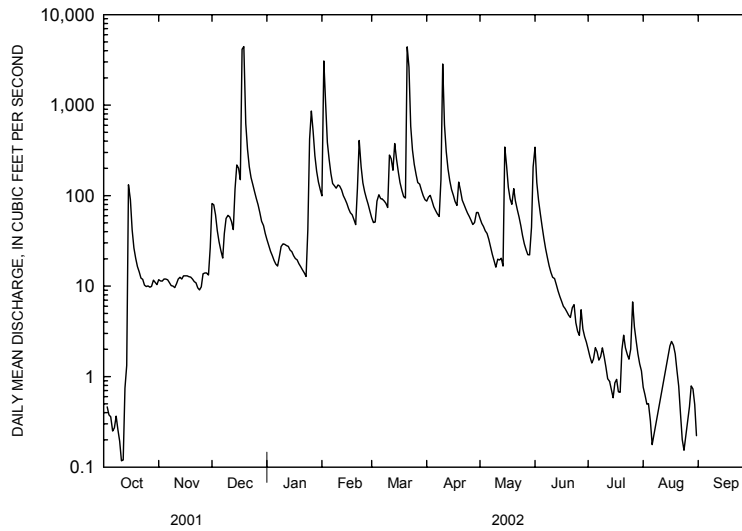
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946-75, 2000-02, BY WATER YEAR (WY)

MEAN	21.53	67.13	125.9	133.2	158.4	195.7	179.0	157.1	44.70	30.29	10.38	9.634
MAX	178	366	480	643	494	598	839	587	283	378	126	99.8
(WY)	1974	1973	1972	1949	1950	1973	1957	1968	1974	1969	1957	1950
MIN	0.000	0.000	0.000	0.000	4.69	11.3	20.4	11.7	2.04	0.026	0.000	0.000
(WY)	1947	1954	1954	1964	1967	1972	1963	2000	1964	1954	1954	1946

ARKANSAS RIVER BASIN

07260000 DUTCH CREEK AT WALTREAK--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946-75, 2000-02	
ANNUAL TOTAL	39903.01		44192.80			
ANNUAL MEAN	109.3		121.1		94.32	
HIGHEST ANNUAL MEAN					225	1973
LOWEST ANNUAL MEAN					27.2	1963
HIGHEST DAILY MEAN	4740	Feb 16	4450	Dec 17	9540	Jul 26 1969
LOWEST DAILY MEAN	0.00	Jul 11	0.00	Aug 6	0.00	Aug 24 1946
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 19	0.00	Aug 6	0.00	Aug 24 1946
MAXIMUM PEAK FLOW			11500	Dec 17	24500	Jul 26 1969
MAXIMUM PEAK STAGE			18.22	Dec 17	22.38	Jul 26 1969
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	79150		87660		68330	
ANNUAL RUNOFF (CFSM)	1.34		1.49		1.16	
ANNUAL RUNOFF (INCHES)	18.24		20.20		15.74	
10 PERCENT EXCEEDS	222		182		177	
50 PERCENT EXCEEDS	14		20		18	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



## ARKANSAS RIVER BASIN

## 07260500 PETIT JEAN RIVER AT DANVILLE

**LOCATION.**--Lat 35°03'33", long 93°23'44", in NW<sub>1</sub>/4SE<sub>1</sub>/4 sec.25, T.5 N., R.23 W., Yell County, Hydrologic Unit 11110204, on right bank 125 ft upstream of bridge on State Highway 10 at Danville, 0.3 mi upstream from old Chicago, Rock Island and Pacific Railroad Co. bridge, 0.5 mi upstream from Spring Creek, 0.6 mi downstream from Dutch Creek, and at mile 48.8.

**DRAINAGE AREA.**--764 mi<sup>2</sup>.

**PERIOD OF RECORD.**--June 1916 to current year. Prior to October 1965, published as "Petit Jean Creek at Danville."

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder and concrete control. Datum of gage is 303.33 ft above NGVD of 1929. June 1, 1916, to Aug. 24, 1934, non-recording gage on railroad bridge 0.3 mi downstream at datum 0.25 ft higher. Aug. 25, 1934, to July 12, 1939, non-recording gage at present site and datum. Since June 18, 1954, auxiliary water-stage recorder 2.2 mi downstream.

**REMARKS.**--No estimated daily discharges. Records good. Flow regulated since March 1947 by Blue Mountain Lake, 25.6 mi upstream, capacity, 257,900 acre-ft. As of July 1986, flow from 51.6 mi<sup>2</sup> upstream from this station is controlled by three floodwater-detention reservoirs that have a total combined capacity of 23,737 acre-ft below the spillway crests, of which 16,361 acre-ft is flood-detention capacity, 4,500 acre-ft is water-supply storage, and 2,876 acre-ft is sediment-storage capacity. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	2.9	324	3470	9250	1940	1590	3030	2200	6.8	22	2.6
2	67	9.1	326	3450	6000	1330	1920	2940	2190	7.1	14	3.3
3	73	43	290	3530	2580	1290	2150	2390	2070	11	13	4.2
4	78	19	320	3570	1360	1020	2350	2240	1920	11	12	2.8
5	78	2.9	309	3500	2350	960	2430	2250	1250	15	13	2.2
6	84	2.2	223	3390	3070	934	2460	2260	1050	17	11	2.1
7	83	2.2	286	3050	3380	866	2450	2450	995	16	8.0	5.6
8	83	2.1	318	2820	3680	828	4990	2430	652	10	5.7	7.6
9	88	1.9	243	2680	3830	1500	6900	2480	594	15	3.9	8.9
10	109	1.8	203	2520	3820	1860	3480	1690	554	42	4.3	12
11	125	1.7	240	1900	3710	1580	2010	2120	256	51	3.5	10
12	114	1.8	365	1050	3600	2790	2190	2330	177	56	4.7	2.6
13	173	1.7	840	902	3480	2240	2280	2540	167	68	6.4	1.8
14	353	1.6	1100	871	3390	2390	2660	1960	162	82	67	1.8
15	199	1.3	1120	489	3480	2480	2780	2340	157	84	79	1.7
16	722	1.1	4070	377	3570	2370	2870	2540	154	76	31	1.7
17	765	1.1	15600	369	3520	2240	3300	2550	145	74	21	1.2
18	650	1.1	10300	365	3420	2110	3050	2250	91	90	18	0.87
19	735	1.0	4090	279	3490	5390	2880	2100	53	165	15	1.2
20	397	0.95	2880	254	4140	14800	3000	2390	44	148	23	7.7
21	336	0.93	2880	249	2680	8370	2970	2500	31	121	43	9.0
22	322	0.92	3190	333	2900	3630	2890	2470	32	109	45	3.9
23	117	0.93	3500	1150	3200	1870	3010	2360	29	122	44	2.0
24	52	1.1	3640	2570	3140	2090	3160	1710	24	121	42	1.7
25	49	2.3	3630	2720	3000	2040	3160	1170	25	116	102	1.6
26	28	5.8	3570	2830	2850	2130	3150	1040	26	115	51	2.1
27	5.4	2.5	3500	2860	2710	2170	2860	1040	26	110	43	3.5
28	2.4	22	3480	2680	2560	2310	2500	1130	20	109	42	2.3
29	2.4	221	3520	2830	---	2400	2920	1350	14	107	42	2.2
30	3.8	302	3520	2860	---	2410	3060	1830	9.8	69	24	2.2
31	2.8	---	3470	4130	---	2430	---	1600	---	37	4.2	---
TOTAL	5962.8	659.93	81347	64048	98160	82768	87420	65480	15117.8	2180.9	857.7	112.37
MEAN	192.3	22.00	2624	2066	3506	2670	2914	2112	503.9	70.35	27.67	3.746
MAX	765	302	15600	4130	9250	14800	6900	3030	2200	165	102	12
MIN	2.4	0.92	203	249	1360	828	1590	1040	9.8	6.8	3.5	0.87
AC-FT	11830	1310	161400	127000	194700	164200	173400	129900	29990	4330	1700	223

ARKANSAS RIVER BASIN

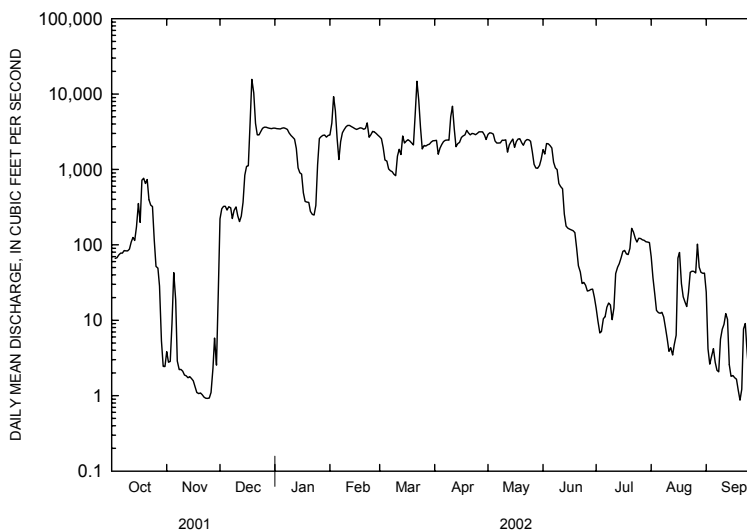
07260500 PETIT JEAN RIVER AT DANVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2002, BY WATER YEAR (WY)

MEAN	186.9	583.1	1223	1175	1362	1513	1375	1415	741.7	316.0	170.2	103.7
MAX	3261	3296	4004	3920	4941	3233	3821	6142	2801	2268	2101	1108
(WY)	1985	1973	1983	1998	1949	1973	1957	1990	1957	1957	1957	1950
MIN	1.03	1.27	3.84	3.82	25.2	82.5	106	46.4	26.9	2.49	4.07	3.75
(WY)	1947	1996	1966	1964	1967	1967	1963	1977	1966	1985	1947	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1947 - 2002	
ANNUAL TOTAL	357126.03		504114.50			
ANNUAL MEAN	978.4		1381		1844.8	
HIGHEST ANNUAL MEAN					1920	1973
LOWEST ANNUAL MEAN					187	1976
HIGHEST DAILY MEAN	15600	Dec 17	15600	Dec 17	26400	Dec 3 1982
LOWEST DAILY MEAN	0.92	Nov 22	0.87	Sep 18	0.00	Aug 11 1956
ANNUAL SEVEN-DAY MINIMUM	0.99	Nov 17	0.99	Nov 17	0.01	Oct 24 1999
MAXIMUM PEAK FLOW			19500	Dec 17	247500	Dec 3 1982
MAXIMUM PEAK STAGE			25.96	Dec 17	329.36	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.80	Sep 18-19	0.00	at times
ANNUAL RUNOFF (AC-FT)	708400		999900		612000	
10 PERCENT EXCEEDS	2570		3470		2540	
50 PERCENT EXCEEDS	173		353		186	
90 PERCENT EXCEEDS	5.2		2.4		10	

<sup>1</sup>Prior to regulation, water years 1917-46, 845 ft<sup>3</sup>/s  
<sup>2</sup>Maximum discharge for period of record, 70,800 ft<sup>3</sup>/s Apr. 17, 1939  
<sup>3</sup>Maximum gage height for period of record, 31.82 ft Apr. 17, 1939



## ARKANSAS RIVER BASIN

## 07260673 WEST FORK POINT REMOVE CREEK NEAR HATTIEVILLE

**LOCATION.**--Lat 35°19'29", long 92°52'23", in NE1/4SE1/4 sec.24, T.8 N., R.18 W., Pope County, Hydrologic Unit 11110203, on right bank about 300 ft upstream from State Highway 247 bridge, 5.5 mi northwest of Hattievville, and 7.8 mi northeast of Atkins.

**DRAINAGE AREA.**--222 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 2001 to current year. Annual maximum 1978-2001.

**GAGE.**--Water-stage recorder.

**REMARKS.**--No estimated daily discharges. Records good. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage 26.62 ft, discharge 64,100 ft<sup>3</sup>/s, occurred December 3, 1982 during computation of annual maximum only, water years 1978-2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	10	228	276	1970	286	889	287	225	8.5	24	2.9
2	2.0	9.4	188	208	1610	541	789	245	187	7.6	19	2.3
3	1.5	9.6	154	162	1420	787	688	210	148	7.3	16	1.8
4	1.4	9.6	123	121	1180	684	599	184	108	6.6	13	1.5
5	1.5	8.9	102	106	942	602	527	163	82	5.8	11	1.3
6	1.8	8.5	179	135	826	532	465	143	67	5.1	9.3	0.96
7	1.8	8.2	251	136	748	475	425	123	55	4.4	7.6	0.71
8	1.7	7.9	215	132	712	432	1480	108	46	3.8	6.0	0.47
9	1.4	7.4	182	129	640	797	1650	110	41	3.4	4.7	0.45
10	1.6	7.1	156	124	562	919	1410	121	46	3.1	3.9	0.26
11	8.2	7.2	131	116	492	919	1190	133	46	6.1	3.5	0.14
12	13	6.1	172	108	441	1830	967	118	43	2.4	2.9	0.06
13	274	5.8	359	101	380	1520	809	174	38	2.2	2.7	0.00
14	194	7.1	418	95	320	1290	747	184	35	2.4	20	0.00
15	154	5.8	393	87	278	1090	630	168	35	2.4	38	0.00
16	122	5.6	2400	81	249	900	530	145	32	2.4	51	0.00
17	94	5.5	4300	76	219	773	519	135	28	6.0	52	0.00
18	68	5.4	2260	72	196	680	477	136	25	8.6	44	0.00
19	45	5.0	1960	78	331	2330	414	118	23	25	35	0.00
20	35	4.7	1760	77	1050	2900	360	105	20	16	28	1.2
21	29	4.8	1610	74	877	2110	315	91	19	21	21	1.8
22	25	4.7	1490	94	705	1800	267	78	18	35	16	1.2
23	22	4.8	1390	341	601	1620	335	69	16	33	14	0.52
24	18	8.2	1270	1540	517	1480	435	62	14	102	11	0.16
25	15	7.3	1090	1410	449	1390	416	56	18	142	10	0.05
26	14	6.7	895	1170	383	1400	386	114	15	102	9.0	0.00
27	12	7.4	740	961	322	1270	440	152	12	71	7.3	0.01
28	12	25	614	786	273	1070	438	303	11	51	6.0	0.0
29	12	109	522	669	---	939	382	368	9.8	39	5.0	0.00
30	12	251	444	579	---	873	329	335	9.5	32	4.1	0.0
31	12	---	360	1370	---	933	---	277	---	28	3.3	---
TOTAL	1207.2	573.7	26356	11414	18693	35172	19308	5015	1472.3	785.1	498.3	17.79
MEAN	38.9	19.1	850	368	668	1135	644	162	49.1	25.3	16.1	0.59
MAX	274	251	4300	1540	1970	2900	1650	368	225	142	52	2.9
MIN	1.4	4.7	102	72	196	286	267	56	9.5	2.2	2.7	0.00
AC-FT	2390	1140	52280	22640	37080	69760	38300	9950	2920	1560	988	35
CFSM	0.18	0.09	3.83	1.66	3.01	5.11	2.90	0.73	0.22	0.11	0.07	0.00
IN.	0.20	0.10	4.42	1.91	3.13	5.89	3.24	0.84	0.25	0.13	0.08	0.00



ARKANSAS RIVER BASIN

07260673 WEST FORK POINT REMOVE CREEK NEAR HATTIEVILLE--CONTINUED

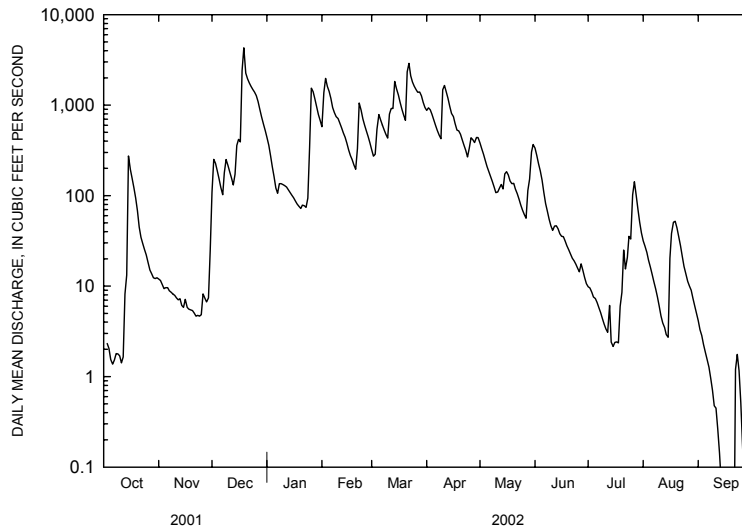
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	38.9	19.1	850	368	668	1135	644	162	49.1	25.3	16.1	0.59
MAX	38.9	19.1	850	368	668	1135	644	162	49.1	25.3	16.1	0.59
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	38.9	19.1	850	368	668	1135	644	162	49.1	25.3	16.1	0.59
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2002 WATER YEAR

ANNUAL TOTAL	120512.39
ANNUAL MEAN	330
HIGHEST DAILY MEAN	4300 Dec 17
LOWEST DAILY MEAN	0.00 Sep 13
ANNUAL SEVEN-DAY MINIMUM	0.00 Sep 13
MAXIMUM PEAK FLOW	8240 Dec 17
MAXIMUM PEAK STAGE	20.63 Dec 17
INSTANTANEOUS LOW FLOW	0.00 at times
ANNUAL RUNOFF (AC-FT)	239000
ANNUAL RUNOFF (CFSM)	1.49
ANNUAL RUNOFF (INCHES)	20.19
10 PERCENT EXCEEDS	1060
50 PERCENT EXCEEDS	94
90 PERCENT EXCEEDS	1.9



## ARKANSAS RIVER BASIN

## 07261000 CADRON CREEK NEAR GUY

**LOCATION.**--Lat 35°17'55", long 92°24'14", in NW1/4SE1/4 sec.29, T.8 N., R.13 W., Faulkner County, Hydrologic Unit 11110205, on left bank on downstream side of bridge on U.S. Highway 65, 4.3 mi southwest of Guy, 10.5 mi upstream from Cove Creek, and at mile 48.3.

**DRAINAGE AREA.**--169 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1954 to current year. Prior to October 1965, published as "North Fork Cadron Creek near Guy."

**REVISED RECORDS.**--WDR Ark. 1970: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 371.68 ft above NGVD of 1929.

**REMARKS.**--Records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.08	196	136	2540	217	905	93	75	20	21	2.9
2	0.00	1.4	108	125	1100	289	683	91	58	16	19	2.6
3	0.00	5.9	80	115	787	341	527	83	47	14	16	2.5
4	0.00	1.1	66	103	609	269	420	78	39	12	13	2.1
5	0.00	0.31	57	106	485	249	359	74	36	9.5	11	1.8
6	0.00	0.41	85	152	449	233	308	70	92	6.8	9.0	1.4
7	0.00	1.1	350	183	433	216	274	65	74	6.7	6.7	1.0
8	0.00	2.8	249	143	486	204	828	60	53	5.6	5.2	0.82
9	0.00	1.8	172	131	442	689	837	58	43	4.6	14	0.66
10	0.00	1.9	127	126	391	816	579	62	59	3.8	21	0.77
11	0.00	1.9	103	119	329	724	462	72	278	3.9	13	0.72
12	0.00	2.4	149	111	299	4020	384	72	194	3.6	9.4	0.27
13	0.30	1.6	e824	105	267	1690	325	77	426	2.3	7.3	0.17
14	0.19	1.1	e621	101	235	1060	352	120	267	2.0	15	0.25
15	0.13	1.1	539	95	220	785	305	85	192	3.7	106	5.8
16	0.14	2.0	4050	89	227	696	249	68	130	5.7	80	1.4
17	0.13	1.8	9850	87	204	571	234	397	104	6.2	54	1.4
18	0.08	1.7	2510	85	180	489	210	924	84	350	40	1.2
19	0.14	1.5	1250	103	284	2870	176	398	68	924	31	2.3
20	0.27	1.2	811	140	1530	5790	158	262	56	278	25	12
21	0.30	0.21	619	120	870	2120	143	191	47	172	20	11
22	0.28	0.78	501	153	614	1190	127	148	38	113	16	26
23	0.33	1.6	425	870	488	882	123	119	32	100	12	19
24	0.39	3.7	340	1800	407	701	152	97	27	96	19	11
25	0.24	4.1	289	1220	344	593	132	85	24	78	24	6.8
26	0.07	5.0	253	801	296	921	117	78	22	61	14	4.8
27	0.04	5.3	224	611	249	699	134	70	22	46	9.4	3.4
28	0.13	25	204	495	222	580	141	65	47	36	7.0	3.1
29	0.22	134	184	415	---	494	118	62	33	30	5.2	2.6
30	0.29	350	160	364	---	490	98	78	24	25	4.0	2.2
31	0.19	---	147	872	---	957	---	124	---	22	3.5	---
TOTAL	3.86	562.79	25543	10076	14987	31845	9860	4326	2691	2457.4	650.7	131.96
MEAN	0.125	18.76	824.0	325.0	535.2	1027	328.7	139.5	89.70	79.27	20.99	4.399
MAX	0.39	350	9850	1800	2540	5790	905	924	426	924	106	26
MIN	0.00	0.08	57	85	180	204	98	58	22	2.0	3.5	0.17
AC-FT	7.7	1120	50660	19990	29730	63160	19560	8580	5340	4870	1290	262
CFSM	0.00	0.11	4.88	1.92	3.17	6.08	1.94	0.83	0.53	0.47	0.12	0.03
IN.	0.00	0.12	5.62	2.22	3.30	7.01	2.17	0.95	0.59	0.54	0.14	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

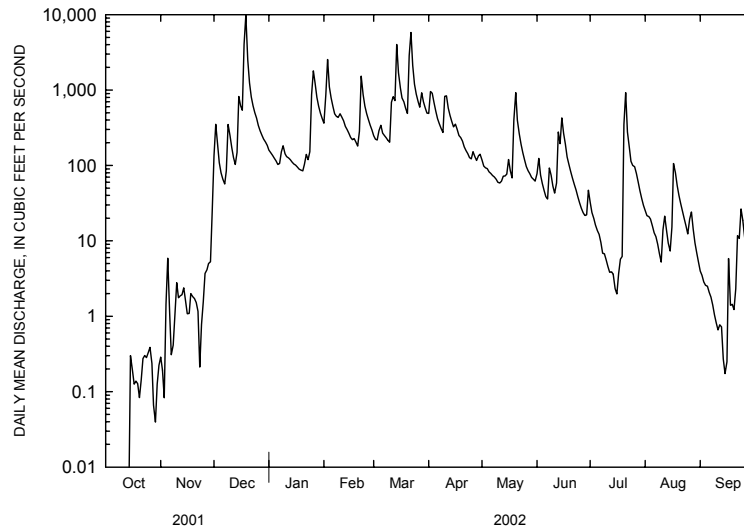
MEAN	71.40	268.3	415.4	386.7	480.4	557.2	463.6	358.1	138.4	39.57	41.56	52.72
MAX	872	1318	1875	1679	1498	1542	1818	1606	867	333	1145	523
(WY)	1985	1958	1983	1991	1956	1975	1973	1968	1974	1960	1957	1977
MIN	0.000	0.000	6.97	21.0	49.6	91.8	81.1	21.3	5.25	0.78	0.031	0.000
(WY)	1955	1955	1955	1955	1963	1972	1960	2001	1988	1998	1999	1999

ARKANSAS RIVER BASIN

07261000 CADRON CREEK NEAR GUY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	78064.46		103134.71			
ANNUAL MEAN	213.9		282.6		271.7	
HIGHEST ANNUAL MEAN					566	1973
LOWEST ANNUAL MEAN					120	1996
HIGHEST DAILY MEAN	9850	Dec 17	9850	Dec 17	14800	Dec 4 1982
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1	0.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Oct 1	0.00	Oct 1 1954
MAXIMUM PEAK FLOW			11200	Dec 17	24200	Dec 4 1982
MAXIMUM PEAK STAGE			18.53	Dec 17	29.29	Dec 4 1982
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	154800		204600		196800	
ANNUAL RUNOFF (CFSM)	1.27		1.67		1.61	
ANNUAL RUNOFF (INCHES)	17.18		22.70		21.84	
10 PERCENT EXCEEDS	458		697		644	
50 PERCENT EXCEEDS	18		80		88	
90 PERCENT EXCEEDS	0.26		0.37		1.0	

<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

07261500 FOURCHE LAFAVE RIVER NEAR GRAVELLY

**LOCATION.**--Lat 34°52'21", long 93°39'24", in NW1/4NW1/4 sec.34, T.3 N., R.25 W., Yell County, Hydrologic Unit 11110206, near left bank on downstream side of bridge on State Highway 28, 1.2 mi downstream from Garner Creek, 1.9 mi east of Gravelly, 6.4 mi upstream from Gaffords Creek, and at mile 103.7.

**DRAINAGE AREA.**--410 mi<sup>2</sup>.

**PERIOD OF RECORD.**--February 1939 to September 1994, October 1999 to current year. Annual maximum water years 1995-99.

**GAGE.**--Water-stage recorder. Datum of gage is 410.50 ft above NGVD of 1929. Prior to May 11, 1939, nonrecording gage at present site and datum.

**REMARKS.**--Records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	30	674	171	16000	298	934	495	936	35	19	0.51
2	17	29	458	152	2730	392	810	337	638	35	17	0.45
3	15	27	343	137	1730	557	650	251	467	33	14	0.32
4	14	25	268	125	1240	542	525	206	362	36	12	0.11
5	15	23	212	122	947	514	447	174	297	33	9.6	0.02
6	14	22	415	149	850	499	392	146	254	31	8.4	0.02
7	12	21	1190	172	797	465	361	124	254	29	6.8	0.00
8	11	21	1730	174	809	430	19700	106	218	26	5.3	0.00
9	9.7	20	987	165	915	e868	4280	103	184	23	4.7	0.00
10	9.3	18	649	156	911	e1420	2040	105	160	22	4.1	0.00
11	14	18	481	147	750	1030	1380	114	136	20	3.4	0.00
12	16	17	746	136	650	1590	1030	126	119	17	2.6	0.00
13	869	16	1640	126	571	1420	816	1840	107	15	2.3	0.00
14	1080	16	2060	119	489	1050	678	1750	99	15	6.3	0.00
15	511	17	1580	111	432	835	558	918	150	15	7.9	0.00
16	304	18	16200	105	404	683	468	604	139	12	6.9	0.00
17	209	18	41200	101	363	576	1250	478	104	11	5.5	0.00
18	155	17	4870	98	321	520	1290	828	86	17	4.6	0.00
19	126	17	2270	98	484	20600	820	688	74	17	4.0	0.05
20	104	17	1430	100	2140	25300	618	485	66	68	3.0	2.6
21	89	16	1030	102	1370	4490	493	376	60	110	2.3	2.7
22	78	16	809	125	941	2240	401	308	53	73	1.6	1.3
23	70	16	654	934	728	1560	335	254	48	53	1.2	0.45
24	61	22	521	4180	604	1200	290	213	46	41	0.92	0.18
25	54	20	428	3410	509	972	244	184	45	35	3.0	0.03
26	49	21	364	1810	427	875	216	176	41	29	4.0	0.02
27	43	21	321	1210	359	825	265	158	40	24	3.6	0.02
28	39	52	286	902	317	684	343	2470	46	21	2.8	0.02
29	36	1000	252	712	---	591	294	4110	45	27	1.7	0.02
30	34	1020	220	587	---	530	480	3170	37	28	1.1	0.02
31	32	---	194	8260	---	611	---	1540	---	23	0.74	---
TOTAL	4109.0	2611	84482	24896	38788	74167	42408	22837	5311	974	170.36	8.84
MEAN	132.5	87.03	2725	803.1	1385	2392	1414	736.7	177.0	31.42	5.495	0.295
MAX	1080	1020	41200	8260	16000	25300	19700	4110	936	110	19	2.7
MIN	9.3	16	194	98	317	298	216	103	37	11	0.74	0.00
AC-FT	8150	5180	167600	49380	76940	147100	84120	45300	10530	1930	338	18
CFSM	0.32	0.21	6.65	1.96	3.38	5.84	3.45	1.80	0.43	0.08	0.01	0.00
IN.	0.37	0.24	7.67	2.26	3.52	6.73	3.85	2.07	0.48	0.09	0.02	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-94 - 2000-02, BY WATER YEAR (WY)

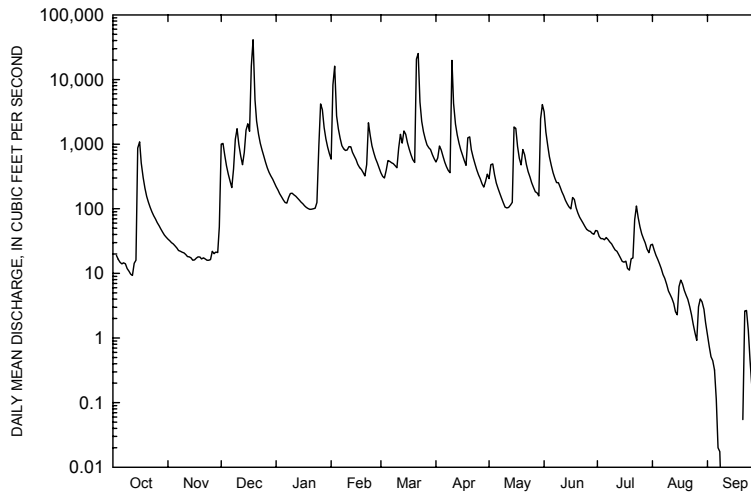
MEAN	195.7	453.9	767.5	682.7	907.1	1069	991.7	963.6	392.0	119.4	37.85	79.31
MAX	3507	2441	3611	3272	2989	5736	4080	4932	2416	1956	439	812
(WY)	1985	1973	1983	1949	1945	1945	1957	1990	1974	1969	1950	1950
MIN	0.000	0.000	0.000	0.019	27.4	65.7	157	51.3	5.78	0.65	0.000	0.000
(WY)	1953	1957	1964	1964	1963	1940	1992	1977	1972	1964	1954	1943

ARKANSAS RIVER BASIN

07261500 FOURCHE LAFAVE RIVER NEAR GRAVELLY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939-94, 2000-02	
ANNUAL TOTAL	266212.88		300762.20			
ANNUAL MEAN	729.4		824.0		552.7	
HIGHEST ANNUAL MEAN					1269	1945
LOWEST ANNUAL MEAN					115	1940
HIGHEST DAILY MEAN	41200	Dec 17	41200	Dec 17	67000	Dec 3 1982
LOWEST DAILY MEAN	0.63	Sep 7	0.00	Sep 7	0.00	Sep 22 1939
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 3	0.00	Sep 7	0.00	Sep 22 1939
MAXIMUM PEAK FLOW			53900	Dec 17	<sup>1</sup> 162000	Dec 3 1982
MAXIMUM PEAK STAGE			28.62	Dec 17	<sup>2</sup> 32.45	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.00	Jan 1	0.00	Oct 1 1999
ANNUAL RUNOFF (AC-FT)	528000		596600		400400	
ANNUAL RUNOFF (CFSM)	1.78		2.01		1.35	
ANNUAL RUNOFF (INCHES)	24.15		27.29		18.32	
10 PERCENT EXCEEDS	1480		1320		1170	
50 PERCENT EXCEEDS	127		137		128	
90 PERCENT EXCEEDS	3.0		2.5		1.9	

<sup>1</sup>From rating curve extended above 47,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow  
<sup>2</sup>From floodmark  
<sup>e</sup>Estimated



## ARKANSAS RIVER BASIN

## 07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION

LOCATION.--Lat 34°52'34", long 92°46'28", in SE1/4NE1/4 sec.26, T.3 N., R.17 W., Perry County, Hydrologic Unit 11110207, near left bank on downstream side of State Highway 9 bridge 0.4 mi south of Williams Junction.

DRAINAGE AREA.--46.1 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 386.45 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good, except discharges below 2.0 ft<sup>3</sup>/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	40	11	488	44	260	4.9	13	0.33	0.74	0.00
2	0.00	0.00	23	9.2	218	72	163	4.2	7.5	0.32	0.54	0.00
3	0.00	0.00	15	8.3	150	73	104	3.7	4.7	0.26	0.53	0.00
4	0.00	0.00	9.8	7.2	109	65	76	3.5	3.3	0.23	0.47	0.00
5	0.00	0.00	7.0	8.2	86	62	60	3.1	2.6	0.19	0.30	0.00
6	0.00	0.00	8.5	26	80	56	48	2.9	2.0	0.10	0.03	0.00
7	0.00	0.00	14	26	76	51	42	2.7	1.6	0.03	0.13	0.00
8	0.00	0.00	19	22	87	47	264	2.2	1.5	0.00	0.08	0.00
9	0.00	0.00	17	19	96	231	186	4.3	1.4	0.00	0.03	0.00
10	0.00	0.00	14	19	86	199	119	7.0	1.5	0.00	0.00	0.00
11	0.00	0.00	11	17	73	233	87	11	1.4	0.01	0.00	0.00
12	0.00	0.00	54	15	67	1180	67	8.5	1.3	0.01	0.00	0.00
13	0.00	0.00	97	14	56	381	87	263	1.2	0.00	0.00	0.00
14	0.00	0.00	85	13	47	228	59	124	0.96	0.00	0.31	0.00
15	0.00	0.00	95	12	43	172	44	61	0.81	0.00	0.30	0.00
16	0.00	0.00	961	10	41	142	34	36	0.74	0.00	0.22	0.00
17	0.00	0.00	1750	9.3	35	105	39	48	0.74	0.13	0.15	0.00
18	0.00	0.00	357	11	30	96	33	52	0.67	0.37	0.08	0.00
19	0.00	0.00	176	35	137	701	25	31	0.59	0.35	0.03	0.00
20	0.00	0.00	111	39	296	1590	20	22	0.52	0.24	0.00	0.00
21	0.00	0.00	81	38	165	412	16	17	0.45	0.15	0.00	0.00
22	0.00	0.00	65	47	114	218	13	12	0.45	0.03	0.00	0.00
23	0.00	0.00	51	218	89	154	11	8.6	0.38	0.32	0.00	0.00
24	0.00	0.00	39	268	72	115	12	6.2	0.40	0.80	0.00	0.00
25	0.00	0.00	32	277	59	97	8.7	4.8	0.49	0.85	0.00	0.00
26	0.00	0.00	27	168	47	211	7.2	4.1	0.50	0.64	0.00	0.00
27	0.00	0.00	23	119	39	149	11	4.5	0.44	0.64	0.00	0.00
28	0.00	17	20	90	35	115	11	25	0.38	1.2	0.00	0.00
29	0.00	88	17	72	---	89	7.8	16	0.36	0.89	0.00	0.00
30	0.00	88	14	60	---	115	5.7	21	0.33	0.77	0.00	0.00
31	0.00	---	12	358	---	370	---	19	---	0.89	0.00	---
TOTAL	0.00	193.00	4245.3	2046.2	2921	7773	1920.4	833.2	52.21	9.75	3.94	0.00
MEAN	0.000	6.433	136.9	66.01	104.3	250.7	64.01	26.88	1.740	0.315	0.127	0.000
MAX	0.00	88	1750	358	488	1590	264	263	13	1.2	0.74	0.00
MIN	0.00	0.00	7.0	7.2	30	44	5.7	2.2	0.33	0.00	0.00	0.00
AC-FT	0.00	383	8420	4060	5790	15420	3810	1650	104	19	7.8	0.00
CFSM	0.00	0.14	2.97	1.43	2.26	5.44	1.39	0.58	0.04	0.01	0.00	0.00
IN.	0.00	0.16	3.43	1.65	2.36	6.27	1.55	0.67	0.04	0.01	0.00	0.00

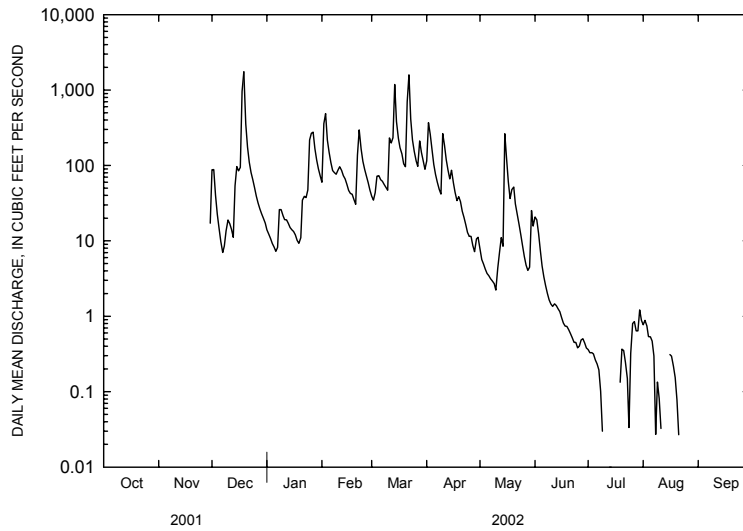
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	18.70	61.26	110.3	112.5	114.1	140.3	102.9	57.71	19.54	7.937	1.688	1.879		
MAX	85.9	265	222	228	284	368	247	257	69.3	47.3	12.9	10.7		
(WY)	1991	1997	1992	1991	2001	2002	1991	1990	2000	1994	1992	1991		
MIN	0.000	2.88	3.53	44.6	13.9	39.4	8.26	1.20	0.68	0.015	0.000	0.000		
(WY)	1993	2000	1990	1996	1996	1996	1992	1992	1998	2002	1990	1993		

ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	19933.38		19998.00			
ANNUAL MEAN	54.61		54.79		62.19	
HIGHEST ANNUAL MEAN					91.9 1990	
LOWEST ANNUAL MEAN					23.8 1996	
HIGHEST DAILY MEAN	2540	Feb 16	1750	Dec 17	3240	Mar 12 2002
LOWEST DAILY MEAN	0.00	Jun 26	0.00	Oct 1	0.00	Jul 4 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 5	0.00	Oct 1	0.00	Jul 4 1990
MAXIMUM PEAK FLOW			3730	Dec 17	6450	Dec 3 1993
MAXIMUM PEAK STAGE			9.39	Dec 17	12.19	Dec 3 1993
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	39540		39670		45060	
ANNUAL RUNOFF (CFSM)	1.18		1.19		1.35	
ANNUAL RUNOFF (INCHES)	16.09		16.14		18.33	
10 PERCENT EXCEEDS	122		129		142	
50 PERCENT EXCEEDS	3.5		3.7		12	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
DEC 17...	0835	81213	80513	1640	20	12	761	9.8	91	7.0	20
FEB 05...	1330	81213	80513	83	<5	4.5	767	11.3	92	6.4	21
MAR 12...	0930	81213	80513	1220	40	19	771	11.6	96	6.1	19
MAR 20...	1000	81213	80513	1670	60	16	771	10.7	104	5.9	20
MAY 30...	1330	80020	80513	33	40	--	769	7.9	103	7.0	27

Date	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
DEC 17...	11.9	6	1.10	.83	1.00	.1	.8	19	6	1.20
FEB 05...	6.9	5	.91	.78	.40	.2	1.2	30	5	1.80
MAR 12...	8.0	5	.86	.76	.60	.2	1.0	26	3	1.20
MAR 20...	14.8	5	.92	.71	.60	.2	.9	25	2	1.00
MAY 30...	29.3	8	1.26	1.17	.62	.2	1.39	26	6	1.86

Date	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)
DEC 17...	<.1	4.60	2.70	.04	128	29	16	E.006	E.50	--
FEB 05...	<.1	6.60	2.70	.02	3.36	15	17	.004	<.20	.01
MAR 12...	<.1	5.70	2.60	.03	65.9	20	15	.002	.30	
MAR 20...	<.1	4.90	2.70	.02	67.6	15	13	.004	.50	.01
MAY 30...	<.1	4.8	1.7	.04	2.52	28	17	<.015	.29	--

Date	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)
DEC 17...	--	--	E.022	--	E.002	--	--	--	<.001	E.005	1.1
FEB 05...	--	--	.006	--	<.001	--	--	--	<.001	<.002	4.0
MAR 12...	.02	.106	.026	.007	.002	.30	.33	.006	.002	.004	4.7
MAR 20...	--	--	.032	--	<.001	.50	.53	.006	.002	<.002	5.2
MAY 30...	--	--	.015	--	<.002	--	.31	--	<.007	.017	1.1



ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, CHARGE, SUS- PENDE (T/DAY) (80155)
DEC 17...	6.8	8.6	440	3600	129	585	28	57	86	35	155
FEB 05...	2.3	2.4	8	3	60	139	4	5	94	10	2.2
MAR 12...	5.4	5.5	190	1800	189	517	14	42	82	35	115
MAR 20...	6.3	6.4	147	980	119	791	14	42	76	39	176
MAY 30...	3.0	3.6	137	152	207	670	16.0	49.7	86	19	1.7

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

ARKANSAS RIVER BASIN

072632966 MAUMELLE RIVER AT HWY 10 NEAR WYE

LOCATION.--Lat 34°52'30", long 92°39'13", in SE1/4NE1/4 sec.25, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at left bank on downstream side of bridge on State Hwy 10 bridge, 4.1 mi south of Wye.

DRAINAGE AREA.--89.4 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1991 to October 1992, February 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
DEC 17...	1125	81213	80513	E2600	20	27	765	9.6	88	7.2	21
FEB 12...	1045	81213	80513	--	10	7.8	767	12.2	99	6.5	20
MAR 12...	1330	81213	80513	940	60	40	773	11.2	94	6.1	21
MAR 20...	1400	81213	80513	1170	60	19	773	10.0	91	6.2	20
MAY 31...	1200	80020	80513	29	25	--	773	8.6	104	6.8	23
AUG 27...	0930	81213	80513	--	5	5.3	777	6.1	79	6.2	25

Date	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
DEC 17...	11.7	6	1.10	.85	1.00	.1	.8	19	5	1.30	<.1
FEB 12...	6.8	7	1.00	1.00	.40	.2	1.4	30	4	2.30	<.1
MAR 12...	8.2	6	1.00	.92	.60	.2	1.0	24	4	1.20	<.1
MAR 20...	11.9	6	1.00	.87	.60	.2	.9	22	2	1.10	<.1
MAY 31...	26.0	8	1.24	1.18	.66	.2	1.36	25	7	1.99	<.1
AUG 27...	29.3	7	.94	1.20	.70	.2	1.0	21	6	2.10	<.1

Date	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL SOLVED (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)
DEC 17...	4.50	2.70	.05	--	34	16	.004	.30	.01	.02	.102
FEB 12...	5.20	3.30	.03	--	19	17	<.002	.20	--	--	--
MAR 12...	5.00	2.80	.03	58.4	23	15	.002	.40	.01	.05	.212
MAR 20...	5.00	2.80	.03	72.7	23	14	.006	.30	--	--	--
MAY 31...	2.7	2.7	.04	2.23	29	16	<.015	.27	--	--	--
AUG 27...	3.10	3.10	.02	--	18	16	.005	.20	.01	--	--

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
DEC 17...	.025	.007	.002	.30	.33	--	<.001	.010	.6	9.5
FEB 12...	.026	--	<.001	--	.23	--	<.001	<.002	2.3	3.2
MAR 12...	.049	.003	.001	.40	.45	.006	.002	<.002	5.9	5.4
MAR 20...	.046	--	<.001	.29	.35	.006	.002	<.002	2.9	6.0
MAY 31...	.015	--	<.002	--	.28	--	<.007	.022	2.2	3.2
AUG 27...	<.002	--	<.001	.20	--	.009	.003	<.002	7.2	2.8

ARKANSAS RIVER BASIN

072632966 MAUMELLE RIVER AT HWY 10 NEAR WYE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
DEC 17...	7.7	480	2400	110	1190	28	82	85	36	--
FEB 12...	4.8	5	7	67	323	9	23	79	25	--
MAR 12...	5.8	480	1000	233	970	16	72	84	53	135
MAR 20...	6.2	200	E1700	171	878	15	35	95	27	85.3
MAY 31...	4.2	23	E19	99	350	11.5	46.9	88	12	.94
AUG 27...	2.6	83	170	25	363	20	100	80	9.0	--

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ARKANSAS RIVER BASIN

## 072632995 LAKE MAUMELLE AT NATURAL STEPS

LOCATION.--Lat 34°51'39", long 92°30'07", in NE1/4NW1/4 sec.33, T.3 N., R.14 W., Pulaski County, Hydrologic Unit 11110207, at dam on Lake Maumelle, at Natural Steps.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	RESER- VOIR DEPTH (FEET) (72025)	SAM- PLING DEPTH (FEET) (00003)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
FEB											
12...	0939	80513	80513	32.0	1.40	765	11.7	97	6.4	22	7.6
12...	0940	80513	80513	32.0	5.10	765	11.6	96	6.4	22	7.5
12...	0941	81213	80513	32.0	6.00	765	11.6	96	6.4	22	7.5
12...	0942	80513	80513	32.0	10.1	765	11.5	96	6.5	22	7.5
12...	0943	80513	80513	32.0	15.0	765	11.6	96	6.4	22	7.5
12...	0944	80513	80513	32.0	20.1	765	11.5	96	6.4	22	7.5
12...	0945	80513	80513	32.0	25.0	765	11.5	95	6.4	22	7.5
12...	0946	80513	80513	32.0	30.0	765	11.4	95	6.4	22	7.4
12...	0947	80513	80513	32.0	32.0	765	11.4	94	6.4	22	7.4
MAY											
31...	1115	80513	80513	35.0	.40	774	8.9	105	6.9	23	24.3
31...	1116	80020	80513	35.0	3.10	774	9.0	104	6.9	23	23.6
31...	1117	80513	80513	35.0	5.00	774	9.0	104	6.9	23	23.5
31...	1118	80513	80513	35.0	10.0	774	9.0	103	6.9	23	23.2
31...	1119	80513	80513	35.0	12.1	774	8.8	100	6.9	23	22.8
31...	1120	80513	80513	35.0	13.1	774	8.6	98	6.9	23	22.6
31...	1121	80513	80513	35.0	15.1	774	8.7	98	6.8	23	22.5
31...	1123	80513	80513	35.0	20.1	774	8.3	93	6.7	23	21.7
31...	1124	80513	80513	35.0	23.9	774	8.1	90	6.7	23	21.4
31...	1125	80513	80513	35.0	25.0	774	8.1	90	6.6	23	21.3
31...	1126	80513	80513	35.0	29.1	774	3.9	40	6.5	28	18.0
31...	1127	80513	80513	35.0	30.0	774	2.7	28	6.3	29	17.6
31...	1128	80513	80513	35.0	34.8	774	1.4	14	6.3	34	16.6
AUG											
27...	0801	80513	80513	33.0	1.30	776	7.2	93	6.9	24	29.8
27...	0802	81213	80513	33.0	3.00	776	7.2	94	6.9	24	29.8
27...	0803	80513	80513	33.0	5.10	776	7.2	93	6.9	24	29.8
27...	0804	80513	80513	33.0	10.0	776	7.2	93	6.8	24	29.8
27...	0805	80513	80513	33.0	15.0	776	7.2	93	6.8	24	29.7
27...	0806	81213	80513	33.0	18.0	776	6.5	82	6.4	24	28.8
27...	0807	80513	80513	33.0	20.1	776	5.1	63	6.1	25	27.3
27...	0808	80513	80513	33.0	22.2	766	2.4	29	5.9	28	25.9
27...	0809	80513	80513	33.0	23.0	776	1.9	23	5.9	29	25.2
27...	0810	80513	80513	33.0	25.0	776	.7	8	5.9	32	23.1
27...	0811	81213	80513	33.0	27.0	776	.2	3	6.1	26	21.2
27...	0812	80513	80513	33.0	30.1	776	.2	2	6.3	54	20.5
27...	0813	80513	80513	33.0	32.7	776	.2	2	6.5	69	18.9
Date	Time	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TUR- BID- ITY (NTU) (00076)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
FEB											
12...	0941	5	6.00	3.00	2.2	8	1.20	1.20	.70	.2	1.4
MAY											
31...	1116	8	3.10	3.00	--	7	1.06	1.10	.58	.2	1.26
AUG											
27...	0802	5	3.00	3.50	1.1	7	.87	1.20	.70	.2	1.0
27...	0806	10	18.0	--	1.6	7	.88	1.20	.60	.2	1.3
27...	0811	20	27.0	--	16	12	2.00	1.70	.70	.2	1.5
Date	Time	ANC WATER UNFLTRD FET FIELD SODIUM PERCENT (00932)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
FEB											
12...	26	6	2.20	<.1	3.10	3.40	.03	23	17	<.002	.30
MAY											
31...	26	6	1.90	<.1	2.1	3.0	.03	21	15	<.015	.19
AUG											
27...	21	12	2.10	<.1	2.60	3.20	.03	21	19	.008	.40
27...	26	--	2.00	<.1	2.50	3.20	.02	16	16	<.002	.30
27...	20	6	2.20	<.1	8.10	1.90	.04	28	25	.019	.60

ARKANSAS RIVER BASIN

072632995 LAKE MAUMELLE AT NATURAL STEPS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
FEB 12...	--	<.002	<.001	--	--	<.001	.004	4.6
MAY 31...	--	<.013	<.002	--	--	<.007	.008	1.5
AUG 27...	.01	<.002	<.001	.39	--	<.001	.005	3.3
27...	--	<.002	<.001	--	--	<.001	.007	5.0
27...	.02	<.002	<.001	.58	.012	.004	.004	10

Date	CARBON ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
FEB 12...	3.6	4.2	E1	1	2.9	19	103	3	15
MAY 31...	2.7	3.5	E1	<1	2.9	22	60	<2.0	16.4
AUG 27...	2.5	2.3	<1	E2	<.1	6	39	<1	23
27...	2.3	2.3	--	--	--	7	67	<1	30
27...	2.7	2.6	--	--	--	344	1320	3070	3210

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## ARKANSAS RIVER BASIN

## 07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS

LOCATION.--Lat 34°51'47", long 92°29'07", in SW<sub>1</sub>/<sub>4</sub>SE<sub>1</sub>/<sub>4</sub> sec.27, T.3 N., R.14 W., Pulaski County, Hydrologic Unit 11110207, at right bank 100 ft upstream from spillway, 0.5 mi west of Natural Steps.

DRAINAGE AREA.--137 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	30	101	776	5.7	41	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	75	150	714	4.3	31	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	105	131	612	0.12	21	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	110	96	502	0.16	11	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	105	85	420	0.00	4.9	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	130	78	339	0.00	0.79	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	135	75	294	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	128	73	324	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	131	162	354	1.0	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	149	182	332	3.6	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	114	251	299	3.2	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	108	905	258	3.8	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	100	1070	228	81	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	83	955	211	110	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	78	848	183	107	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	81	805	154	99	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	65	718	142	119	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	57	633	123	108	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	113	757	105	92	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	404	1700	87	79	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	430	1780	76	60	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	391	1420	54	38	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	342	1130	41	30	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	297	907	40	24	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	267	778	22	18	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	271	723	11	13	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	163	622	14	8.1	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	124	552	13	20	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	482	7.6	44	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	480	5.0	52	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.56	---	702	---	47	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.56	4586	19351	6740.6	1170.98	109.69	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.018	163.8	624.2	224.7	37.77	3.656	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.56	430	1780	776	119	41	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	30	73	5.0	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	1.1	9100	38380	13370	2320	218	0.00	0.00	0.00

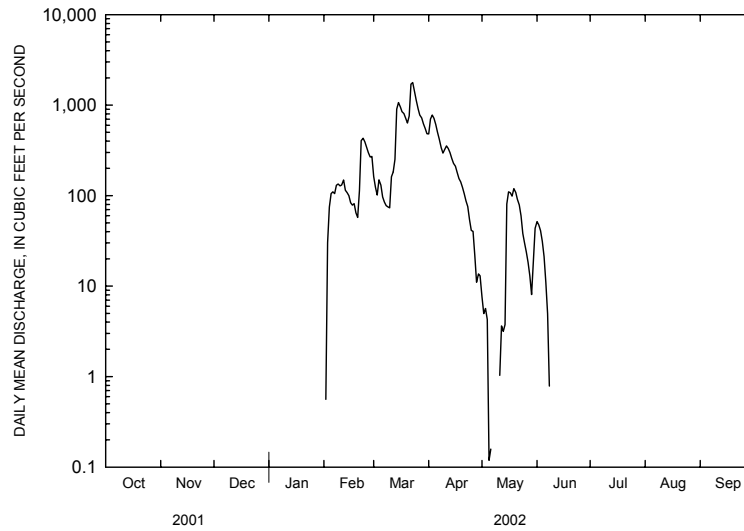
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

MEAN	0.000	58.14	209.7	184.8	300.0	383.4	262.4	178.0	43.39	11.19	4.214	0.000
MAX	0.000	435	840	836	881	947	642	546	198	86.3	53.1	0.000
(WY)	1990	1997	1992	1991	2001	1997	1991	1990	1992	1994	1992	1989
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1990	1990	1990	1990	1996	1996	1996	1992	1998	1990	1990	1989

ARKANSAS RIVER BASIN

07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	37656.45		31958.83			
ANNUAL MEAN	103.2		87.56		135.5	
HIGHEST ANNUAL MEAN					274	1997
LOWEST ANNUAL MEAN					7.84	2000
HIGHEST DAILY MEAN	3770	Feb 17	1780	Mar 21	3770	Feb 17 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 17 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Aug 17 1989
MAXIMUM PEAK FLOW			1930	Mar 20	4210	Feb 16 2001
MAXIMUM PEAK STAGE			91.76	Mar 20	92.83	Feb 16 2001
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	74690		63390		98170	
10 PERCENT EXCEEDS	274		280		435	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



## ARKANSAS RIVER BASIN

## 07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK

**LOCATION.**--Lat 34°47'27", long 92°21'32", in sec.23, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, in metal shelter on dam and at mile 141.5.

**DRAINAGE AREA.**--158,030 mi<sup>2</sup>, of which 22,241 mi<sup>2</sup> is probably noncontributing.

**PERIOD OF RECORD.**--September 1927 to current year. Prior to October 1969, published as "07263500 Arkansas River at Little Rock." Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at or near former site since 1873 are contained in reports of National Weather Service. Gage-height records collected since 1883 at site 5.5 mi downstream, and intermittent records of discharge since 1885 are contained in reports of Mississippi River Commission.

**GAGE.**--Water-stage and gate-position recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, Oct. 1, 1934, to May 9, 1970, recording gage at site 6.2 mi downstream at datum 223.61 ft higher. Sept. 20, 1968, to May 9, 1970, auxiliary water-stage recorder 5.5 mi upstream from former gage.

**REMARKS.**--Records good except discharges below 10,000 ft<sup>3</sup>/s and estimated daily discharges, which are fair. Beginning May 10, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct. 7, 1988, the North Little Rock Electric Department hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in June 1833 reached a stage of 34.6 ft, at former site and datum. Flood of Apr. 20, 1927, reached a stage of 33.0 ft, at former site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	7830	7510	30100	124000	20500	55100	42700	59900	23900	35200	280
2	4580	14000	9980	26000	153000	25400	55900	38900	48900	30200	10900	2210
3	3550	9570	8240	31800	121000	36800	59300	45800	50400	32100	16100	6800
4	3570	10600	7300	27600	82200	24600	69400	36500	49800	37800	17400	4780
5	6960	24500	3740	16400	58700	18500	63100	16200	43300	38800	8060	6640
6	4320	15900	9140	19900	68400	18500	49500	10300	51700	27500	7410	9010
7	8550	3370	14400	22700	68100	31900	42700	29500	66200	17300	11500	7760
8	14200	9110	11800	20300	53300	21400	83400	33600	77300	31200	16100	1930
9	69	15800	16900	17700	29700	35700	175000	34900	76200	32900	12000	487
10	9600	5340	13100	8400	50100	57000	196000	53200	59800	28900	9660	1240
11	34700	1800	12300	9180	56500	20500	182000	69600	47500	31800	6390	1180
12	45500	1130	16000	8000	31000	61600	133000	76900	59200	12000	10500	3140
13	16700	8760	18700	8200	33700	70100	105000	83700	63800	18400	6760	1200
14	22900	5980	18400	7900	48800	39100	85500	94300	63600	12000	24300	1080
15	31800	5460	18300	10100	26500	39700	78300	88000	64300	18100	30600	1560
16	7330	5500	51600	18700	27100	45600	67700	86300	66600	4670	14300	820
17	293	284	143000	5730	24100	22700	69300	86100	42500	17300	6260	4900
18	17000	42	193000	7030	18200	23200	76100	96200	39700	30600	7520	4150
19	10100	7540	182000	6790	24500	72300	64700	110000	40800	44600	12900	4730
20	13500	8380	127000	5030	50700	175000	64900	128000	58800	27600	18200	6380
21	10500	28	100000	4960	68200	228000	71700	131000	71200	17900	8410	4380
22	6260	28	61100	8710	44500	218000	66400	104000	82400	16700	8220	5420
23	5350	577	30000	13200	43500	171000	54300	63800	89000	29500	8380	25000
24	14100	821	43700	40200	28300	132000	56700	78500	88900	38100	10700	8710
25	19100	4210	44400	40700	24000	91400	73300	74500	e82100	5540	5380	6880
26	20200	6600	35300	22200	44900	110000	76400	61900	61100	16600	4730	8150
27	9490	2430	32600	36400	19000	139000	64800	57300	55100	18100	11500	123
28	85	9380	33600	31700	9690	101000	37900	32900	49500	13300	3740	2970
29	5700	18400	24500	29000	---	86000	32100	15100	36600	1920	364	1670
30	11800	18100	29000	41400	---	84800	36700	45600	26300	11700	2820	1270
31	3040	---	28700	38000	---	64100	---	62500	---	33700	4080	---
TOTAL	361585	221470	1345310	614030	1431690	2285400	2346200	1987800	1772500	720730	350384	134850
MEAN	11660	7382	43400	19810	51130	73720	78210	64120	59080	23250	11300	4495
MAX	45500	24500	193000	41400	153000	228000	196000	131000	89000	44600	35200	25000
MIN	69	28	3740	4960	9690	18500	32100	10300	26300	1920	364	123
AC-FT	717200	439300	2668000	1218000	2840000	4533000	4654000	3943000	3516000	1430000	695000	267500



ARKANSAS RIVER BASIN

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	28380	46390	52750	45330	49290	76650	77430	77470	68440	34290	16250	15240
MAX	215100	176000	155400	161800	116100	169500	215900	234800	191600	117100	62730	51690
(WY)	1987	1975	1993	1998	2001	1987	1973	1990	1995	1999	1992	1989
MIN	1466	2615	3714	1439	9340	9986	7971	18460	4994	4954	4130	3172
(WY)	1979	1981	1990	1981	1981	1972	1981	1977	1988	1991	1991	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	14901599		13571949			
ANNUAL MEAN	40830		37180		<sup>1</sup> 48960	
HIGHEST ANNUAL MEAN					96810 1993	
LOWEST ANNUAL MEAN					12880 1981	
HIGHEST DAILY MEAN	227000	Feb 18	228000	Mar 21	404000	May 8 1990
LOWEST DAILY MEAN	28	Nov 21	28	Nov 21	<sup>2</sup> 14	Oct 25 1978
ANNUAL SEVEN-DAY MINIMUM	1270	Aug 28	1410	Sep 9	432	Oct 15 1982
MAXIMUM PEAK FLOW			238000	Mar 21	<sup>3</sup> 406000	May 7 1990
MAXIMUM PEAK STAGE			245.72	Mar 21	<sup>4</sup> 256.97	May 7 1990
ANNUAL RUNOFF (AC-FT)	29560000		26920000		35470000	
10 PERCENT EXCEEDS	116000		84100		132000	
50 PERCENT EXCEEDS	20400		24500		30200	
90 PERCENT EXCEEDS	2520		3740		3970	

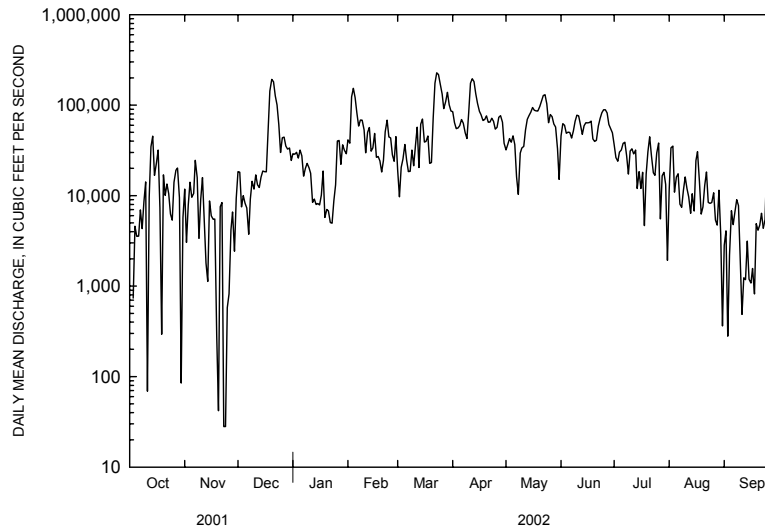
<sup>1</sup>Prior to regulation, water years 1928-69, 39,920 ft<sup>3</sup>/s

<sup>2</sup>Also minimum daily discharge for period of record

<sup>3</sup>Maximum discharge for period of record, 536,000 ft<sup>3</sup>/s May 27, 1943

<sup>4</sup>Maximum gage height for period of record, 30.05 ft, May 27, 1943, at site and datum then in use

<sup>e</sup>Estimated



ARKANSAS RIVER BASIN

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK

LOCATION.--Lat 34°43'14", long 92°21'35", in NW1/4SW1/4 sec.13, T.1 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, at West 36th Street bridge in Little Rock.

DRAINAGE AREA.--20.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1996 to current year. Daily stages and results of discharge measurements for March 1970 to March 1978 are in the files of the U.S. Army Corps of Engineers. Annual peak stages and discharges for 1978-88 and 1995-96 are published in the annual reports of the U.S. Geological Survey. Daily stages for the 1989-94 water year are in the files of the U.S. Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 260.00 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 13, 1978, reached a stage of 18.22 ft, discharge, 22,500 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.2	18	2.4	55	43	33	1.8	2.4	1.3	8.0	0.99
2	1.4	2.4	10	2.4	15	46	15	1.9	1.8	2.2	2.5	0.98
3	1.6	2.8	7.1	2.3	10	14	9.4	36	1.6	3.4	1.6	0.97
4	1.6	2.0	5.6	2.3	7.5	7.8	7.2	6.2	1.4	2.9	1.3	1.1
5	41	1.8	4.3	14	6.0	6.3	6.0	2.9	1.4	1.5	1.2	1.1
6	9.0	2.0	10	17	17	5.3	5.3	3.0	3.3	1.2	6.3	1.2
7	2.9	1.9	43	5.1	24	13	5.1	2.0	1.5	1.0	19	1.1
8	2.1	1.8	24	3.6	19	6.9	21	1.7	1.3	0.83	1.5	1.1
9	1.8	1.8	8.5	3.3	13	123	6.4	79	1.4	0.85	1.2	1.6
10	102	1.9	5.7	3.1	8.4	16	4.6	66	20	3.2	1.0	1.5
11	439	2.0	4.7	2.8	6.2	271	4.1	8.2	14	2.0	0.89	1.3
12	44	1.9	344	2.4	5.6	301	3.7	3.9	2.3	1.9	2.3	1.2
13	176	1.8	123	2.4	4.8	38	3.6	166	1.7	1.7	51	1.0
14	55	1.8	65	2.3	4.2	18	3.1	8.9	1.5	1.5	52	0.92
15	8.6	1.8	86	2.2	5.3	25	2.9	4.1	1.2	2.0	4.5	0.88
16	4.3	1.8	738	2.0	5.1	37	2.6	2.8	2.1	1.5	4.1	1.0
17	3.5	1.7	442	6.6	3.8	53	3.7	14	1.6	68	2.0	3.6
18	3.9	1.7	57	15	3.4	41	2.6	6.4	1.3	17	1.5	1.5
19	2.8	2.1	21	43	231	195	2.3	2.6	1.2	5.9	1.7	208
20	2.4	2.2	12	7.6	87	317	2.1	2.1	1.1	2.1	1.6	466
21	2.4	1.7	8.6	5.4	17	38	1.9	1.9	1.1	1.6	1.1	31
22	2.3	1.7	13	60	9.4	17	2.3	1.7	1.0	2.2	1.0	6.2
23	2.1	1.8	8.1	60	7.1	12	14	1.6	0.95	1.6	4.9	2.8
24	2.3	61	5.7	241	5.8	9.7	13	1.4	0.99	9.3	9.0	1.8
25	2.5	4.2	4.9	34	5.0	29	7.8	1.4	1.3	1.9	29	1.6
26	1.8	59	4.5	14	4.2	43	19	14	7.8	1.6	3.9	1.8
27	1.9	13	4.1	9.5	3.5	10	7.2	2.9	1.7	1.3	1.7	1.7
28	1.9	456	3.7	7.4	3.2	7.6	3.7	29	1.5	1.3	1.4	1.5
29	2.0	341	3.5	6.4	---	6.5	2.4	46	1.6	1.3	1.2	1.5
30	2.2	71	3.0	5.6	---	239	2.0	39	4.3	23	1.1	1.3
31	2.1	---	2.6	149	---	230	---	4.6	---	41	1.0	---
TOTAL	927.8	1049.8	2090.6	734.1	586.5	2219.1	217.0	563.0	86.34	208.08	220.49	748.24
MEAN	29.93	34.99	67.44	23.68	20.95	71.58	7.233	18.16	2.878	6.712	7.113	24.94
MAX	439	456	738	241	231	317	33	166	20	68	52	466
MIN	1.4	1.7	2.6	2.0	3.2	5.3	1.9	1.4	0.95	0.83	0.89	0.88
AC-FT	1840	2080	4150	1460	1160	4400	430	1120	171	413	437	1480
CFSM	1.46	1.71	3.29	1.16	1.02	3.49	0.35	0.89	0.14	0.33	0.35	1.22
IN.	1.68	1.91	3.79	1.33	1.06	4.03	0.39	1.02	0.16	0.38	0.40	1.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

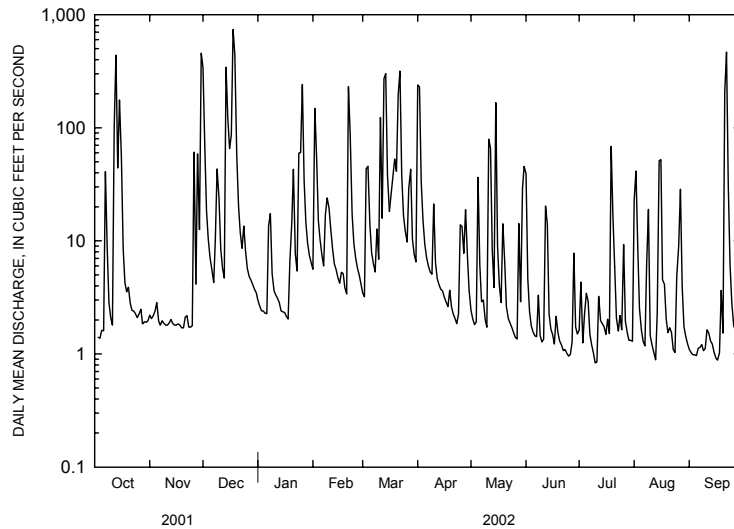
MEAN	26.23	41.83	38.79	35.06	45.36	53.50	26.47	14.77	17.46	11.77	10.02	18.41
MAX	42.8	92.2	67.4	89.7	83.5	106	69.8	18.2	45.3	19.1	22.5	32.4
(WY)	1997	1997	2002	1998	1998	1997	1997	2002	1997	2001	1998	1997
MIN	5.59	5.71	19.0	5.76	14.2	18.8	7.23	12.3	2.88	1.82	1.48	4.27
(WY)	2001	2000	2000	2000	1999	2000	2002	1999	2002	2000	2000	1999

ARKANSAS RIVER BASIN

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	10419.36		9651.05			
ANNUAL MEAN	28.55		26.44		28.20	
HIGHEST ANNUAL MEAN					46.8 1997	
LOWEST ANNUAL MEAN					11.8 2000	
HIGHEST DAILY MEAN	738	Dec 16	738	Dec 16	738	Dec 16 2001
LOWEST DAILY MEAN	0.41	Sep 30	0.83	Jul 8	0.05	Oct 19 1996
ANNUAL SEVEN-DAY MINIMUM	0.70	Jul 19	1.0	Aug 30	0.08	Oct 14 1996
MAXIMUM PEAK FLOW			3450	Dec 16	<sup>1</sup> 4650	Oct 27 1996
MAXIMUM PEAK STAGE			6.82	Dec 16	7.47	Oct 27 1996
INSTANTANEOUS LOW FLOW			0.63	Jul 10	0.05	Oct 18 1996
ANNUAL RUNOFF (AC-FT)	20670		19140		20430	
ANNUAL RUNOFF (CFSM)	1.39		1.29		1.38	
ANNUAL RUNOFF (INCHES)	18.91		17.51		18.69	
10 PERCENT EXCEEDS	61		54		62	
50 PERCENT EXCEEDS	8.1		3.5		6.4	
90 PERCENT EXCEEDS	1.8		1.3		1.2	

<sup>1</sup>From rating curve extended above 1,400 ft<sup>3</sup>/s



ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK  
 (National radiochemical station)  
 (National stream-quality accounting network)

LOCATION.--Lat 34°40'07", long 92°09'18", in sec.35, T.1 N., R.11 W., Pulaski County, Hydrologic Unit 11110207, at upper end of upstream wall at David D. Terry Lock and Dam, 10.7 mi downstream from Main Street bridge at Little Rock, and at mile 124.2.

DRAINAGE AREA.--158,288 mi<sup>2</sup>, of which 22,241 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--October 1969 to current year.

INSTRUMENTATION.--Water-quality monitor October 1969 to September 1981.

REMARKS.--Discharge figures are for station 07263450, 16.8 mi upstream.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (PER-CENT) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	
OCT	10...	1200	80020	80513	12300	9.5	.093	.065	775	7.5	83	8.2
DEC	04...	1015	80020	80513	13600	9.7	.088	.063	775	8.9	82	7.6
JAN	07...	1130	80020	80513	25800	29	.140	.105	780	11.2	86	7.1
MAR	06...	1115	80020	80513	18000	21	.111	.083	777	8.6	69	7.8
APR	11...	1000	80020	80513	189000	150	.117	.088	775	9.8	93	7.5
MAY	21...	0855	80020	80513	134000	50	.097	.071	779	8.5	93	8.1
JUN	26...	0840	80020	80513	41700	35	.130	.096	770	6.9	88	7.5
JUL	17...	0910	80020	80513	13400	12	.115	.084	774	6.8	87	8.0
AUG	08...	0820	80020	80513	23300	9.2	.106	.077	771	6.1	81	8.1
SEP	04...	0945	80020	80513	2420	6.9	.103	.073	770	7.5	98	8.3

Date	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	
OCT	10...	762	21.1	56	160	43.5	12.7	4.04	3	85.2	53
DEC	04...	575	12.4	--	--	--	--	--	--	--	--
JAN	07...	207	5.0	12	54	14.5	4.17	2.52	1	16.2	38
MAR	06...	259	6.8	15	61	16.9	4.59	2.25	1	21.7	42
APR	11...	194	13.8	10	50	13.9	3.71	1.96	.6	10.1	30
MAY	21...	420	20.4	35	120	35.9	7.09	3.17	1	32.6	37
JUN	26...	553	27.8	21	120	36.9	7.90	3.78	2	53.9	48
JUL	17...	558	29.4	35	130	38.3	8.40	3.82	2	57.0	48
AUG	08...	509	30.6	22	110	33.1	7.64	3.76	2	49.9	48
SEP	04...	610	29.9	32	130	38.5	9.24	4.15	2	64.7	50

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ALKA-LINITY WAT DIS TOT FET FIELD MG/L AS CACO3 (00418)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT 10...	109	106	129	0	123	.3	4.62	70.3	.57	13900
DEC 04...	97	97	119	0	85.1	.2	--	53.9	--	--
JAN 07...	43	42	51	0	22.1	E.1	4.78	19.2	.16	8220
MAR 06...	49	46	56	0	31.1	.1	2.50	22.3	.19	6900
APR 11...	40	40	49	0	12.6	.1	3.17	15.6	.13	49400
MAY 21...	85	83	102	0	45.8	.2	2.13	36.7	.33	86500
JUN 26...	104	104	127	0	81.8	.1	5.17	40.9	.44	36000
JUL 17...	96	95	116	0	83.7	.1	5.08	41.1	.42	11200
AUG 08...	93	93	113	0	76.3	.2	5.65	35.2	.39	18300
SEP 04...	103	102	125	0	97.8	.2	5.23	42.4	.46	2190

Date	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT 10...	420	408	<.04	.33	.67	--	--	--	--	E.03
DEC 04...	326	--	.05	.35	.52	.07	.50	--	--	.15
JAN 07...	118	110	.05	.30	.52	.06	.66	--	--	.35
MAR 06...	142	131	E.03	.27	.45	--	.59	--	--	.33
APR 11...	97	87	E.04	.27	.74	--	.51	--	--	.24
MAY 21...	239	216	<.04	.28	.57	--	.70	--	--	.43
JUN 26...	320	296	.04	.35	.50	.05	.88	--	--	.53
JUL 17...	311	296	.07	.36	.85	.09	.52	.14	.629	.16
AUG 08...	290	268	<.04	.29	.58	--	--	--	--	<.05
SEP 04...	335	324	<.04	.26	.51	--	--	--	--	<.05

Date	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INORGANIC PARTIC. TOTAL (MG/L AS C) (00688)
OCT 10...	--	E.007	--	.35	--	.187	.073	.061	.116	2.0	<.1
DEC 04...	--	E.004	.29	.26	.67	.147	.058	.048	.084	1.4	<.1
JAN 07...	--	<.008	.26	.30	.87	.083	.037	.027	.084	1.4	<.1
MAR 06...	--	E.004	--	.14	.77	.058	.030	.019	.079	.9	<.1
APR 11...	--	E.006	--	--	.98	.061	.027	.020	.21	--	--
MAY 21...	--	E.007	--	.17	1.0	.089	.040	.029	.135	1.5	.2
JUN 26...	--	E.005	.31	.10	1.0	.153	.064	.050	.122	.6	<.1
JUL 17...	.049	.015	.29	.35	1.0	.086	.040	.028	.092	2.2	<.1
AUG 08...	--	E.006	--	.49	--	.126	.056	.041	.106	2.6	<.1
SEP 04...	--	E.005	--	.30	--	.150	.065	.049	.114	1.7	<.1

## ARKANSAS RIVER BASIN

## 07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	PHEO- PHYTTIN A, PHYTO- PHYTON (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT 10...	4.1	2.0	10.1	16.5	2	.10	3.0	83	<.06	64
DEC 04...	4.3	1.4	E4.7	E5.4	--	--	--	--	--	--
JAN 07...	4.4	1.4	2.2	2.4	--	--	.5	--	--	31
MAR 06...	3.8	.9	7.3	11.6	35	.21	.5	35	<.06	31
APR 11...	3.5	--	9.5	5.8	7	.12	.6	32	<.06	23
MAY 21...	3.6	1.3	11.1	12.8	3	.21	1.0	61	<.06	34
JUN 26...	4.0	.6	4.2	5.4	--	--	1.4	--	--	40
JUL 17...	3.7	2.2	13.8	27.4	--	--	2.2	--	--	50
AUG 08...	15.1	2.6	6.9	25.1	--	--	3.0	--	--	45
SEP 04...	4.2	1.7	11.6	26.1	--	--	3.5	--	--	54

Date	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT 10...	.06	<.8	.14	1.9	<10	.14	5.1	.4	1.6	E.06
DEC 04...	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	49	--	2.0	--	--	--
MAR 06...	E.02	E.6	.12	1.6	59	.16	2.0	5.6	.7	1.21
APR 11...	E.03	<.8	.09	1.8	47	.13	1.6	3.9	.4	1.06
MAY 21...	E.03	<.8	.13	2.0	<10	<.08	2.7	1.1	.9	.89
JUN 26...	--	--	--	--	<10	--	3.3	--	--	--
JUL 17...	--	--	--	--	<10	--	4.2	--	--	--
AUG 08...	--	--	--	--	<10	--	3.3	--	--	--
SEP 04...	--	--	--	--	<10	--	4.2	--	--	--

Date	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER DISS, REC (UG/L) (39632)
OCT 10...	.4	<1	389	2.4	2	<.002	<.004	<.002	<.005	.338
DEC 04...	--	--	--	--	--	<.002	<.004	<.002	<.005	.237
JAN 07...	<.3	--	99.9	.6	--	<.002	<.004	<.002	<.005	.087
MAR 06...	<.3	<1	116	.8	3	<.006	<.006	<.004	<.005	.158
APR 11...	<.3	<1	88.2	1.1	4	<.006	<.006	<.004	<.005	.157
MAY 21...	.5	<1	216	1.5	2	<.006	<.006	.008	<.005	.415
JUN 26...	E.3	--	253	2.4	--	<.006	.014	.056	<.005	.894
JUL 17...	.7	--	271	2.9	--	<.006	<.010	E.038	<.005	.793
AUG 08...	.4	--	278	3.0	--	<.006	<.006	.019	<.005	.626
SEP 04...	E.2	--	308	3.3	--	<.006	<.006	.008	<.005	.549

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
OCT 10...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.064	105	<.005
DEC 04...	<.010	<.002	E.015	<.020	<.005	<.018	<.003	E.054	91.3	E.004
JAN 07...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.013	109	<.005
MAR 06...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.024	107	<.005
APR 11...	<.010	<.002	E.006	E.007	<.005	<.018	<.003	E.005	90.0	.022
MAY 21...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.041	87.1	.005
JUN 26...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.115	106	.010
JUL 17...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.100	96.3	<.010
AUG 08...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.067	94.4	E.002
SEP 04...	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.098	109	E.005

Date	DI-ELDRIN DIS-SOLVED (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DIS-REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (82686)
OCT 10...	<.005	<.02	<.002	<.009	<.005	<.003	94.5	<.004	<.035	E.005	<.050
DEC 04...	<.005	<.02	<.002	<.009	<.005	<.003	80.5	<.004	<.035	<.027	<.050
JAN 07...	<.005	<.02	E.001	<.009	<.005	<.003	73.5	<.004	<.035	<.027	<.050
MAR 06...	<.005	<.02	<.002	<.009	<.005	<.003	98.2	<.004	<.035	<.027	<.050
APR 11...	<.005	<.02	<.002	<.009	<.005	<.003	95.8	<.004	<.035	<.027	<.050
MAY 21...	<.005	<.02	<.002	<.009	<.005	<.003	87.1	<.004	<.035	<.027	<.050
JUN 26...	<.005	<.02	<.002	<.009	<.005	<.003	99.1	<.004	<.035	<.027	<.050
JUL 17...	<.005	<.02	<.002	<.009	<.005	<.003	79.4	<.004	<.035	<.027	<.050
AUG 08...	<.005	<.02	<.002	<.009	<.005	<.003	82.1	<.004	<.035	<.027	<.050
SEP 04...	<.005	<.02	<.002	<.009	<.005	<.003	106	<.004	<.035	<.027	<.050

Date	METHYL-PARA-THION WAT FLT 0.7 U GFM REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (39415)	METRI-BUZIN SENCOR WATER DISSOLV (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P'DDE DISSOLV (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)
OCT 10...	<.006	.053	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
DEC 04...	<.006	.047	<.006	<.013	<.007	<.003	<.007	<.002	<.010	<.006	<.011
JAN 07...	<.006	.015	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
MAR 06...	<.006	.025	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
APR 11...	<.006	E.012	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
MAY 21...	<.006	.044	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
JUN 26...	<.006	.210	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
JUL 17...	<.006	.177	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
AUG 08...	<.006	.127	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
SEP 04...	<.006	.117	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011

## ARKANSAS RIVER BASIN

## 07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)		
	OCT 10...	E.01	<.004	<.010	<.011	<.02	.020	E.02	
DEC 04...	E.01	<.004	<.010	<.011	<.02	.128	.03		
JAN 07...	M	<.004	<.010	<.011	<.02	.021	<.02		
MAR 06...	<.01	<.004	<.010	<.011	<.02	.061	E.01		
APR 11...	E.01	<.004	<.010	<.011	<.02	.053	E.01		
MAY 21...	E.01	<.004	<.010	<.011	<.02	.018	E.01		
JUN 26...	E.01	<.004	<.010	<.011	<.02	.029	.03		
JUL 17...	E.01	<.004	<.010	<.011	<.02	<.025	<.03		
AUG 08...	E.01	<.004	<.010	<.011	<.02	.012	E.02		
SEP 04...	E.01	<.004	<.010	<.011	<.02	.030	.02		

Date	TER- BACIL WATER FLTRD .7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U (22703)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
	OCT 10...	<.034	<.02	<.005	<.002	<.009	1.23	93	9.0
DEC 04...	<.034	<.02	<.005	<.002	<.009	--	88	8.0	294
JAN 07...	<.034	<.02	<.005	<.002	<.009	--	97	17	1180
MAR 06...	<.034	<.02	<.005	<.002	<.009	.34	97	13	632
APR 11...	<.034	<.02	<.005	<.002	<.009	.15	--	--	--
MAY 21...	<.034	<.02	<.005	<.002	<.009	.86	87	64	23200
JUN 26...	<.034	<.02	<.005	<.002	<.009	--	100	27	3040
JUL 17...	<.034	<.02	<.005	<.002	<.009	--	96	12	434
AUG 08...	<.034	<.02	<.005	<.002	<.009	--	96	12	755
SEP 04...	<.034	<.02	<.005	<.002	<.009	--	98	7.0	45.7

Remark codes used in this report:

< -- Less than  
E -- Estimated value  
M -- Presence verified, not quantified



ARKANSAS RIVER BASIN

359

07264000 BAYOU METO NEAR LONOKE

LOCATION.--Lat 34°44'13", long 91°54'58", in SW 1/4 sec.6, T.1 N., R.8 W., Lonoke County, Hydrologic Unit 08020402, near left bank on downstream side of bridge on State Highway 31, 3.0 mi upstream from Brushy Slough, 3.5 mi south of Lonoke, and at mile 106.4.

DRAINAGE AREA.--207 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1954 to current year. Gage-height records and results of discharge measurements since June 1948 at site 4.8 mi upstream are contained in reports of U.S. Army Corps of Engineers, Vicksburg District; published as "Big Bayou Meto near Lonoke".

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 199.11 ft above NGVD of 1929. Prior to Feb. 10, 1955, water-stage recorder at site 4.8 mi upstream at datum 6.97 ft higher. Feb. 10 to June 29, 1955 nonrecording gage at present site and datum.

REMARKS.--Records good. Part of low flow is drainage from areas irrigated with ground water and from large minnow farm supplied with ground water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	8.8	745	663	723	448	1220	67	33	0.77	20	4.7
2	e11	7.8	835	520	684	337	1210	59	29	1.2	13	0.80
3	e10	7.5	903	402	703	315	1220	49	17	1.3	9.1	1.2
4	10	7.8	944	314	732	360	1250	56	14	0.30	6.6	1.6
5	11	8.1	944	261	721	412	1240	66	16	0.83	5.0	1.1
6	10	6.1	888	248	658	404	1160	72	8.8	2.4	6.2	1.5
7	9.6	5.3	767	250	548	359	1030	73	6.0	0.94	6.1	0.49
8	8.9	5.0	620	273	467	313	867	64	5.1	0.38	0.26	0.75
9	8.4	4.9	492	291	446	295	689	70	4.2	0.68	0.26	0.92
10	8.9	5.7	505	282	455	303	534	89	9.4	0.58	1.1	2.0
11	41	3.5	556	260	444	431	421	129	42	0.54	0.21	1.7
12	131	0.88	646	233	405	851	347	171	27	0.65	0.26	0.37
13	278	0.86	789	204	346	1090	297	264	24	0.44	1.4	0.03
14	374	0.78	910	183	296	1200	257	383	27	0.31	7.2	0.92
15	400	1.1	982	156	251	1340	222	456	26	0.64	8.9	0.94
16	369	0.25	1080	134	232	1510	201	496	28	19	20	0.98
17	306	0.24	1610	129	212	1610	182	465	20	23	24	1.2
18	223	0.68	1990	118	194	1680	152	349	14	24	18	1.5
19	138	0.37	2240	124	231	1650	125	227	13	18	15	1.9
20	80	1.9	2610	152	517	1720	110	145	8.5	23	15	6.5
21	50	1.8	2960	245	676	1760	99	102	5.2	30	10	11
22	34	1.00	3070	313	771	1760	85	78	1.8	17	5.9	20
23	27	3.7	2980	335	882	1800	69	64	1.4	4.8	3.2	24
24	20	4.0	2710	504	967	1840	54	48	4.5	4.0	2.9	19
25	13	1.8	2350	652	985	1860	49	43	1.6	1.7	5.5	17
26	9.6	5.9	2050	754	926	1790	40	33	1.7	38	5.9	16
27	6.7	6.3	1800	852	792	1650	39	24	5.3	71	5.0	15
28	6.4	46	1550	917	622	1490	51	18	4.4	44	6.6	12
29	7.2	332	1300	928	---	1320	62	14	1.1	22	7.0	9.8
30	8.2	607	1050	875	---	1180	62	18	2.3	12	4.6	7.5
31	8.4	---	839	780	---	1210	---	23	---	20	5.4	---
TOTAL	2630.3	1087.06	43715	12352	15886	34288	13344	4215	401.3	383.46	239.59	182.40
MEAN	84.85	36.24	1410	398.5	567.4	1106	444.8	136.0	13.38	12.37	7.729	6.080
MAX	400	607	3070	928	985	1860	1250	496	42	71	24	24
MIN	6.4	0.24	492	118	194	295	39	14	1.1	0.30	0.21	0.03
AC-FT	5220	2160	86710	24500	31510	68010	26470	8360	796	761	475	362

ARKANSAS RIVER BASIN

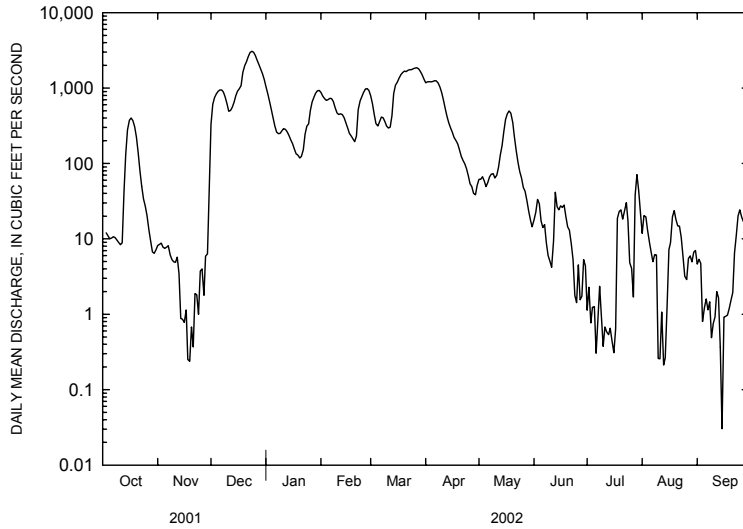
07264000 BAYOU METO NEAR LONOKE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

MEAN	60.77	235.7	470.5	412.2	512.2	564.5	497.7	416.9	150.8	54.74	46.05	64.03
MAX	775	1394	1451	1515	1680	1283	1517	1698	1191	482	402	391
(WY)	1985	1958	1974	1991	1956	1997	1973	1968	1974	1960	1966	1978
MIN	0.35	0.000	2.87	21.0	65.2	166	64.5	14.7	2.28	1.28	1.09	1.84
(WY)	2000	2000	1955	2000	1972	1972	1960	2001	1988	1980	2000	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	125771.38		128724.11			
ANNUAL MEAN	344.6		352.7		289.4	
HIGHEST ANNUAL MEAN					550 1973	
LOWEST ANNUAL MEAN					95.2 1963	
HIGHEST DAILY MEAN	3490	Feb 20	3070	Dec 22	5570	Dec 29 1987
LOWEST DAILY MEAN	0.13	Jul 3	0.03	Sep 13	0.00	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	0.61	Nov 13	0.51	Jul 8	0.00	Oct 18 1954
MAXIMUM PEAK FLOW			3090	Dec 22	5750	Dec 29 1987
MAXIMUM PEAK STAGE			24.55	Dec 22	27.11	Dec 29 1987
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	249500		255300		209700	
10 PERCENT EXCEEDS	1090		1170		865	
50 PERCENT EXCEEDS	28		50		82	
90 PERCENT EXCEEDS	2.1		1.1		5.8	

<sup>e</sup>Estimated



RED RIVER BASIN

361

07337000 RED RIVER AT INDEX

LOCATION.--Lat 33°33'07", long 94°02'28", in NW1/4SW1/4 sec.7, T.14 S., R.28 W., Miller County, Hydrologic Unit 11140106, near right bank on downstream side of southbound bridge on U.S. Highway 71 at Index, 2.2 mi south of Ogden, 20.6 mi upstream from Little River, and at mile 485.3.

DRAINAGE AREA.--48,030 mi<sup>2</sup>, of which 5,936 mi<sup>2</sup> is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft above NGVD of 1929. Prior to Dec. 12, 1939, nonrecording gage, and Dec. 12, 1939, to July 19, 1979, water-stage recorder, at site 500 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Some regulation since Oct. 31, 1943, by Lake Texoma (Texas), 241 mi upstream, capacity, 5,392,900 acre-ft, since Sept. 28, 1967, by Pat Mayse Lake (Texas), capacity, 352,700 acre-ft, and since Jan. 18, 1974, by Hugo Lake (Oklahoma) capacity, 966,700 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2840	3240	4770	18900	16500	9270	56800	30900	5100	4840	7610	4550
2	2570	2640	3860	18000	40600	8220	50300	29500	4580	4690	7480	5580
3	2430	2200	3210	18600	45800	8020	44900	26900	4820	4590	7290	5750
4	2340	2100	3020	17400	37100	7120	37100	24800	4990	4500	6440	5780
5	2270	2500	2700	15000	28800	6190	32100	21900	5100	4340	6120	5000
6	2160	3070	2510	12600	24500	5580	30600	19800	4820	4560	5680	3510
7	1990	3020	2540	11600	23100	8180	30400	17200	4960	5970	5490	3100
8	2310	2540	2570	11200	26400	11100	33100	13100	6080	6980	5640	4530
9	2430	2190	2720	9580	29800	10800	56900	11900	7710	6500	5900	5350
10	2530	1920	2960	7160	25800	8190	78900	12800	7620	5890	5930	5480
11	4260	1790	3170	6090	21800	6290	81000	13100	8560	5310	5950	5060
12	6660	1820	5130	7310	19200	6690	67500	11500	8290	5340	5260	3890
13	7970	1940	7550	7910	16400	7160	56800	9200	7450	5600	4670	3340
14	11000	2000	7940	6720	14300	7750	56300	9230	6520	5170	5120	3180
15	18100	1980	7390	5820	13300	7050	61600	9760	5280	4450	5300	4140
16	22200	1950	11200	5710	12200	6020	69900	8930	4540	4610	5060	5290
17	21800	1800	39400	4910	8970	5780	73200	7500	4330	5200	5100	5230
18	18600	1640	67400	4330	7180	6070	68300	7400	5970	5260	5760	5240
19	15400	1630	70200	5620	6960	6730	64900	10500	8100	4470	9930	4960
20	13200	1760	54400	7430	7010	17300	66600	12100	7830	3880	13600	4140
21	11500	1810	43000	7600	8370	63500	68600	12500	5890	4130	11300	3320
22	9230	1810	36500	7570	12700	88900	68900	11800	4300	4240	9990	3150
23	8110	1780	38900	7370	18700	90700	66000	9870	3850	4700	8790	3680
24	8140	1690	39600	6930	17900	65000	62100	7520	3750	5540	6710	3500
25	7190	1580	34700	9640	14400	51300	54100	5380	3610	6520	5420	3190
26	4770	1580	29300	14700	12400	50100	48600	4560	3490	6660	4690	2910
27	3500	1710	26400	17600	11200	46700	44800	4540	3320	6900	3990	2650
28	3820	2450	25300	17600	9950	43800	42200	4680	3140	7310	3630	2510
29	3790	4250	24400	15900	---	42600	36500	5520	2900	7400	3400	2600
30	3410	5170	22900	13400	---	41300	32300	5590	4030	7490	2900	2540
31	3270	---	21100	11400	---	53300	---	4900	---	7650	2700	---
TOTAL	229790	67560	646740	331600	531340	796710	1641300	384880	160930	170690	192850	123150
MEAN	7413	2252	20860	10700	18980	25700	54710	12420	5364	5506	6221	4105
MAX	22200	5170	70200	18900	45800	90700	81000	30900	8560	7650	13600	5780
MIN	1990	1580	2510	4330	6960	5580	30400	4540	2900	3880	2700	2510
AC-FT	455800	134000	1283000	657700	1054000	1580000	3256000	763400	319200	338600	382500	244300

RED RIVER BASIN

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

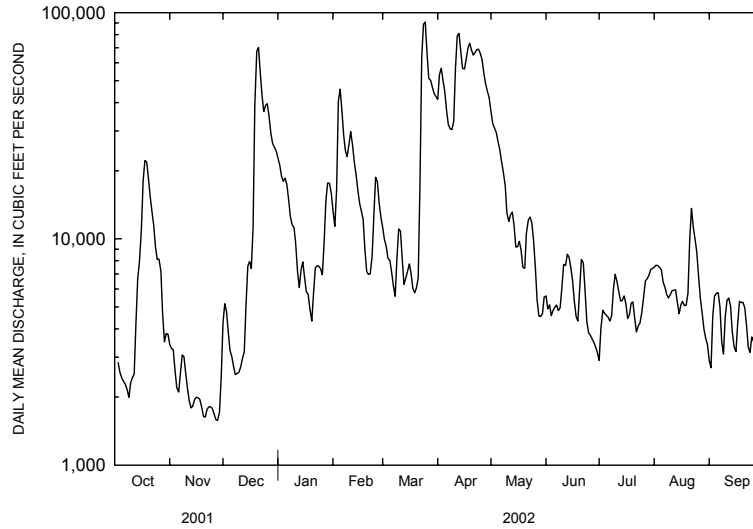
MEAN	8060	10760	12170	11340	14340	17630	17240	23740	21710	9712	5791	5895
MAX	41690	47140	47910	60160	38960	67730	61460	121000	94400	33990	39230	30340
(WY)	1946	1975	1992	1998	1946	1945	1990	1990	1957	1989	1950	1950
MIN	716	642	1206	1360	2127	2233	2096	4199	3098	1162	1025	909
(WY)	1957	1957	1957	1964	1964	1967	1956	1972	1988	1944	1944	1944

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	6418330		5277540			
ANNUAL MEAN	17580		14460		<sup>1</sup> 13210	
HIGHEST ANNUAL MEAN					30420 1990	
LOWEST ANNUAL MEAN					4383 1964	
HIGHEST DAILY MEAN	96400	Feb 19	90700	Mar 23	268000	May 10 1990
LOWEST DAILY MEAN	1580	Nov 25	1580	Nov 25	384	Nov 28 1956
ANNUAL SEVEN-DAY MINIMUM	1710	Nov 21	1710	Nov 21	397	Oct 19 1956
MAXIMUM PEAK FLOW			96800	Mar 23	<sup>2</sup> 270000	May 10 1990
MAXIMUM PEAK STAGE			17.59	Mar 23	<sup>3</sup> 32.30	May 10 1990
INSTANTANEOUS LOW FLOW			1540	Nov 25-26	378	Nov 28 1956
ANNUAL RUNOFF (AC-FT)	12730000		10470000		9570000	
10 PERCENT EXCEEDS	46800		42800		35300	
50 PERCENT EXCEEDS	8630		6730		6010	
90 PERCENT EXCEEDS	2540		2560		2290	

<sup>1</sup>Prior to regulation, water years 1937-43, 11,970 ft<sup>3</sup>/s

<sup>2</sup>Maximum discharge for period of record 297,000 ft<sup>3</sup>/s Feb. 23, 1938

<sup>3</sup>Maximum gage height for period of record, 34.25 ft Feb. 23, 1938, from graph based on gage readings



RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-1956, April 1980 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 24...	1345	81213	80513	7940	757	8.1	93	8.3	452	21.7	120
JAN 16...	1415	81213	80513	5380	771	10.9	94	8.2	1130	9.4	280
Date	Time	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 24...	34.0	7.90	3.40	2	39.0	41	54.0	62.0	260	.04	
JAN 16...	72.0	24.0	4.80	3	110	46	160	170	663	.14	
Date	Time	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
OCT 24...	.90	.05	.08	<.010	.86	.98	.061	<.02	.02		
JAN 16...	.70	.18	.20	<.010	.56	.90	.031	<.02	.01		
Date	Time	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)			
OCT 24...	.13	340	E250	210	85	232	4970				
JAN 16...	.07	E23	E20	E11	95	163	2370				
Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	SAMPLE LOC-ATION, CROSS SECTION (FT FM R BK) (72103)	SAM-PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)			
JAN 16...	1417	80513	80513	1030	1.00	400	771	9.4			
JAN 16...	1418	80513	80513	990.0	1.00	400	771	9.4			
JAN 16...	1419	80513	80513	950.0	1.00	400	771	9.4			
JAN 16...	1420	80513	80513	910.0	1.00	400	771	9.4			
JAN 16...	1421	80513	80513	870.0	1.00	400	771	9.4			
JAN 16...	1422	80513	80513	830.0	1.00	400	771	9.4			
JAN 16...	1423	80513	80513	790.0	1.00	400	771	9.4			
JAN 16...	1424	80513	80513	750.0	1.00	400	771	9.4			
JAN 16...	1425	80513	80513	710.0	1.00	400	771	9.5			
JAN 16...	1426	80513	80513	670.0	1.00	400	771	9.5			
Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
MAR 05...	1330	81213	80513	6330	768	9.8	81	8.1	990	7.2	230
APR 24...	1300	81213	80513	58300	775	8.4	91	7.8	838	19.7	190
JUN 26...	1620	81213	80513	3240	771	6.9	90	8.4	559	29.6	180

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORPTION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
MAR 05...	62.0	19.0	3.70	3	98.0	47	140	140	588	.05
APR 24...	51.0	15.0	3.10	3	86.0	49	100	98.0	405	.03
JUN 26...	51.0	12.0	4.60	1	42.0	33	43.0	60.0	326	.04

Date	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAR 05...	.70	.06	.14	<.010	.65	.84	.153	<.02
APR 24...	.70	.04	.17	<.010	.67	.87	.031	<.02
JUN 26...	1.0	.05	<.02	<.010	.96	--	--	<.02

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR 05...	.05	.12	E28	40	42	95	180	3080
APR 24...	.01	.22	E42	96	E12	64	865	136000
JUN 26...	<.01	.08	E10	E6	54	73	73	639

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	SAM-PLING DEPTH (FEET) (00003)	STREAM WIDTH (FT) (00004)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER (STAND-ARD) (00400)	TEMPER-ATURE (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
AUG 22...	1300	80513	80513	1.00	410	762	30.2	670			
22...	1302	80513	80513	1.00	410	762	30.3	711			
22...	1305	80513	80513	1.00	410	762	30.3	752			
22...	1306	80513	80513	1.00	410	762	30.2	793			
22...	1309	80513	80513	1.00	410	762	30.2	834			
22...	1310	80513	80513	1.00	410	762	30.2	875			
22...	1311	80513	80513	1.00	410	762	30.3	916			
22...	1312	80513	80513	1.00	410	762	30.3	957			
22...	1313	80513	80513	1.00	410	762	30.3	998			
22...	1314	80513	80513	1.00	410	762	30.3	1040			

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER (STAND-ARD) (00400)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)		
AUG 22...	1315	81213	80513	9990	762	7.5	100	7.9	990	30.2	220

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORPTION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
AUG 22...	59.0	18.0	4.60	3	98.0	48	150	140	581	.01

RED RIVER BASIN

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
AUG 22...	1.0	.01	.14	<.010	.99	1.1	<.02	<.01

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
AUG 22...	.20	300	400	370	92	347	9360

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.0	20.2	21.5	18.2	16.6	17.4	9.7	8.1	8.9	7.1	6.6	6.9
2	26.1	18.1	21.2	22.5	17.5	19.1	10.7	9.1	9.8	6.6	5.8	6.2
3	27.1	18.5	21.6	24.9	16.9	20.1	11.5	10.1	10.7	5.8	5.0	5.4
4	26.2	19.5	21.9	23.6	16.7	19.0	13.8	11.4	12.7	5.1	4.4	4.8
5	24.0	16.3	20.6	26.0	15.5	19.0	17.3	13.0	15.4	4.9	4.7	4.8
6	18.8	12.4	15.5	19.8	18.1	19.0	18.0	16.3	17.1	5.6	4.5	5.0
7	23.4	11.9	16.4	19.8	18.1	19.0	19.3	16.3	17.8	5.8	4.8	5.3
8	24.8	13.6	17.9	22.5	15.6	18.7	17.9	11.5	14.0	6.2	4.8	5.5
9	22.0	16.6	19.7	20.1	15.5	17.2	13.4	9.9	11.3	7.7	5.6	6.5
10	22.6	20.3	21.3	20.9	15.0	17.2	13.2	10.5	12.1	8.8	7.6	8.0
11	20.8	19.5	19.9	25.9	13.1	17.6	12.4	11.3	11.6	9.9	8.8	9.3
12	20.7	19.4	20.0	22.7	13.6	17.0	11.5	10.9	11.1	9.6	8.7	9.2
13	20.7	19.8	20.2	21.1	14.5	17.3	11.4	11.1	11.2	9.5	8.4	9.1
14	19.9	18.7	19.4	22.5	14.3	17.7	11.3	10.7	11.0	9.8	8.8	9.3
15	19.9	18.8	19.4	23.9	13.6	17.4	10.8	10.2	10.4	9.6	8.6	9.2
16	19.2	18.3	18.6	21.6	14.7	17.4	10.7	10.3	10.4	9.6	8.9	9.2
17	18.3	17.4	17.7	21.5	14.2	16.9	11.2	10.7	11.0	9.8	9.3	9.6
18	17.7	16.8	17.3	24.1	12.5	17.6	11.3	10.9	11.1	9.3	8.2	8.5
19	18.1	16.7	17.4	18.3	11.4	15.8	11.2	10.7	10.9	8.4	7.8	8.0
20	18.9	17.6	18.2	20.0	8.5	11.8	10.7	10.1	10.4	7.9	7.2	7.6
21	19.6	18.2	18.8	20.4	7.1	11.1	10.2	9.7	10.0	8.3	7.0	7.7
22	20.5	18.8	19.6	16.5	9.5	13.1	10.2	9.8	10.0	8.5	7.5	7.9
23	21.2	20.0	20.6	21.3	15.3	18.3	10.1	9.6	9.8	10.3	8.5	9.2
24	21.9	20.8	21.3	22.6	12.8	16.2	9.6	9.2	9.4	10.5	9.9	10.3
25	21.3	19.8	20.5	23.2	9.0	14.9	9.2	8.7	9.0	9.9	9.0	9.5
26	20.3	18.5	19.3	20.0	11.4	15.8	8.8	8.1	8.4	9.5	8.5	9.0
27	19.0	17.5	18.1	15.2	6.5	11.4	8.2	7.5	7.9	9.4	8.4	8.9
28	17.8	16.3	16.9	9.8	5.4	7.5	8.4	7.7	8.0	9.9	8.8	9.3
29	17.3	15.7	16.4	9.4	7.7	8.7	8.4	7.9	8.2	10.7	9.7	10.2
30	17.1	15.6	16.3	8.7	7.3	8.0	8.1	7.4	7.8	12.7	10.6	11.5
31	17.3	15.5	16.5	---	---	---	7.5	7.0	7.2	13.0	11.6	12.6
MONTH	27.1	11.9	19.0	26.0	5.4	15.9	19.3	7.0	10.8	13.0	4.4	8.2

## RED RIVER BASIN

## 07337000 RED RIVER AT INDEX--CONTINUED

WATER TEMPERATURE, DEGREES C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.6	9.9	10.7	8.6	7.9	8.1	15.5	14.2	14.8	22.7	20.8	21.6
2	9.9	8.1	8.7	8.4	7.0	8.0	16.7	15.5	16.1	22.9	22.5	22.7
3	8.1	7.8	7.9	7.0	5.5	6.2	16.9	16.2	16.6	22.5	20.7	21.4
4	8.3	7.8	8.0	6.8	4.9	5.9	16.4	15.7	16.0	20.7	19.9	20.2
5	8.1	6.9	7.6	7.8	5.7	6.7	16.0	15.1	15.5	20.4	19.4	19.8
6	6.9	6.6	6.7	9.3	7.2	8.0	15.4	14.7	15.0	22.4	20.3	21.2
7	7.1	6.4	6.8	12.0	9.3	10.6	---	---	---	23.5	21.8	22.5
8	7.6	6.8	7.2	12.2	11.1	11.5	15.0	14.5	14.8	24.5	22.6	23.5
9	7.7	7.2	7.5	13.1	12.2	12.6	14.8	14.2	14.6	24.9	23.6	24.2
10	7.5	7.1	7.3	12.5	11.2	11.9	15.3	14.0	14.5	24.4	22.9	23.5
11	7.7	6.7	7.2	12.0	10.4	11.1	16.6	15.3	15.8	24.1	22.2	23.0
12	8.1	6.9	7.5	11.1	10.0	10.5	17.5	16.6	17.0	24.7	23.0	23.7
13	8.7	7.5	8.1	12.6	10.2	11.3	18.0	17.3	17.6	24.5	22.6	23.5
14	8.9	7.8	8.3	14.7	12.0	13.1	18.3	17.5	17.9	23.9	22.2	23.2
15	8.7	8.1	8.4	15.7	14.4	15.0	18.4	17.8	18.1	24.0	22.3	23.2
16	9.2	7.6	8.4	15.5	13.5	14.3	18.2	17.8	17.9	24.0	22.5	23.3
17	9.7	8.2	9.0	13.5	13.1	13.2	18.3	17.6	18.0	24.1	22.5	23.4
18	9.8	9.0	9.5	13.5	12.9	13.2	19.1	18.0	18.5	22.5	21.2	21.8
19	11.0	9.8	10.5	14.2	13.5	13.8	19.5	18.8	19.1	22.4	20.4	21.5
20	12.2	10.3	11.2	14.6	14.0	14.3	19.4	18.9	19.2	22.9	20.8	21.8
21	11.8	11.1	11.4	14.3	13.7	14.0	19.5	19.2	19.4	23.3	21.3	22.3
22	12.2	10.6	11.4	13.9	13.1	13.4	19.4	18.9	19.2	23.6	21.5	22.5
23	12.0	11.0	11.5	13.1	12.5	12.9	19.3	18.5	18.9	23.9	21.8	22.9
24	12.5	11.2	11.8	13.0	12.7	12.8	19.7	19.0	19.3	24.0	22.7	23.4
25	12.7	11.9	12.2	13.6	13.0	13.2	19.4	18.7	19.0	25.4	23.2	24.1
26	11.9	9.5	10.7	13.1	12.1	12.5	18.9	17.3	18.1	26.4	24.0	25.0
27	9.6	8.5	9.1	12.5	11.5	12.0	17.6	17.0	17.3	26.8	24.4	25.5
28	9.1	7.6	8.4	13.6	12.2	12.8	18.8	17.5	18.0	26.3	24.7	25.5
29	---	---	---	14.5	13.5	14.0	19.4	18.3	18.8	25.9	24.7	25.1
30	---	---	---	14.6	14.1	14.4	21.0	19.2	20.0	25.5	24.5	24.9
31	---	---	---	14.4	13.7	14.1	---	---	---	27.2	24.5	25.7
MONTH	12.7	6.4	9.0	15.7	4.9	11.8	---	---	---	27.2	19.4	23.1
	JUNE			JULY			AUGUST			SEPTEMBER		
1	28.8	25.8	27.1	28.8	27.5	28.1	31.6	29.8	30.7	30.5	28.4	29.3
2	29.7	27.2	28.3	29.5	27.7	28.4	31.7	30.1	30.9	30.8	28.9	29.7
3	30.1	27.8	28.9	29.6	27.6	28.5	31.8	30.1	31.0	30.8	29.0	29.9
4	30.3	28.3	29.3	30.6	28.0	29.2	32.4	30.4	31.4	30.8	29.2	30.0
5	30.1	28.4	29.2	32.0	29.0	30.3	32.1	30.4	31.2	30.5	29.2	29.8
6	29.9	28.0	29.0	32.4	30.0	31.1	32.1	30.3	31.1	30.3	28.7	29.4
7	29.9	27.7	28.8	32.7	30.8	31.6	31.7	30.3	31.0	28.7	26.2	27.9
8	29.5	28.0	28.7	32.7	30.7	31.8	31.0	29.5	30.3	28.0	26.9	27.4
9	28.8	27.8	28.2	33.1	31.1	32.0	30.9	29.0	29.9	27.5	26.7	27.1
10	28.7	27.0	27.8	33.1	31.5	32.3	30.8	29.2	30.0	28.5	26.3	27.2
11	29.1	27.5	28.3	32.7	31.5	32.2	30.3	29.0	29.6	29.3	27.2	28.1
12	30.2	28.0	29.0	32.9	30.7	31.6	30.5	28.5	29.4	29.1	27.5	28.3
13	30.5	29.0	29.7	32.6	30.7	31.6	30.3	28.7	29.4	29.3	27.0	28.1
14	29.5	28.4	28.9	31.5	30.3	30.9	29.4	28.0	28.6	28.9	26.9	28.0
15	29.1	27.2	28.1	30.5	29.2	29.9	28.6	27.6	28.0	29.2	27.3	28.3
16	28.4	26.8	27.4	30.0	28.1	28.9	27.8	27.0	27.3	28.7	27.2	27.7
17	28.9	25.9	27.3	28.9	27.4	28.0	29.0	26.5	27.6	27.9	26.8	27.3
18	29.0	26.7	27.9	30.4	27.7	28.8	30.3	28.2	29.0	27.9	26.5	27.0
19	29.4	27.4	28.4	31.4	29.0	30.1	30.4	28.7	29.6	27.2	25.6	26.5
20	29.5	28.0	28.9	32.2	29.9	31.0	30.3	28.8	29.6	26.7	25.1	25.7
21	30.1	28.3	29.1	32.9	30.5	31.6	30.6	28.9	29.7	26.8	24.6	25.6
22	30.4	28.3	29.3	33.1	30.9	32.0	31.1	29.3	30.1	26.9	24.9	25.9
23	30.7	28.6	29.6	32.7	31.1	32.0	31.1	29.5	30.4	25.9	23.5	24.5
24	30.6	28.7	29.5	32.2	31.1	31.6	31.4	29.8	30.7	24.0	22.3	23.2
25	30.2	28.1	29.0	31.8	30.3	31.1	31.2	29.5	30.2	23.9	21.8	22.8
26	29.9	27.9	28.9	32.2	30.1	31.1	31.2	29.1	30.0	23.1	21.7	22.5
27	29.6	27.9	28.6	31.5	30.3	31.0	30.6	29.0	29.4	26.6	20.5	23.2
28	29.8	27.9	28.8	31.2	29.9	30.6	29.8	27.7	28.7	29.2	20.4	24.3
29	28.5	26.3	27.3	30.9	29.5	30.2	29.2	27.7	28.4	29.8	21.8	24.8
30	29.0	27.5	28.1	31.2	29.5	30.4	28.2	26.4	27.5	30.9	22.1	25.6
31	---	---	---	31.2	29.7	30.5	30.1	25.0	27.5	---	---	---
MONTH	30.7	25.8	28.6	33.1	27.4	30.6	32.4	25.0	29.6	30.9	20.4	26.8



RED RIVER BASIN

367

07340000 LITTLE RIVER NEAR HORATIO

**LOCATION.**--Lat 33°55'10", long 94°23'15", in NE1/4 sec.10, T.10 S., R.32 W., Sevier County, Hydrologic Unit 11140109, near left bank on downstream side of bridge on State Highway 41, 0.9 mi downstream from Rolling Fork, 2.0 mi southwest of Horatio, 28.5 mi upstream from Cossatot River, and at mile 72.0.

**DRAINAGE AREA.**--2,662 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1311.

**REVISED RECORDS.**--WSP 858: 1932, 1935-36. WSP 1211: 1931, drainage area. WSP 1561: 1932. WDR Ark. 1978: drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 272.89 ft above NGVD of 1929. Prior to Feb. 5, 1935, nonrecording gage, and Feb. 5, 1934, to Sept. 13, 1961, water-stage recorder, at site 50 ft upstream at present datum.

**REMARKS.**--No estimated daily discharges. Records good Some regulation since Oct. 3, 1968, by Broken Bow Lake (Oklahoma), 31.4 mi upstream, capacity, 1,368,000 acre-ft, and since June 1, 1969, by Pine Creek Lake (Oklahoma), 73.3 mi upstream, capacity, 465,800 acre-ft. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in August 1915, reached a stage of 38.0 ft, discharge, 124,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	463	1920	1920	11400	16400	3260	23700	9030	13000	590	3140	522
2	484	695	1600	11700	17600	3430	16400	8870	7340	707	3910	510
3	455	806	1390	10600	16600	3060	14600	5070	6250	1030	3150	598
4	472	501	1420	9880	14800	3780	14700	5970	5710	830	1470	1140
5	995	451	1970	9280	15000	4560	15500	2830	5690	830	1190	1230
6	716	662	2080	6680	15100	4530	14600	1680	4540	1000	1470	1550
7	539	752	1950	5180	15300	3150	13200	3040	4370	1320	1140	1210
8	453	770	3080	5590	16300	1970	13600	3340	5880	924	1040	688
9	471	886	3230	4610	15900	1750	16200	2710	3030	1590	783	555
10	447	503	2390	3870	11000	2100	15900	3630	4180	2050	558	994
11	583	451	3060	4320	9200	2620	15400	4170	3550	1320	564	1030
12	701	450	5170	3670	10900	3770	17100	2260	3580	852	544	635
13	2850	448	5800	1720	10800	4300	17600	1420	2570	649	680	549
14	5070	637	6620	1130	10500	5280	16500	1480	1470	589	806	523
15	3560	751	6330	3130	8530	5020	15400	1730	874	555	622	660
16	1750	477	12100	2840	8410	4160	15600	1790	709	1800	669	697
17	2740	450	27200	3120	7930	2460	16600	4260	600	2190	971	587
18	3160	448	29900	3280	6510	2200	16700	7960	601	1370	681	528
19	3190	446	28300	3060	7150	4130	15700	4940	796	988	534	699
20	2820	447	27200	1200	12800	18200	15500	2370	1470	2690	664	1100
21	1430	447	23400	900	12900	25800	15600	3980	987	2700	590	1110
22	872	538	14800	2150	11100	24400	15400	4320	1430	2320	530	779
23	811	460	11800	3940	9440	23100	13300	3710	1040	1630	1500	600
24	1040	473	13100	4330	6970	21200	12700	2430	589	1570	2000	662
25	1370	452	14200	8070	6180	17400	12400	1220	1570	2050	1040	597
26	1650	446	15000	11000	5980	16900	12800	992	973	1290	624	596
27	1590	448	15100	10900	5870	17400	12900	952	635	1060	893	655
28	550	572	13000	10500	4270	17200	8980	2950	589	831	1410	646
29	454	2120	13100	9680	---	17000	5960	9130	576	744	884	566
30	1420	2490	13100	9650	---	18800	6740	14800	637	1070	670	640
31	2350	---	12700	10100	---	25700	---	15800	---	946	538	---
TOTAL	45456	21397	332010	187480	309440	308630	437280	138834	85236	40085	35265	22856
MEAN	1466	713.2	10710	6048	11050	9956	14580	4479	2841	1293	1138	761.9
MAX	5070	2490	29900	11700	17600	25800	23700	15800	13000	2700	3910	1550
MIN	447	446	1390	900	4270	1750	5960	952	576	555	530	510
AC-FT	90160	42440	658500	371900	613800	612200	867300	275400	169100	79510	69950	45330

RED RIVER BASIN

07340000 LITTLE RIVER NEAR HORATIO--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

MEAN	2104	4410	6531	4901	5905	7058	5739	6039	4206	1724	1149	1449
MAX	9360	15960	17120	15890	12390	15020	16250	16790	14180	8397	3542	10430
(WY)	1985	1975	1972	1998	1989	1997	1973	1990	1990	1983	1992	1974
MIN	242	232	244	493	669	665	1449	530	346	281	411	303
(WY)	2000	2000	1990	1981	1996	1996	1981	1988	1988	1972	1977	1977

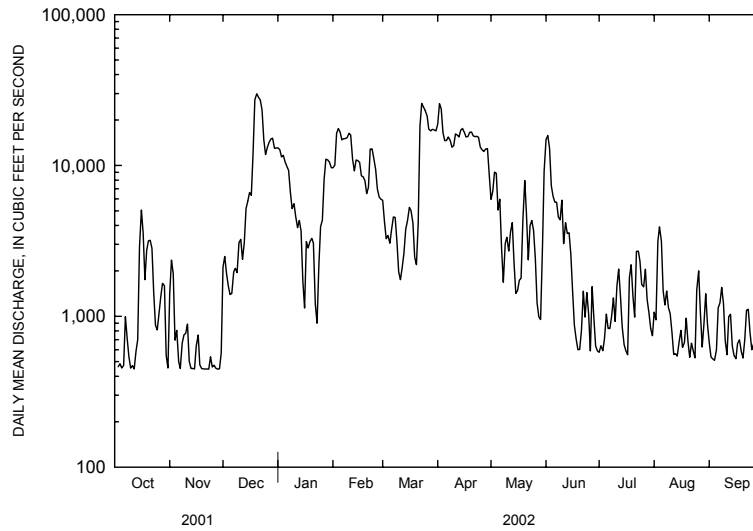
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	1827192		1963969			
ANNUAL MEAN	5006		5381		14259	
HIGHEST ANNUAL MEAN					7523 1973	
LOWEST ANNUAL MEAN					1547 1976	
HIGHEST DAILY MEAN	31400	Feb 17	29900	Dec 18	57700	Dec 12 1971
LOWEST DAILY MEAN	446	Nov 19	446	Nov 19	2121	Oct 5 1972
ANNUAL SEVEN-DAY MINIMUM	462	Nov 17	462	Nov 17	152	Oct 4 1972
MAXIMUM PEAK FLOW			30900	Dec 17	365100	Dec 10 1971
MAXIMUM PEAK STAGE			28.62	Dec 17	432.84	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	3624000		3896000		3085000	
10 PERCENT EXCEEDS	15100		15500		12600	
50 PERCENT EXCEEDS	2130		2370		1860	
90 PERCENT EXCEEDS	637		550		367	

<sup>1</sup>Prior to regulation, water years 1931-68, 3,742 ft<sup>3</sup>/s

<sup>2</sup>Minimum discharge for period of record, 1.0 ft<sup>3</sup>/s Aug. 18 to Sept. 1, 1934

<sup>3</sup>Maximum discharge for period of record, 120,000 ft<sup>3</sup>/s Mar. 30, 1945, from rating curve extended above 93,000 ft<sup>3</sup>/s

<sup>4</sup>Maximum gage height for period of record, 37.70 ft Mar. 30, 1945



RED RIVER BASIN

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07340300 COSSATOT RIVER NEAR VANDERVOORT  
(Hydrologic benchmark station)

LOCATION.--Lat 34°22'48", long 94°14'11", in SE1/4NE1/4 sec.30, T.4 S., R.30 W., Polk County, Hydrologic Unit 11140109, on right bank 200 ft upstream from bridge on State Highway 246, 0.3 mi downstream from Brushy Creek, 3.2 mi upstream from Flat Creek, and 7.5 mi east of Vandervoort.

DRAINAGE AREA.--89.6 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

REVISED RECORDS.--WDR Ark. 1978: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 771.88 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 6, 1961, reached a stage of about 23.0 ft, from information by local resident, discharge, about 48,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	265	48	1170	80	479	90	204	32	12	9.9
2	14	27	186	46	504	134	323	79	137	83	11	10
3	14	27	143	43	319	200	225	74	100	118	11	9.1
4	14	33	116	45	223	170	172	69	77	47	13	8.6
5	15	30	95	58	177	149	141	60	65	33	13	8.3
6	22	28	674	93	159	130	120	56	63	31	12	8.0
7	18	26	1440	87	138	147	264	52	52	e26	12	7.9
8	16	26	940	80	150	151	2780	50	45	e26	11	11
9	15	27	465	77	201	231	719	49	42	e24	11	12
10	16	27	289	73	213	238	395	59	45	e23	11	11
11	48	26	206	66	183	230	273	54	39	e25	11	9.5
12	96	25	635	60	162	559	206	49	35	20	10	8.8
13	1260	24	685	57	136	389	163	138	32	18	11	8.5
14	457	24	552	56	114	278	136	102	90	19	17	8.4
15	226	24	413	52	102	212	116	76	44	20	18	8.7
16	141	24	5890	48	91	162	102	63	35	18	14	8.2
17	100	24	2830	47	81	136	328	120	31	21	13	8.4
18	78	23	801	46	74	124	241	147	28	30	12	8.7
19	65	26	432	50	424	1450	186	102	25	22	11	37
20	56	28	273	46	678	3180	150	80	23	19	11	204
21	49	25	199	44	362	823	127	67	22	17	10	58
22	44	24	161	50	241	441	108	57	21	15	9.6	29
23	40	25	130	244	184	304	92	50	20	14	9.4	20
24	39	34	105	515	149	232	84	46	19	16	12	16
25	35	36	90	449	126	190	73	45	26	17	15	14
26	33	34	80	299	103	154	111	51	36	14	16	13
27	30	40	73	217	87	125	184	126	28	13	12	12
28	29	780	68	168	80	112	155	1230	24	12	11	11
29	28	701	63	e139	---	105	120	2510	18	12	10	10
30	27	417	56	e114	---	201	103	764	21	13	9.6	10
31	27	---	51	2660	---	720	---	351	---	13	9.4	---
TOTAL	3067	2641	18406	6077	6631	11757	8676	6866	1447	811	369.0	599.0
MEAN	98.94	88.03	593.7	196.0	236.8	379.3	289.2	221.5	48.23	26.16	11.90	19.97
MAX	1260	780	5890	2660	1170	3180	2780	2510	204	118	18	204
MIN	14	23	51	43	74	80	73	45	18	12	9.4	7.9
AC-FT	6080	5240	36510	12050	13150	23320	17210	13620	2870	1610	732	1190
CFSM	1.10	0.98	6.63	2.19	2.64	4.23	3.23	2.47	0.54	0.29	0.13	0.22
IN.	1.27	1.10	7.64	2.52	2.75	4.88	3.60	2.85	0.60	0.34	0.15	0.25

RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

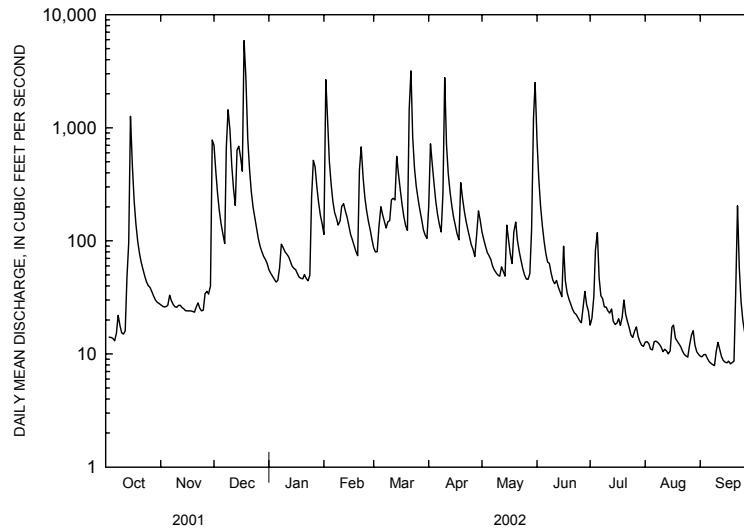
MEAN	125.2	231.3	323.8	224.0	255.5	351.7	278.3	245.6	142.9	81.21	27.40	57.90
MAX	899	878	1105	624	722	860	799	827	426	565	65.1	376
(WY)	1985	1997	1972	1969	2001	1973	1973	1968	1973	1994	1971	1974
MIN	11.2	19.8	25.6	24.2	65.3	61.5	60.3	24.5	11.5	11.4	9.57	10.7
(WY)	1979	1990	1990	1981	1996	1986	1987	1988	1972	1978	1972	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	74065.3		67347.0			
ANNUAL MEAN	202.9		184.5		195.3	
HIGHEST ANNUAL MEAN					358 1973	
LOWEST ANNUAL MEAN					86.3 1996	
HIGHEST DAILY MEAN	6540	Feb 16	5890	Dec 16	15800	Dec 9 1971
LOWEST DAILY MEAN	9.2	Jul 23	7.9	Sep 7	5.6	Sep 21 2000
ANNUAL SEVEN-DAY MINIMUM	10	Jul 18	8.5	Sep 12	5.8	Sep 16 2000
MAXIMUM PEAK FLOW			12200	Dec 16	<sup>1</sup> 32000	Dec 2 1982
MAXIMUM PEAK STAGE			13.21	Dec 16	19.50	Dec 2 1982
INSTANTANEOUS LOW FLOW			7.7	Sep 6,7	5.5	<sup>2</sup> Sep 17 2000
ANNUAL RUNOFF (AC-FT)	146900		133600		141500	
ANNUAL RUNOFF (CFSM)	2.26		2.06		2.18	
ANNUAL RUNOFF (INCHES)	30.75		27.96		29.62	
10 PERCENT EXCEEDS	425		402		405	
50 PERCENT EXCEEDS	55		56		66	
90 PERCENT EXCEEDS	15		11		15	

<sup>1</sup>From rating curve extended above 11,000 ft<sup>3</sup>/s on basis of step-backwater computations

<sup>2</sup>Also Sept.21-22, 2000

<sup>e</sup>Estimated



RED RIVER BASIN

371

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-68, 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST-CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 25...	0915	81213	80513	30	761	8.7	86	7.7	50	14.8	18
JAN 17...	0915	81213	80513	40	758	11.5	94	7.2	41	6.5	14
MAR 06...	0845	81213	80513	130	750	9.6	77	7.7	30	5.7	9
APR 25...	0715	81213	80513	76	769	8.6	88	6.9	36	17.1	9
JUN 27...	0930	81213	80513	27	762	7.8	96	7.2	53	26.0	19
AUG 23...	0815	81213	80513	9.2	748	6.4	82	6.3	69	27.1	27

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FIELD CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT 25...	4.90	1.40	.90	.2	1.8	17	20	1.90	3.60	.05
JAN 17...	3.90	1.10	.60	.2	1.7	20	18	1.60	3.70	.04
MAR 06...	2.20	.85	.50	.2	1.6	27	10	1.50	3.40	.03
APR 25...	2.20	.74	.50	.2	1.2	22	9	1.50	3.10	.03
JUN 27...	5.30	1.40	.70	.2	1.7	16	20	1.60	3.40	.04
AUG 23...	7.90	1.80	.80	.2	1.9	13	23	1.90	3.60	.05

Date	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHATE ORTHO DIS-SOLVED (MG/L AS PO4) (00660)
OCT 25...	2.83	35	26	<.01	<.20	--	<.02	<.010	--
JAN 17...	3.13	29	23	.03	<.20	.04	<.02	<.010	--
MAR 06...	7.72	22	16	.01	<.20	.01	.05	<.010	.123
APR 25...	4.51	22	15	<.01	<.20	--	<.02	<.010	--
JUN 27...	2.33	32	26	<.01	<.20	--	<.02	<.010	--
AUG 23...	.94	38	32	<.01	.30	--	<.02	<.010	--

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	E COLI, MTEC MF WATER (COLS./100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COL/100 ML) (31625)	FECAL STREP, KF STRP MF, WATER THAN (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 25...	<.02	<.01	<.02	.7	E20	30	96	84	11	.89
JAN 17...	<.02	<.01	<.02	2.1	E5	E15	E14	89	9.0	.97
MAR 06...	<.02	.04	<.02	.3	S7	S11	S7	91	8.0	2.8
APR 25...	<.02	<.01	<.02	2.2	E19	78	E17	79	13	2.7
JUN 27...	<.02	<.01	<.02	2.2	E14	E13	240	76	3.0	.22
AUG 23...	<.02	<.01	<.02	24	E12	E19	E14	50	4.0	.10

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value  
 S -- Most probable value

## RED RIVER BASIN

## 07341200 SALINE RIVER NEAR LOCKESBURG

**LOCATION.**--Lat 33°57'43", long 94°03'40", in NW1/4SE1/4 sec.23, T.9 S., R.29 W., Sevier County, Hydrologic Unit 11140109, on right bank 50 ft upstream of bridge on State Highway 24, 2.0 mi downstream from Brushy Creek, 6.0 mi east of Lockesburg, and at mile 30.0.

**DRAINAGE AREA.**--256 mi<sup>2</sup>.

**PERIOD OF RECORD.**--June 1963 to current year.

**REVISED RECORDS.**--WDR Ark. 1978: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 300.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**REMARKS.**--No estimated daily discharges. Records good. Regulation since May 8, 1975, by Dierks Lake 5.9 mi upstream, capacity 159,500 acre-ft. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of May 6 or 7, 1961, reached a stage of about 25.6 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	472	909	860	233	3990	336	204	15	17	28
2	15	20	375	899	798	243	1320	316	622	18	13	28
3	12	21	331	887	747	327	1260	198	841	18	14	28
4	9.6	21	313	868	704	227	1130	401	826	14	16	28
5	10	21	297	712	661	326	1060	232	816	13	14	28
6	11	21	295	269	555	320	1010	206	615	12	13	28
7	12	20	222	176	387	309	998	323	130	11	13	25
8	11	19	244	658	487	196	3610	228	77	11	12	26
9	9.9	19	210	702	451	177	2890	182	38	11	12	27
10	9.2	19	184	677	382	162	1110	204	32	10	12	26
11	105	19	297	528	323	168	1190	183	30	10	12	25
12	351	19	1010	212	391	1840	1100	150	27	10	12	20
13	1510	19	1600	181	379	939	1040	188	23	12	12	16
14	1740	19	1180	176	353	755	1010	183	25	15	13	16
15	272	19	914	128	240	663	976	141	28	26	14	16
16	231	19	3780	114	226	608	943	125	20	68	15	16
17	314	19	10800	114	218	581	1180	342	17	33	13	16
18	306	19	4420	124	211	608	1140	653	16	97	13	17
19	296	19	926	151	263	1180	969	236	14	77	13	18
20	289	19	925	165	1110	4700	416	174	13	42	13	23
21	283	19	999	144	405	3820	280	311	32	26	13	21
22	279	19	1090	135	513	1170	270	311	20	20	13	20
23	277	19	1100	284	477	1220	258	301	13	28	12	18
24	127	25	1050	574	450	1170	250	195	13	141	12	17
25	51	29	1020	724	430	1120	240	99	14	175	13	16
26	249	27	998	870	413	1200	161	65	14	175	14	16
27	246	23	981	826	396	1130	425	61	16	93	13	16
28	189	99	968	774	256	1050	227	446	16	25	13	16
29	32	1140	953	746	---	1010	155	886	14	20	20	16
30	23	582	934	735	---	2660	322	1370	14	20	28	16
31	22	---	920	748	---	9550	---	877	---	19	28	---
TOTAL	7306.7	2374	39808	15210	13086	39662	30930	9923	4580	1265	445	627
MEAN	235.7	79.13	1284	490.6	467.4	1279	1031	320.1	152.7	40.81	14.35	20.90
MAX	1740	1140	10800	909	1110	9550	3990	1370	841	175	28	28
MIN	9.2	19	184	114	211	162	155	61	13	10	12	16
AC-FT	14490	4710	78960	30170	25960	78670	61350	19680	9080	2510	883	1240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	169.7	369.1	688.4	531.4	646.3	812.4	591.0	498.9	358.0	203.7	50.23	53.08
MAX	887	1854	2719	1292	1521	1772	1415	1295	1458	1451	236	454
(WY)	1994	1975	1983	1994	1989	1990	1979	1979	1981	1983	1989	1992
MIN	4.88	9.97	14.7	25.2	17.8	36.1	148	40.0	22.3	15.8	14.4	8.03
(WY)	1978	1996	1990	1996	1996	1996	1998	1987	1988	1978	2002	1981

RED RIVER BASIN

07341200 SALINE RIVER NEAR LOCKESBURG--CONTINUED

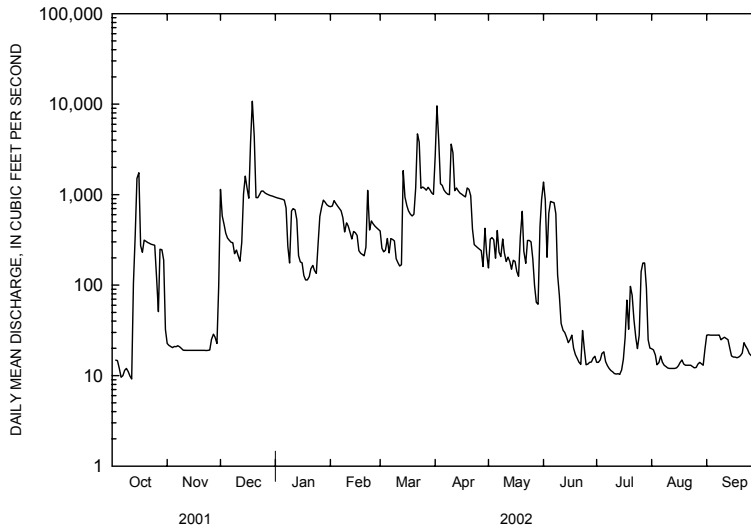
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	200555.7		165216.7			
ANNUAL MEAN	549.5		452.6		<sup>1</sup> 413.4	
HIGHEST ANNUAL MEAN					733	1983
LOWEST ANNUAL MEAN					87.0	1996
HIGHEST DAILY MEAN	10800	Dec 17	10800	Dec 17	36800	Dec 3 1982
LOWEST DAILY MEAN	9.2	Oct 10	9.2	Oct 10	<sup>2</sup> 2.3	Oct 16 1977
ANNUAL SEVEN-DAY MINIMUM	10	Oct 4	10	Oct 4	2.4	Oct 14 1977
MAXIMUM PEAK FLOW			12200	Dec 17	<sup>3</sup> 59600	Dec 3 1982
MAXIMUM PEAK STAGE			16.62	Dec 17	<sup>4</sup> 20.52	Dec 3 1982
ANNUAL RUNOFF (AC-FT)	397800		327700		299500	
10 PERCENT EXCEEDS	1220		1050		1010	
50 PERCENT EXCEEDS	211		181		119	
90 PERCENT EXCEEDS	19		13		16	

<sup>1</sup>Prior to regulation, water years 1963-74, 382 ft<sup>3</sup>/s

<sup>2</sup>Minimum discharge for period of record, 0.20 ft<sup>3</sup>/s Nov. 6, 1963, and Oct. 29, 1969

<sup>3</sup>Maximum discharge for period of record 64,700 ft<sup>3</sup>/s May 14, 1968, from rating extended above 23,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow

<sup>4</sup>Maximum gage height for period of record 20.86 ft May 14, 1968



## RED RIVER BASIN

## 07356000 OUACHITA RIVER NEAR MOUNT IDA

**LOCATION.**--Lat 34°36'36", long 93°41'50", in SE<sub>1</sub>/4SW<sub>1</sub>/4 sec.32, T.1 S., R.25 W., Montgomery County, Hydrologic Unit 08040101, on right bank 300 ft upstream from bridge on U.S. Highway 270, 3.1 mi upstream from Fiddler's Creek, 5.2 mi northwest of Mount Ida, and at mile 553.4.

**DRAINAGE AREA.**--414 mi<sup>2</sup>.

**PERIOD OF RECORD.**--November 1941 to current year. Monthly discharge only for some periods, published in WSP 1311.

**REVISED RECORDS.**--WSP 1211: 1947(m). WDR Ark. 1979: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 655.14 ft above NGVD of 1929. Prior to Dec. 3, 1941, and Mar. 1, 1945, to Apr. 1, 1946, nonrecording gage, Dec. 3, 1941 to Feb. 21, 1945, and Apr. 2, 1946, to Nov. 2, 1949, water-stage recorder, all at site 350 ft downstream at present datum.

**REMARKS.**--Records good except estimated daily discharges, which are poor. As of August 1977, flow from 34.3 mi<sup>2</sup> upstream from this station is controlled by one floodwater-detention reservoir that has a capacity of 15,661 acre-ft, of which 9,726 acre-ft is flood-detention, 4,600 acre-ft is water supply, and 1,355 acre-ft is sediment storage. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--The flood of Dec. 3, 1982, was about 4.0 ft higher than that of 1908 and is the highest since at least that date, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	92	1340	371	9330	421	2020	714	1200	79	45	27
2	59	88	982	344	3200	607	1500	580	863	82	42	26
3	55	84	779	319	2270	1050	1170	497	e579	94	40	25
4	51	88	650	296	1650	807	938	442	e461	192	37	25
5	54	97	552	302	1270	715	801	389	442	184	35	25
6	56	88	1180	424	1160	663	698	344	401	137	39	24
7	57	85	2290	475	1080	633	681	303	356	132	34	25
8	54	79	2410	409	1110	609	10800	265	290	105	30	24
9	54	77	1620	378	1150	939	4250	253	247	86	29	24
10	56	76	1160	362	1070	1040	2520	250	229	74	28	25
11	80	75	915	342	917	902	1760	271	198	67	27	25
12	109	78	1830	321	819	2320	1310	257	174	60	25	25
13	4750	81	3000	299	734	1760	1020	1600	152	57	25	25
14	2320	78	2740	283	644	1320	838	1330	368	61	34	24
15	1120	76	2040	265	584	1070	701	856	430	71	34	24
16	740	73	15100	248	534	890	599	652	242	72	37	24
17	556	69	25600	239	484	759	2450	631	175	124	36	25
18	443	67	5010	235	436	694	1780	951	e141	113	34	25
19	360	68	3070	250	600	4750	1220	702	125	98	33	29
20	301	71	2380	257	2350	14800	942	559	112	90	31	53
21	256	67	2040	255	1500	4860	762	470	101	96	29	107
22	219	68	1800	250	1110	2920	647	399	92	83	27	156
23	192	74	1380	1180	900	2340	551	340	83	72	25	100
24	174	84	996	2110	754	1770	500	293	76	79	25	73
25	154	83	807	2260	648	1370	431	257	70	134	36	61
26	138	87	690	1610	562	1240	437	241	71	99	38	53
27	126	100	602	1230	481	1010	1950	226	107	70	38	46
28	117	832	544	982	434	856	1230	3080	97	66	33	44
29	109	3770	493	823	---	762	986	e4340	80	58	30	42
30	103	2070	439	721	---	822	926	e3440	77	52	28	40
31	96	---	396	4810	---	2190	---	e1830	---	49	27	---
TOTAL	13023	8825	84835	22650	37781	56889	46418	26762	8039	2836	1011	1251
MEAN	420.1	294.2	2737	730.6	1349	1835	1547	863.3	268.0	91.48	32.61	41.70
MAX	4750	3770	25600	4810	9330	14800	10800	4340	1200	192	45	156
MIN	51	67	396	235	434	421	431	226	70	49	25	24
AC-FT	25830	17500	168300	44930	74940	112800	92070	53080	15950	5630	2010	2480



RED RIVER BASIN

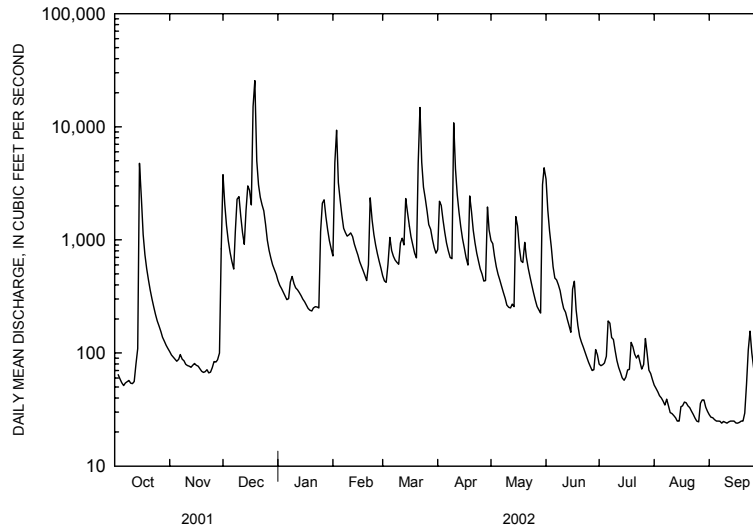
07356000 OUACHITA RIVER NEAR MOUNT IDA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

MEAN	372.1	744.9	1069	897.5	1143	1344	1117	1102	512.4	228.1	91.01	200.0
MAX	4031	3558	5373	3676	4574	5692	4230	3679	2084	1130	506	1470
(WY)	1985	1997	1983	1949	1945	1945	1957	1990	1974	1951	1950	1974
MIN	7.24	21.9	37.1	34.5	104	197	275	102	28.6	13.9	6.33	5.45
(WY)	1957	1964	1964	1964	1963	1972	1963	1977	1972	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	307263		310320			
ANNUAL MEAN	841.8		850.2		733.1	
HIGHEST ANNUAL MEAN					1499 1945	
LOWEST ANNUAL MEAN					263 1963	
HIGHEST DAILY MEAN	25600	Dec 17	25600	Dec 17	79800	Dec 3 1982
LOWEST DAILY MEAN	16	Jul 25	24	Sep 6	2.5	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	18	Jul 20	25	Sep 3	2.8	Aug 19 1954
MAXIMUM PEAK FLOW			30900	Dec 17	102000	Dec 3 1982
MAXIMUM PEAK STAGE			23.84	Dec 17	<sup>1</sup> 39.78	Dec 3 1982
INSTANTANEOUS LOW FLOW			21	<sup>2</sup> Aug 13-14	2.3	Aug 25 1954
ANNUAL RUNOFF (AC-FT)	609500		615500		531100	
10 PERCENT EXCEEDS	1810		2030		1600	
50 PERCENT EXCEEDS	220		299		250	
90 PERCENT EXCEEDS	27		34		32	

<sup>1</sup>From floodmark  
<sup>2</sup>Also August 24-25  
<sup>e</sup>Estimated



## RED RIVER BASIN

## 07359002 OUACHITA RIVER BELOW REMMEL DAM AT JONES MILL

**LOCATION.**--Lat 34°25'50", long 92°52'51", in NE1/4NE1/4 sec.36, T.3 S., R.18 W., Hot Spring County, Hydrologic Unit 08040102, at left bank 0.25 mi downstream from confluence of Cove Creek, 0.8 mi downstream from Rempel Dam at Jones Mill and at mile 455.1.

**DRAINAGE AREA.**--1,550 mi<sup>2</sup>.

**PERIOD OF RECORD.**--March 1903 to April 1905, June 1922 to September 1924 (fragmentary), October 1925 to April, 1927, January 1928 to current year. Published as "at Rempel Dam, near Malvern" January 1925 to March 1937, as "near Malvern (07359500)" April 1937 to September 1991.

**REVISED RECORDS.**--WSP 587: 1923. WSP 857: 1923(M). WSP 977: 1942. WSP 1391: 1903-4. WDR Ark. 1979: Drainage Area.

**GAGE.**--Water-stage recorder. Datum of gage is 248.06 ft above sea level. March 1903 to April 1905, nonrecording gage 5.0 mi downstream at datum 18.11 ft lower. June 1922 to September 1924, nonrecording gage 5.0 mi downstream at datum 20.11 ft lower. January 1925 to March 1937, water-stage recorder at Rempel Dam, 0.8 mi upstream at present datum. April 1937 to September 1991 water-stage recorder 5.0 mi downstream at datum 20.11 ft lower.

**REMARKS.**--Records good. Flow regulated since 1925 by Lake Catherine, 0.8 mi upstream, capacity, 35,250 acre-ft, since 1932 by Lake Hamilton, capacity, 190,100 acre-ft, and since 1952 by Lake Ouachita, capacity, 2,768,400 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	603	779	6310	7210	3150	6540	3750	4070	1700	2620	745
2	589	602	630	6320	7430	2510	6960	3440	4080	1830	2790	835
3	598	609	1050	6310	6840	2210	4800	2200	2830	2170	2790	1480
4	599	607	1430	5620	5580	3520	4500	1960	3080	2250	2800	1450
5	616	611	1660	3790	7070	2330	5370	669	3320	1360	3020	1490
6	590	668	1370	3790	7030	1730	5450	529	3150	1330	2560	e1630
7	589	587	1570	3800	6990	2460	6760	435	2960	808	3040	e1570
8	583	561	674	3820	6280	2710	e8150	1090	1600	2090	2490	e948
9	844	598	735	3830	3280	2840	7250	550	1870	2140	1740	e1510
10	592	601	1120	3840	3460	1160	5790	3530	2960	2070	816	1690
11	2750	621	3000	3250	3270	2240	6560	1790	3000	2150	821	1530
12	761	2120	3960	4730	3970	11600	6490	1640	2570	2490	2020	1490
13	1840	1240	4580	5350	4320	3630	6560	4810	2150	2210	2310	1170
14	1180	2400	4580	4920	5050	2750	6040	1920	2220	2340	2480	1620
15	592	3340	4060	3860	5070	1490	5980	1750	911	2510	1810	1790
16	658	2250	14400	2840	5460	4580	3560	1800	933	2140	1650	372
17	717	2130	24100	3110	5110	3320	3560	3280	2100	3370	1040	e290
18	610	682	6370	2850	5450	4570	4420	833	2120	2580	1480	e367
19	591	678	7390	847	5670	6550	3530	470	2110	2320	1670	e829
20	593	2110	6680	524	6550	14900	2140	1500	2220	2220	2090	1570
21	610	1160	6580	2900	5390	6360	1870	1600	1740	2220	1670	326
22	606	674	6630	3130	5370	8000	1900	952	961	2910	1670	316
23	594	662	6640	2570	2670	6420	456	964	872	2200	1450	315
24	774	663	6600	3530	2720	7180	978	911	1650	1830	1850	339
25	608	660	6600	3740	2690	e6850	1530	1120	2110	2910	2160	404
26	592	740	6550	2120	2340	8160	1320	1460	1730	2950	1500	479
27	603	1400	6020	e2970	2670	6540	1130	2080	1300	2780	1700	499
28	611	3980	6300	e3970	2260	6440	985	1630	662	2760	1680	502
29	606	4420	6300	3080	---	4600	2970	9060	1250	2910	1400	506
30	609	1670	6300	3960	---	8530	3020	5990	834	2770	1470	356
31	612	---	6310	3840	---	9350	---	4060	---	2490	809	---
TOTAL	23314	39647	160968	115521	137200	158680	126569	67773	63363	70808	59396	28418
MEAN	752.1	1322	5193	3726	4900	5119	4219	2186	2112	2284	1916	947.3
MAX	2750	4420	24100	6320	7430	14900	8150	9060	4080	3370	3040	1790
MIN	583	561	630	524	2260	1160	456	435	662	808	809	290
AC-FT	46240	78640	319300	229100	272100	314700	251000	134400	125700	140400	117800	56370

RED RIVER BASIN

07359002 OUACHITA RIVER BELOW REMMEL DAM AT JONES MILL--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

MEAN	1312	2156	3263	3740	3445	3461	3636	3418	1830	1240	1125	1141
MAX	6425	9717	13790	13560	11880	17230	13620	12550	9436	3602	2850	4224
(WY)	1985	1985	1983	1949	1950	1945	1952	1946	1974	1967	1966	1950
MIN	126	97.1	395	87.1	417	442	403	263	161	98.2	93.5	95.7
(WY)	1933	1944	1940	1931	1936	1966	1963	1936	1934	1930	1930	1943

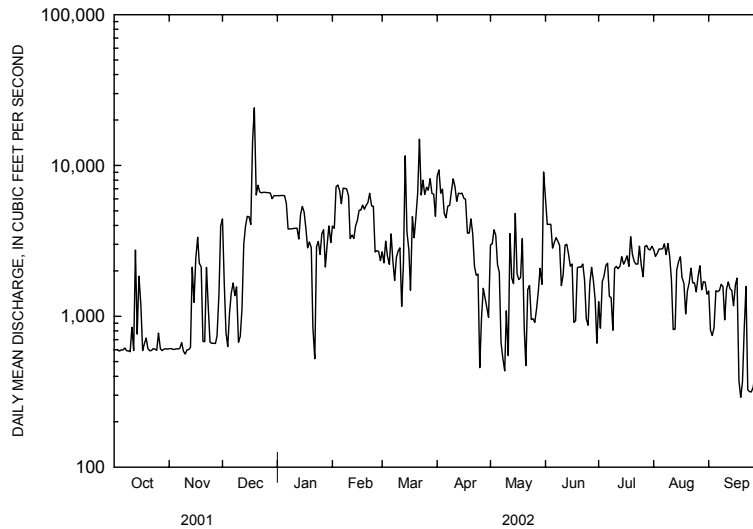
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	935744		1051657			
ANNUAL MEAN	2564		2881		2476	
HIGHEST ANNUAL MEAN					5209 1973	
LOWEST ANNUAL MEAN					746 1954	
HIGHEST DAILY MEAN	26500	Feb 16	24100	Dec 17	104000	Mar 30 1945
LOWEST DAILY MEAN	244	May 9	290	Sep 17	39	Jun 22 1929
ANNUAL SEVEN-DAY MINIMUM	301	May 12	383	Sep 21	58	Nov 13 1943
MAXIMUM PEAK FLOW			37200	Dec 17	<sup>1</sup> 166000	May 20 1990
MAXIMUM PEAK STAGE			15.66	Dec 17	<sup>2,3</sup> 30.30	May 15 1923
INSTANTANEOUS LOW FLOW			165	Jul 23	6.0	Jan 19 2000
ANNUAL RUNOFF (AC-FT)	1856000		2086000		1794000	
10 PERCENT EXCEEDS	6460		6460		5730	
50 PERCENT EXCEEDS	1620		2170		1470	
90 PERCENT EXCEEDS	462		602		286	

<sup>1</sup>From rating curve extended above 120,000 ft<sup>3</sup>/s on basis of computations of peak flow over Remmel Dam, 0.8 mi upstream, adjusted for flow from intervening area

<sup>2</sup>From floodmark

<sup>3</sup>Maximum gage height for period of record at different site and datum

<sup>e</sup>Estimated



## RED RIVER BASIN

## 07359610 CADDO RIVER NEAR CADDO GAP

**LOCATION.**--Lat 34°22'59", long 93°36'21", in SW<sub>1</sub>/4NE<sub>1</sub>/4 sec.19, T.4 S., R.24 W., Montgomery County, Hydrologic Unit 08040102, at downstream side of bridge on State Highway 240, 1.3 mi southeast of Caddo Gap.

**DRAINAGE AREA.**--132 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1988 to current year. Results of discharge measurements April 1975 to September 1978 are contained in reports of U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 577.81 ft above NGVD of 1929.

**REMARKS.**--Records good, except estimated daily discharges which are fair and those above 10,000 ft<sup>3</sup>/s, which are poor.

DISCHARGE FROM THE EDL, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	47	370	96	420	126	732	153	314	50	e39	e50
2	28	47	276	93	297	182	487	141	245	55	e38	e48
3	28	47	220	99	251	211	368	289	196	70	e36	e43
4	28	46	180	97	216	182	303	288	162	70	e33	e40
5	31	44	153	106	192	166	258	227	143	62	e32	e38
6	37	43	161	133	195	150	223	194	136	51	e31	e36
7	31	42	280	116	183	298	220	167	118	48	e30	e34
8	29	42	369	108	202	275	2970	148	105	45	e30	e33
9	29	42	283	106	228	449	900	152	99	45	e30	e32
10	32	42	231	104	213	357	532	239	104	44	e29	e31
11	207	42	195	98	189	392	402	229	102	44	e29	e30
12	201	41	756	95	174	1500	327	186	90	44	e29	e30
13	2480	41	773	95	158	627	278	1060	93	64	e30	e30
14	756	42	672	94	143	413	240	470	183	138	e30	e29
15	361	41	428	94	132	325	209	327	99	202	e32	e29
16	236	41	7580	94	122	276	186	255	85	81	e32	e29
17	172	40	7520	95	112	246	216	340	77	692	e35	e28
18	135	40	1190	96	106	233	181	330	71	442	e37	e28
19	111	42	577	115	225	995	163	253	66	226	e38	e31
20	97	43	375	107	428	3600	151	210	62	139	e40	100
21	85	41	295	101	293	1080	141	179	58	100	e40	73
22	76	41	251	188	238	590	135	152	53	80	e41	e45
23	70	43	214	563	205	432	130	133	52	70	e42	e45
24	66	57	181	565	181	352	127	120	50	62	e43	e44
25	60	52	160	584	164	304	118	113	50	64	e43	e43
26	55	52	147	388	143	272	158	142	49	e57	e63	e43
27	52	55	133	307	125	224	240	125	55	e50	e67	e41
28	51	1120	121	258	116	198	198	170	50	e45	e65	e40
29	50	1300	111	228	---	179	168	1360	47	e42	e60	e40
30	49	642	103	203	---	617	173	650	49	e40	e56	e40
31	48	---	98	299	---	1520	---	418	---	e40	e52	---
TOTAL	5719	4258	24403	5725	5651	16771	10934	9220	3063	3262	1232	1203
MEAN	184.5	141.9	787.2	184.7	201.8	541.0	364.5	297.4	102.1	105.2	39.74	40.10
MAX	2480	1300	7580	584	428	3600	2970	1360	314	692	67	100
MIN	28	40	98	93	106	126	118	113	47	40	29	28
AC-FT	11340	8450	48400	11360	11210	33270	21690	18290	6080	6470	2440	2390
CFSM	1.36	1.04	5.79	1.36	1.48	3.98	2.68	2.19	0.75	0.77	0.29	0.29
IN.	1.56	1.16	6.67	1.57	1.55	4.59	2.99	2.52	0.84	0.89	0.34	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

MEAN	180.9	372.3	471.5	382.5	387.7	430.2	318.0	342.3	180.4	103.9	63.14	78.41
MAX	405	1149	1289	799	979	886	578	1176	599	266	203	177
(WY)	1994	1997	1994	1994	2001	1990	1991	1990	2000	1995	1994	1994
MIN	38.3	52.5	50.9	76.4	112	182	111	103	80.6	39.0	26.9	35.5
(WY)	2001	1990	1990	2000	1996	1996	1992	1997	1994	1998	2000	1999

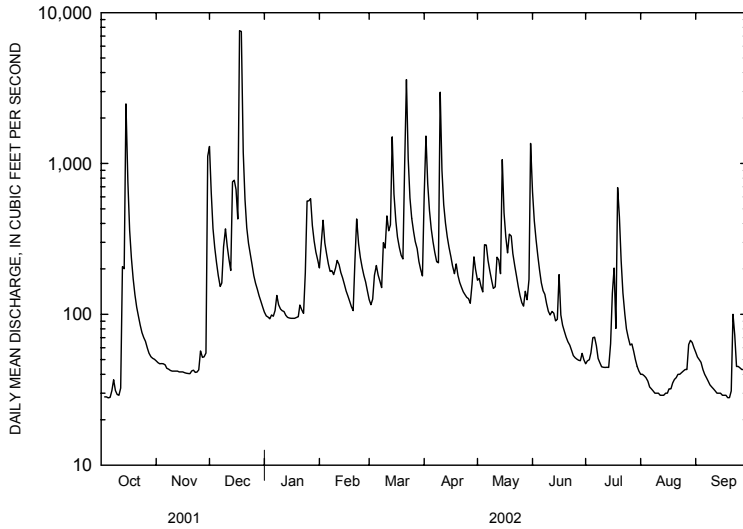
RED RIVER BASIN

07359610 CADDO RIVER NEAR CADDO GAP--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	103085		91441			
ANNUAL MEAN	282.4		250.5		275.5	
HIGHEST ANNUAL MEAN					389	1994
LOWEST ANNUAL MEAN					157	1996
HIGHEST DAILY MEAN	10500	Feb 16	7580	Dec 16	28600	Dec 3 1993
LOWEST DAILY MEAN	27	Sep 29	28	Oct 1	24	Aug 27 2000
ANNUAL SEVEN-DAY MINIMUM	28	Sep 28	29	Sep 12	24	Sep 16 2000
MAXIMUM PEAK FLOW			23700	Dec 17	<sup>1</sup> 97200	Dec 3 1993
MAXIMUM PEAK STAGE			17.13	Dec 17	26.27	Dec 3 1993
INSTANTANEOUS LOW FLOW			27	Oct 3	23	at times
ANNUAL RUNOFF (AC-FT)	204500		181400		199600	
ANNUAL RUNOFF (CFSM)	2.08		1.84		2.03	
ANNUAL RUNOFF (INCHES)	28.20		25.01		27.52	
10 PERCENT EXCEEDS	499		430		496	
50 PERCENT EXCEEDS	99		115		118	
90 PERCENT EXCEEDS	37		36		42	

<sup>1</sup>From rating curve extended above 10,000 ft<sup>3</sup>/s on basis of slope-conveyance study

<sup>e</sup>Estimated



## RED RIVER BASIN

## 07360200 LITTLE MISSOURI RIVER NEAR LANGLEY

**LOCATION.**--Lat 34°18'41", long 93°53'58", in NW<sub>1</sub>/4SW<sub>1</sub>/4 sec.16, T.5 S., R.27 W., Pike County, Hydrologic Unit 08040103, at bridge on State Highway 84, 3.3 mi west of Langley.

**DRAINAGE AREA.**--68.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1998 to current year. Occasional low-flow measurements water years 1958-63, occasional measurements 1974-98, and annual maximum water years 1989-98.

**GAGE.**--Water-stage recorder.

**REMARKS.**--No estimated daily discharges. Records good. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of March 8, 1990, reached a stage of 17.34 ft, discharge, 23,200 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	27	256	58	684	81	560	79	177	21	19	14
2	17	28	165	56	398	97	367	73	118	57	18	14
3	16	28	120	55	281	127	251	74	89	93	17	14
4	16	33	100	54	199	123	182	70	73	44	17	14
5	22	30	85	58	153	114	142	63	62	28	17	14
6	40	28	99	72	138	105	120	59	59	23	16	14
7	27	26	274	69	119	145	121	56	51	20	16	14
8	23	25	385	66	126	181	1850	54	45	16	16	14
9	21	26	251	65	146	303	662	53	44	14	15	14
10	23	26	172	64	151	299	390	61	44	15	16	14
11	143	25	132	61	135	289	269	63	40	12	15	14
12	146	25	579	58	125	790	197	58	37	11	15	13
13	2330	25	650	58	111	472	150	193	33	23	15	12
14	697	24	477	57	97	324	124	143	40	34	19	13
15	312	24	351	54	90	237	106	105	31	29	21	12
16	167	24	4680	53	83	174	95	84	28	27	17	12
17	109	24	3000	53	77	140	164	92	26	71	17	12
18	84	24	803	51	72	124	148	90	25	76	16	12
19	68	24	464	58	248	573	126	76	23	47	15	19
20	58	25	300	56	523	2080	109	67	21	36	15	38
21	51	25	213	54	320	741	98	60	20	32	14	26
22	45	24	168	125	221	433	88	54	19	30	14	17
23	42	25	136	503	167	306	78	50	17	27	14	14
24	39	36	112	422	136	232	75	46	17	32	14	14
25	36	35	98	427	115	187	68	45	20	36	16	13
26	33	32	87	316	97	150	83	46	22	29	17	13
27	32	35	80	231	85	122	116	48	27	25	16	13
28	30	523	75	173	79	111	106	201	20	24	15	13
29	29	753	71	137	---	105	93	1910	18	22	14	13
30	29	425	67	116	---	303	87	567	23	20	14	13
31	28	---	61	458	---	1010	---	295	---	19	14	---
TOTAL	4730	2434	14511	4138	5176	10478	7025	4935	1269	993	494	446
MEAN	152.6	81.13	468.1	133.5	184.9	338.0	234.2	159.2	42.30	32.03	15.94	14.87
MAX	2330	753	4680	503	684	2080	1850	1910	177	93	21	38
MIN	16	24	61	51	72	81	68	45	17	11	14	12
AC-FT	9380	4830	28780	8210	10270	20780	13930	9790	2520	1970	980	885
CFSM	2.23	1.19	6.84	1.95	2.70	4.94	3.42	2.33	0.62	0.47	0.23	0.22
IN.	2.57	1.32	7.89	2.25	2.82	5.70	3.82	2.68	0.69	0.54	0.27	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

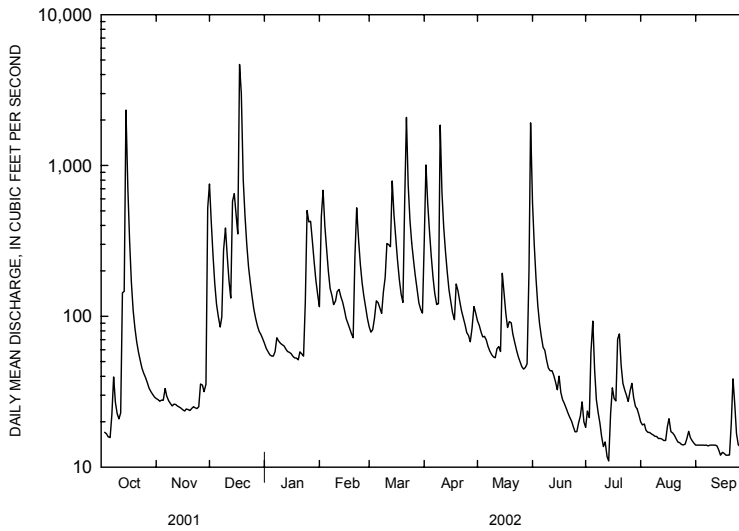
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	96.69	149.6	312.0	148.4	264.5	251.9	193.2	170.4	138.6	35.04	16.11	26.08
MAX	177	383	468	231	511	338	313	239	352	50.6	20.7	55.6
(WY)	1999	2001	2002	1999	2001	2002	1999	2001	2000	1999	2001	2001
MIN	19.9	60.3	174	64.0	162	160	87.5	95.2	42.3	21.9	12.5	10.5
(WY)	2001	2000	2001	2000	1999	2000	2000	1999	2002	2001	2000	2002

RED RIVER BASIN

07360200 LITTLE MISSOURI RIVER NEAR LANGLEY--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	65342		56629			
ANNUAL MEAN	179.0		155.1		149.6	
HIGHEST ANNUAL MEAN					168	2001
LOWEST ANNUAL MEAN					124	2000
HIGHEST DAILY MEAN	4680	Dec 16	4680	Dec 16	4680	Dec 16 2001
LOWEST DAILY MEAN	16	Jul 22	11	Jul 12	7.4	Sep 22 2000
ANNUAL SEVEN-DAY MINIMUM	16	Aug 24	12	Sep 12	7.8	Sep 16 2000
MAXIMUM PEAK FLOW			10200	Dec 16	<sup>1</sup> 13000	Feb 16 2001
MAXIMUM PEAK STAGE			11.64	Dec 16	13.05	Feb 16 2001
INSTANTANEOUS LOW FLOW			10	Jul 12	5.4	Aug 30 2000
ANNUAL RUNOFF (AC-FT)	129600		112300		108400	
ANNUAL RUNOFF (CFSM)	2.62		2.27		2.19	
ANNUAL RUNOFF (INCHES)	35.54		30.80		29.72	
10 PERCENT EXCEEDS	352		322		312	
50 PERCENT EXCEEDS	58		58		63	
90 PERCENT EXCEEDS	19		15		16	

<sup>1</sup>From rating curve extended above 2,300 ft<sup>3</sup>/s on basis of slope-conveyance study



## RED RIVER BASIN

## 07361500 ANTOINE RIVER AT ANTOINE

**LOCATION.**--Lat 34°02'20", long 93°25'05", in NW<sub>1</sub>/4NW<sub>1</sub>/4 sec.24, T.8 S., R.23 W., Pike County, Hydrologic Unit 08040103, near right bank on downstream side of bridge on State Highway 26 at Antoine, 1.6 mi downstream from Brushy Creek, 1.9 mi downstream from Suck Creek, and at mile 8.5.

**DRAINAGE AREA.**--178 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1954 to current year. Gage-height records collected in this vicinity since November 1950 (published as "Antoine Creek") are contained in reports of U.S. Army Corps of Engineers.

**REVISED RECORDS.**--WSP 1511: 1955(M). WDR Ark. 1973: 1972. WDR Ark. 1979: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 229.33 ft above NGVD of 1929. Prior to Oct. 22, 1954, at site 75 ft upstream at present datum.

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

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in 1905 reached a stage of 29.7 ft, from information by State Highway and Transportation Department, discharge, 40,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	0.94	440	93	498	171	e2700	113	264	1.2	0.39	0.01
2	1.6	0.86	278	85	319	384	e1400	90	208	1.8	0.41	0.05
3	1.7	0.70	213	77	278	360	e830	300	158	2.6	0.33	0.03
4	1.7	0.54	174	71	245	276	e510	507	115	73	0.21	0.00
5	1.9	0.45	137	84	212	254	e390	293	87	46	0.12	0.00
6	2.9	0.62	120	217	225	229	e310	238	68	23	0.08	0.00
7	3.4	0.42	186	191	230	213	277	192	55	10	0.19	0.00
8	2.8	0.32	309	142	279	201	2080	149	44	5.1	0.19	0.00
9	2.6	0.28	236	130	290	352	1160	121	36	2.7	0.19	0.00
10	3.1	0.18	186	121	284	305	681	209	34	1.6	0.13	0.00
11	140	0.17	151	111	251	408	475	244	43	0.98	0.03	0.00
12	430	0.16	2410	97	232	3010	363	169	44	0.77	0.00	0.00
13	378	0.09	2040	89	208	1230	298	804	39	0.72	0.00	0.00
14	461	0.11	1290	84	181	753	256	479	82	17	0.00	0.00
15	222	0.16	1060	76	161	528	220	287	91	36	0.00	0.00
16	116	0.20	6850	68	144	412	188	209	38	23	0.00	0.00
17	68	0.24	9790	66	125	365	257	201	22	29	0.00	0.00
18	46	0.24	1890	72	111	722	232	317	16	28	0.00	0.00
19	34	0.30	1060	130	1130	1210	172	176	12	16	0.00	0.00
20	26	0.43	679	145	2410	5730	142	126	8.9	14	0.00	0.00
21	19	0.52	495	114	928	1810	123	99	6.3	10	0.00	0.11
22	15	0.57	398	103	573	977	115	77	4.4	6.6	0.00	0.30
23	11	0.52	332	246	408	670	103	59	3.1	3.9	0.00	0.32
24	8.8	0.77	265	759	320	507	90	46	2.4	2.6	0.00	0.27
25	5.9	1.1	230	955	265	401	82	38	2.1	2.0	0.03	0.18
26	4.2	0.87	205	582	222	569	108	34	2.7	1.5	0.10	0.18
27	3.2	0.94	180	420	186	391	267	44	2.8	0.93	0.11	0.17
28	2.4	666	159	332	164	320	204	56	2.0	0.75	0.05	0.16
29	1.8	1640	138	279	---	281	147	303	1.4	0.64	0.00	0.12
30	1.4	954	116	244	---	4820	113	649	1.3	0.58	0.00	0.07
31	1.1	---	102	258	---	e5400	---	368	---	0.51	0.00	---
TOTAL	2018.0	3272.70	32119	6441	10879	33259	14293	6997	1493.4	362.48	2.56	1.97
MEAN	65.10	109.1	1036	207.8	388.5	1073	476.4	225.7	49.78	11.69	0.083	0.066
MAX	461	1640	9790	955	2410	5730	2700	804	264	73	0.41	0.32
MIN	1.1	0.09	102	66	111	171	82	34	1.3	0.51	0.00	0.00
AC-FT	4000	6490	63710	12780	21580	65970	28350	13880	2960	719	5.1	3.9
CFSM	0.37	0.61	5.82	1.17	2.18	6.03	2.68	1.27	0.28	0.07	0.00	0.00
IN.	0.42	0.68	6.71	1.35	2.27	6.95	2.99	1.46	0.31	0.08	0.00	0.00



RED RIVER BASIN

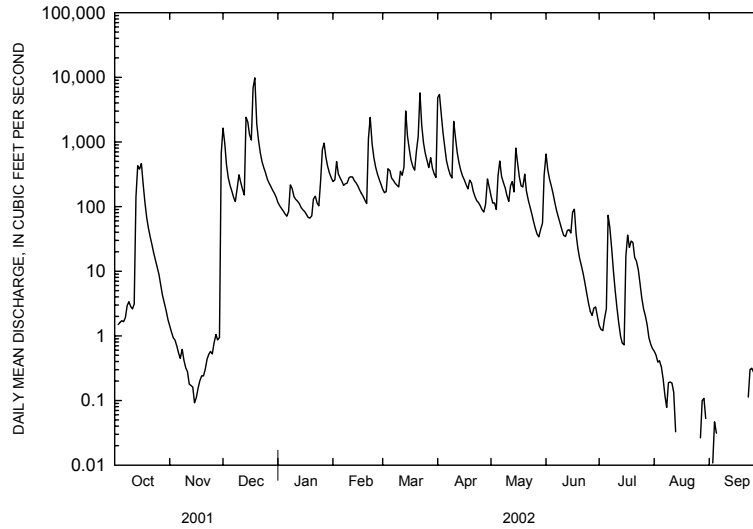
07361500 ANTOINE RIVER AT ANTOINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

MEAN	105.7	295.9	439.6	354.7	457.0	533.4	462.4	406.8	179.5	87.29	35.69	36.83
MAX	838	1271	1958	1038	1344	1325	1548	2266	1430	823	598	439
(WY)	1985	1974	1988	1999	1989	1990	1973	1968	1974	1983	1966	1980
MIN	0.000	0.37	1.48	21.4	76.3	74.0	32.7	15.1	3.34	0.13	0.013	0.020
(WY)	1957	1957	1966	1966	1963	1972	1972	1988	1966	1998	1956	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	135101.73		111139.11			
ANNUAL MEAN	370.1		304.5		282.0	
HIGHEST ANNUAL MEAN					551 1973	
LOWEST ANNUAL MEAN					109 1971	
HIGHEST DAILY MEAN	12400	Feb 16	9790	Dec 17	20500	May 2 1958
LOWEST DAILY MEAN	0.09	Nov 13	0.00	Aug 12	0.00	Aug 4 1956
ANNUAL SEVEN-DAY MINIMUM	0.15	Nov 10	0.00	Aug 12	0.00	Aug 4 1956
MAXIMUM PEAK FLOW			17900	Dec 17	35500	May 2 1958
MAXIMUM PEAK STAGE			24.55	Dec 17	28.75	May 2 1958
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	268000		220400		204300	
ANNUAL RUNOFF (CFSM)	2.08		1.71		1.58	
ANNUAL RUNOFF (INCHES)	28.23		23.23		21.53	
10 PERCENT EXCEEDS	812		609		601	
50 PERCENT EXCEEDS	82		84		68	
90 PERCENT EXCEEDS	0.87		0.03		1.4	

<sup>e</sup>Estimated



## RED RIVER BASIN

## 07362000 OUACHITA RIVER AT CAMDEN

**LOCATION.**--Lat 33°35'47", long 92°49'05", in SE1/4 sec.14, T.13 S., R.17 W., Ouachita County, Hydrologic Unit 08040102, at bridge on U.S. Highway 79B at Camden, 3.4 mi downstream from Ecore Fabre Bayou, 6.2 mi upstream from Two Bayou Creek, and at mile 354.1.

**DRAINAGE AREA.**--5,357 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--September 1928 to September 1960 and October 1965 to current year in reports of Geological Survey. October 1929 to date in reports of U.S. Army Corps of Engineers. Monthly discharge only, October 1929 to September 1960 published in WSP 1311 and WSP 1731. Gage heights collected since 1885 in this vicinity are contained in reports of National Weather Service.

**GAGE.**--Water-stage recorder. Datum of gage is 71.69 ft above NGVD of 1929. Aug. 8, 1928, to July 10, 1935, and July 11, 1935, to Jan. 4, 1945, non-recording gage at present site and datum. Jan. 5, 1945, to Oct. 27, 1947, non-recording gage at site 0.4 mi downstream at present datum. Aug. 10, 1938, to May 31, 1949, supplementary non-recording gage, 4.5 mi upstream. Since Jan. 1, 1957, auxiliary water-stage recorder, 3.2 mi downstream.

**REMARKS.**--No estimated daily discharges. Water-discharge records good. Flow regulated since 1925 by Lake Catherine, 102 mi upstream, capacity, 35,250 acre-ft, since 1932 by Lake Hamilton, capacity, 190,100 acre-ft, since 1949 by Lake Greeson, capacity, 407,900 acre-ft, since 1952 by Lake Ouachita, capacity, 2,768,400 acre-ft, and since August 1969 by DeGray Lake, capacity, 881,900 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	721	769	18000	12200	8640	6180	31200	7080	14800	2330	4470	1880
2	755	808	17800	11700	11700	6350	39700	7760	12500	1430	4580	1690
3	767	766	17100	11600	14500	7850	46400	7690	9770	2140	4490	1290
4	762	704	13200	11700	13800	8330	48600	10000	7400	2870	4020	1210
5	760	1230	8480	11900	11700	9530	44300	11400	6190	3280	3500	1280
6	721	920	6390	10200	12000	8030	34800	10500	5870	3860	3050	1540
7	1050	817	5330	8930	13300	6420	25600	8300	5500	3300	3500	1810
8	961	704	5210	9560	13100	6300	21800	6540	4810	2720	3400	1810
9	763	766	5840	9810	13800	6780	22100	4730	4340	1820	4040	1810
10	715	713	5340	10000	12500	8010	23600	5260	2840	2830	3640	1330
11	1660	1050	4800	9340	10100	7880	25000	10900	2950	3400	3040	1360
12	8390	850	6160	8340	8950	10900	24000	16800	4320	3600	2070	1620
13	12800	786	14800	9000	8690	21300	21700	17900	4350	3680	1500	1640
14	15100	1200	21600	9910	8430	27900	18800	19000	3890	3590	2150	1630
15	18100	1060	26900	9580	8580	30200	16500	18400	3480	2910	3080	1690
16	17400	1770	30600	8210	8740	28200	14700	14100	3250	3260	3590	1810
17	12300	2280	35700	6730	8650	23100	13100	10500	1950	3560	3080	1850
18	7310	1830	45200	5450	7930	24900	11600	9230	1550	3850	2900	1210
19	4950	1670	59000	6500	7950	31200	11400	9440	2240	5540	2300	1090
20	3920	1030	80900	6700	11400	40300	10400	6710	2740	4930	1800	1130
21	2000	760	85100	5790	18900	47300	8850	4650	2770	4330	2050	1280
22	2310	1260	72800	5520	21700	53500	6460	4050	2850	3370	2500	1860
23	2720	1140	55900	6270	20200	57100	5250	3850	2530	3170	2600	1440
24	2710	881	41200	7790	16500	57300	4840	3450	1720	3620	2620	1080
25	2580	684	31600	11400	11500	51500	3580	2730	1620	4070	2270	1040
26	2460	689	24000	14500	8690	43000	3540	2150	2550	3740	2430	980
27	2090	733	19100	14400	7180	34800	3980	2550	2740	4650	2230	988
28	1670	878	16100	11600	6460	28500	4980	3000	2800	4800	1790	1040
29	1050	5690	14100	10100	---	23300	4990	3780	2180	3760	1780	1180
30	814	15300	13400	9620	---	19500	4880	6010	1730	3240	2030	1180
31	797	---	12700	8290	---	22500	---	13500	---	3950	1940	---
TOTAL	131106	49738	814350	292640	325590	757960	556650	261960	128230	107600	88440	42748
MEAN	4229	1658	26270	9440	11630	24450	18560	8450	4274	3471	2853	1425
MAX	18100	15300	85100	14500	21700	57300	48600	19000	14800	5540	4580	1880
MIN	715	684	4800	5450	6460	6180	3540	2150	1550	1430	1500	980
AC-FT	260000	98660	1615000	580500	645800	1503000	1104000	519600	254300	213400	175400	84790

RED RIVER BASIN

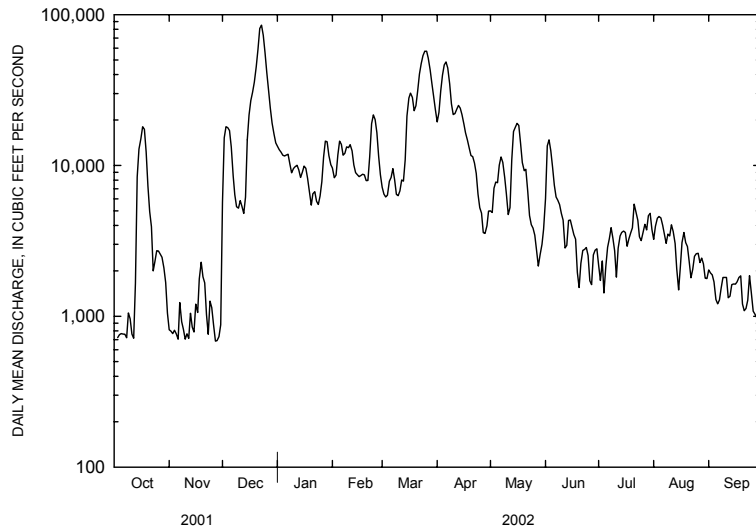
07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

MEAN	2479	5211	9560	12230	12420	13100	13000	12370	5249	2886	2008	2221
MAX	18200	25370	41930	46610	40110	45110	48110	52200	31090	13640	7469	19410
(WY)	1985	1973	1983	1937	1950	1945	1945	1968	1974	1989	1966	1974
MIN	291	381	740	686	1542	1742	1578	1674	411	260	176	154
(WY)	1933	1933	1940	1940	1936	1954	1930	1932	1936	1930	1930	1943

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	3878051		3557012			
ANNUAL MEAN	10620		9745		7706	
HIGHEST ANNUAL MEAN					16120 1973	
LOWEST ANNUAL MEAN					2292 1936	
HIGHEST DAILY MEAN	85100	Dec 21	85100	Dec 21	238000	Apr 3 1945
LOWEST DAILY MEAN	684	Nov 25	684	Nov 25	125	Sep 16 1943
ANNUAL SEVEN-DAY MINIMUM	762	Sep 30	791	Oct 1	132	Sep 11 1943
MAXIMUM PEAK FLOW			88700 Dec 21		243000 Apr 3 1945	
MAXIMUM PEAK STAGE			37.40 Dec 21		44.82 Apr 3 1945	
INSTANTANEOUS LOW FLOW			497 Nov 14		125 <sup>1</sup> Sep 16 1943	
ANNUAL RUNOFF (AC-FT)	7692000		7055000		5582000	
10 PERCENT EXCEEDS	29400		23400		19400	
50 PERCENT EXCEEDS	4420		4980		3460	
90 PERCENT EXCEEDS	1020		1060		791	

<sup>1</sup>Also September 24-26, 1943



RED RIVER BASIN

07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-52, October 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (US/CM) (00400)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT	24.. 0945	81213	80513	2090	764	8.3	90	7.4	53	19.4	15	4.40
JAN	16.. 1115	81213	80513	8750	780	10.2	85	7.7	60	8.1	20	5.80
MAR	05.. 0900	81213	80513	9400	775	11.8	94	7.4	72	6.4	21	6.40
APR	24.. 0830	81213	80513	5780	778	7.7	83	7.2	66	20.0	21	6.10
JUN	26.. 1155	81213	80513	2950	777	7.3	90	7.5	76	27.6	23	6.50
AUG	22.. 0845	81213	80513	2420	766	8.5	112	7.1	70	29.8	20	5.70

Date	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	
OCT	24...	1.00	1.40	.3	3.1	29	3.30	6.10	43	.03	.40
JAN	16...	1.40	1.10	.3	3.0	23	2.90	5.50	41	.05	<.20
MAR	05...	1.20	1.00	.4	3.9	28	4.40	8.40	48	.02	.40
APR	24...	1.30	1.10	.3	3.4	25	3.70	5.30	40	.04	.30
JUN	26...	1.60	1.20	.4	4.8	30	4.20	8.00	47	.01	.30
AUG	22...	1.50	1.10	.4	4.5	31	3.50	7.50	42	.01	.40

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	
OCT	24...	.04	.14	<.010	.37	.54	.031	<.02	.01	.04	110
JAN	16...	.06	.15	<.010	--	--	<.02	<.01	.02		E10
MAR	05...	.03	.17	<.010	.38	.57	.153	<.02	.05	.04	73
APR	24...	.05	.11	<.010	.26	.41	--	<.02	<.01	.04	E17
JUN	26...	.01	.05	<.010	.29	.35	--	<.02	<.01	<.02	71
AUG	22...	.01	.07	<.010	.39	.47	--	<.02	<.01	.03	73

Date	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	
OCT	24...	E250	40	96	31	175
JAN	16...	<3	E10	91	25	591
MAR	05...	110	67	94	41	1040
APR	24...	E12	E17	89	38	593
JUN	26...	57	29	87	16	127
AUG	22...	52	87	86	13	84.9

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

RED RIVER BASIN

387

07362100 SMACKOVER CREEK NEAR SMACKOVER

LOCATION.--Lat 33°22'33", long 92°46'37", in NW1/4SE1/4 sec.32, T.15 S., R.16 W., Union County, Hydrologic Unit 08040201, near right bank on downstream side of bridge on State Highway 7, 0.1 mi downstream from Camp Creek, 3.3 mi northwest of Smackover, and at mile 22.0.

DRAINAGE AREA.--385 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year. Gage-height records collected and occasional discharge measurements made by U.S. Army Corps of Engineers at this site since September 1938. Daily stages 1940 to date and results of discharge measurements 1947 to 1960 are published in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR Ark. 1967: 1965. WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.56 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 1, 1989, water-stage recorder at site 100 ft downstream at same datum. Mar. 1, 1989 to Sept. 4, 1991, non-recording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	71	2300	259	381	240	3730	165	1170	56	8.7	5.0
2	19	71	2190	242	390	297	3850	140	798	51	7.7	4.4
3	16	71	1760	232	373	369	2750	325	333	63	7.0	3.7
4	15	71	1440	223	332	364	1990	989	192	110	6.3	3.3
5	14	71	1120	225	298	306	1490	1250	171	98	5.5	2.9
6	30	69	656	385	529	258	1030	1440	183	65	4.9	2.7
7	45	65	430	565	918	237	625	1530	137	56	4.4	2.6
8	48	62	743	572	1060	230	781	1450	113	46	3.8	3.1
9	44	59	1220	505	981	250	1370	1120	101	39	3.6	3.0
10	36	57	1350	396	839	352	1710	815	95	33	3.4	3.0
11	440	57	1150	339	654	408	1630	3370	102	30	2.8	3.1
12	1370	57	1640	305	463	1070	1400	7640	244	28	2.5	4.1
13	3390	58	5030	269	360	1800	1100	4300	224	80	2.4	4.4
14	6730	57	10300	245	312	2400	741	2480	136	136	2.6	3.8
15	5250	57	9330	230	278	2300	496	1890	107	60	2.9	3.4
16	3400	57	5530	216	257	1930	395	1390	89	47	24	4.1
17	2210	57	4670	204	243	1540	336	870	80	62	214	4.7
18	1600	57	5520	212	234	2140	316	527	74	71	125	4.0
19	1110	55	7340	392	258	4100	322	492	68	71	41	6.2
20	507	56	3910	723	841	6500	297	433	62	56	22	53
21	216	61	2390	813	1200	5670	240	303	56	42	14	92
22	168	67	1820	701	1280	5010	209	216	51	29	10	55
23	145	69	1440	559	1130	3270	194	180	47	22	9.3	29
24	128	70	1090	506	909	2280	175	156	42	17	7.6	16
25	118	70	757	834	604	1810	159	140	40	17	6.8	11
26	107	74	541	1120	383	1760	152	132	48	18	8.6	8.4
27	97	165	423	988	305	1850	174	184	79	19	10	6.9
28	87	438	371	658	259	1600	245	320	96	17	10	6.3
29	79	1340	341	462	---	1120	265	415	77	14	8.1	5.9
30	74	2350	314	388	---	785	207	752	63	12	6.9	5.9
31	73	---	284	358	---	2240	---	982	---	10	5.8	---
TOTAL	27588	5939	77400	14126	16071	54486	28379	36396	5078	1475	591.6	360.9
MEAN	889.9	198.0	2497	455.7	574.0	1758	946.0	1174	169.3	47.58	19.08	12.03
MAX	6730	2350	10300	1120	1280	6500	3850	7640	1170	136	214	92
MIN	14	55	284	204	234	230	152	132	40	10	2.4	2.6
AC-FT	54720	11780	153500	28020	31880	108100	56290	72190	10070	2930	1170	716
CFSM	2.31	0.51	6.49	1.18	1.49	4.57	2.46	3.05	0.44	0.12	0.05	0.03
IN.	2.67	0.57	7.48	1.36	1.55	5.26	2.74	3.52	0.49	0.14	0.06	0.03

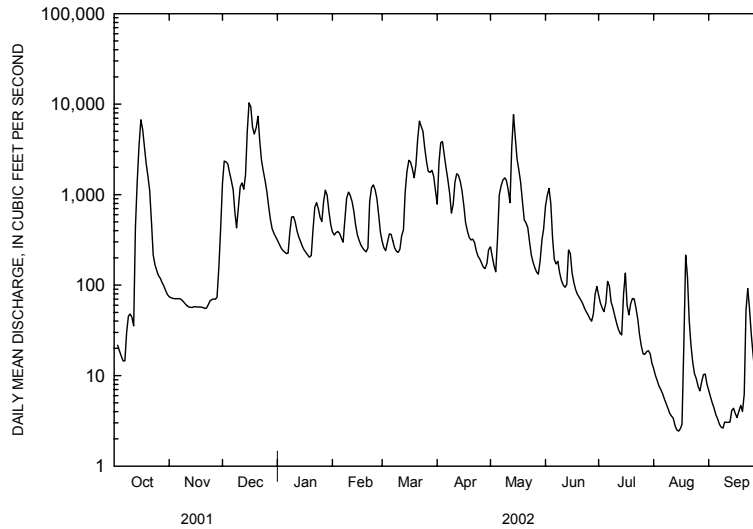
RED RIVER BASIN

07362100 SMACKOVER CREEK NEAR SMACKOVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

MEAN	132.0	245.5	608.3	660.9	846.3	885.6	755.9	524.5	429.7	124.4	49.32	90.53
MAX	1784	1143	2497	1980	2875	2875	4078	1701	2864	1949	346	2174
(WY)	1985	1975	2002	1962	2001	2001	1991	1966	1974	1989	1971	1974
MIN	1.51	3.66	33.5	38.8	44.6	112	90.6	33.6	8.91	1.81	0.22	1.29
(WY)	1996	1996	1982	2000	1996	1967	1971	1996	1972	1964	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002	
ANNUAL TOTAL	420643.7		267890.5			
ANNUAL MEAN	1152		733.9		443.8	
HIGHEST ANNUAL MEAN					1074	1974
LOWEST ANNUAL MEAN					94.4	1963
HIGHEST DAILY MEAN	21000	Jun 1	10300	Dec 14	35300	Apr 6 1997
LOWEST DAILY MEAN	5.5	Aug 26	2.4	Aug 13	0.00	Aug 24 1978
ANNUAL SEVEN-DAY MINIMUM	6.9	Aug 7	2.9	Aug 9	0.00	Aug 8 2000
MAXIMUM PEAK FLOW			11400	Dec 14	52700	Jun 8 1974
MAXIMUM PEAK STAGE			18.46	Dec 14	24.97	Jun 8 1974
INSTANTANEOUS LOW FLOW			2.3	Aug 12	0.00	Aug 9 1964
ANNUAL RUNOFF (AC-FT)	834300		531400		321500	
ANNUAL RUNOFF (CFSM)	2.99		1.91		1.15	
ANNUAL RUNOFF (INCHES)	40.64		25.88		15.66	
10 PERCENT EXCEEDS	2910		1910		1250	
50 PERCENT EXCEEDS	275		216		96	
90 PERCENT EXCEEDS	14		6.9		6.0	



RED RIVER BASIN

389

07362500 MORO CREEK NEAR FORDYCE

LOCATION.--Lat 33°47'32", long 92°20'00", in NW1/4NW1/4 sec.3, T.11 S., R.12 W., Calhoun-Cleveland County line, Hydrologic Unit 08040201, on downstream side of bridge on State Highway 8, 5.0 mi southeast of Fordyce.

DRAINAGE AREA.--240 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1951 to September 1983. October 2001 to current year. Annual maximum 1984-2001.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.50	19	1340	90	378	129	2020	39	2090	13	2.3	0.09
2	0.33	18	1090	80	281	116	3520	39	1800	26	1.8	0.02
3	0.21	18	987	72	245	115	3010	340	1250	49	1.4	0.00
4	0.12	17	1120	66	262	113	1820	1550	859	34	1.0	0.00
5	0.09	16	990	64	279	127	1160	1360	402	21	0.70	0.00
6	0.10	16	799	96	304	149	869	1050	125	15	0.45	0.00
7	0.03	15	672	128	433	144	629	766	65	11	0.29	0.00
8	0.00	16	634	166	460	119	424	573	48	9.2	0.16	0.00
9	0.00	16	583	127	454	106	373	348	41	9.0	0.08	0.00
10	0.02	17	515	124	451	103	362	1680	105	6.1	0.02	0.00
11	143	17	428	118	444	118	346	2080	123	6.5	0.00	0.00
12	620	18	664	106	415	886	325	1330	80	6.5	0.00	0.00
13	769	18	1710	93	332	1560	271	1080	55	38	0.00	0.00
14	779	19	3540	81	232	2250	192	956	91	73	0.00	0.00
15	716	20	4370	72	163	3200	137	814	193	28	0.00	0.00
16	855	19	3890	63	126	2260	105	640	269	16	0.54	0.00
17	1070	18	6680	58	107	1520	93	649	291	15	29	0.00
18	936	18	6240	58	94	2980	80	741	302	28	23	0.00
19	814	17	5970	202	89	9950	66	515	215	15	12	0.00
20	701	18	3970	344	315	8610	57	384	93	10	7.3	1.2
21	515	18	2210	322	514	5670	51	347	50	7.9	4.5	38
22	241	17	1480	269	562	4210	59	237	37	6.3	3.1	34
23	99	17	1120	218	587	3260	54	120	29	6.1	2.1	13
24	61	17	912	241	643	2140	45	70	23	5.2	1.7	7.2
25	46	19	690	314	668	1390	39	49	20	5.1	1.6	4.5
26	37	22	436	334	611	1100	47	39	20	4.3	1.5	3.2
27	32	40	249	369	399	839	66	33	20	3.3	1.1	2.6
28	27	92	175	368	196	573	64	50	18	3.0	0.78	2.0
29	24	845	140	419	---	354	50	381	16	3.0	0.47	1.6
30	21	1300	116	494	---	409	41	1350	15	2.7	0.29	1.2
31	19	---	101	505	---	1640	---	1980	---	2.7	0.17	---
TOTAL	8526.40	2737	53821	6061	10044	56140	16375	21590	8745	478.9	97.35	108.61
MEAN	275.0	91.23	1736	195.5	358.7	1811	545.8	696.5	291.5	15.45	3.140	3.620
MAX	1070	1300	6680	505	668	9950	3520	2080	2090	73	29	38
MIN	0.00	15	101	58	89	103	39	33	15	2.7	0.00	0.00
AC-FT	16910	5430	106800	12020	19920	111400	32480	42820	17350	950	193	215
CFSM	1.15	0.38	7.23	0.81	1.49	7.55	2.27	2.90	1.21	0.06	0.01	0.02
IN.	1.32	0.42	8.34	0.94	1.56	8.70	2.54	3.35	1.36	0.07	0.02	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2002, BY WATER YEAR (WY)

MEAN	18.56	83.55	312.2	310.9	471.4	568.6	542.2	477.5	123.1	33.65	15.42	23.48
MAX	211	796	1739	1348	1188	1811	1935	2336	930	447	249	560
(WY)	2002	1975	2002	1979	1957	2002	1957	1958	1974	1963	1971	1974
MIN	0.000	0.000	0.70	1.34	21.7	19.1	15.6	10.4	0.077	0.006	0.000	0.000
(WY)	1953	1954	1956	1956	1971	1954	1971	1965	1977	1952	1952	1953

RED RIVER BASIN

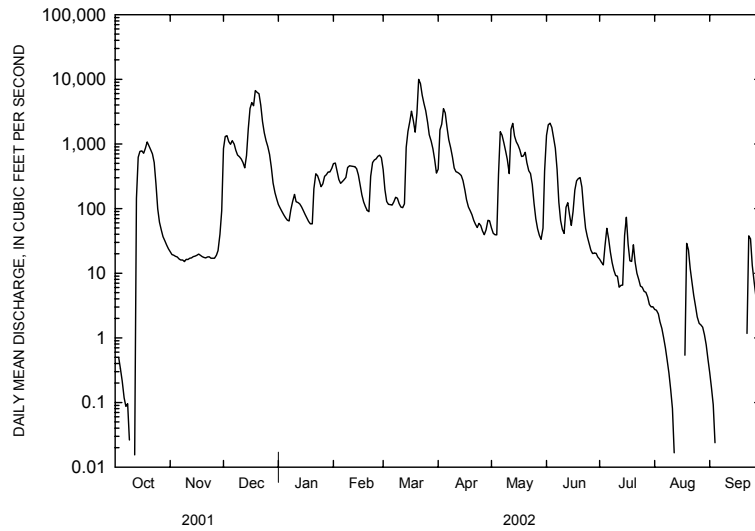
07362500 MORO CREEK NEAR FORDYCE--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1952 - 2002

ANNUAL TOTAL	184724.26		
ANNUAL MEAN	506.1		245.9
HIGHEST ANNUAL MEAN			594 1979
LOWEST ANNUAL MEAN			41.6 1972
HIGHEST DAILY MEAN	9950	Mar 19	23600 May 2 1958
LOWEST DAILY MEAN	0.00	Oct 8	0.00 Oct 3 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 3	0.00 Oct 3 1951
MAXIMUM PEAK FLOW	11500	Mar 19	26800 May 2 1958
MAXIMUM PEAK STAGE	14.37	Mar 19	16.47 May 2 1958
INSTANTANEOUS LOW FLOW	0.00	at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	366400		178100
ANNUAL RUNOFF (CFSM)	2.11		1.02
ANNUAL RUNOFF (INCHES)	28.63		13.92
10 PERCENT EXCEEDS	1340		701
50 PERCENT EXCEEDS	90		15
90 PERCENT EXCEEDS	0.26		0.00





RED RIVER BASIN

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07362587 ALUM FORK SALINE RIVER NEAR REFORM

LOCATION.--Lat 34°47'51", long 92°56'00", in NW1/4NE1/4 sec.29, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, on left bank 100 ft above low-water bridge on forest road, 5.7 mi west of Reform.

DRAINAGE AREA.--27.0 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	1.1	54	5.7	255	14	175	5.1	3.9	0.16	2.0	0.73
2	0.07	1.1	24	5.3	126	31	110	4.8	3.2	0.14	1.8	0.58
3	0.03	1.0	13	5.0	83	39	69	4.8	2.7	0.11	1.4	0.46
4	0.01	1.0	10	4.9	53	33	48	4.8	2.4	0.09	1.1	0.38
5	0.06	0.99	8.4	5.3	38	28	35	4.4	2.1	0.07	0.88	0.28
6	0.07	0.92	9.9	12	34	23	26	4.1	1.9	0.04	0.71	0.21
7	0.03	0.89	21	12	29	29	22	3.6	1.6	0.01	0.57	0.14
8	0.00	0.87	38	11	35	25	290	3.3	1.4	0.00	0.45	0.09
9	0.00	0.85	22	11	46	267	143	6.2	1.4	0.00	0.34	0.07
10	0.00	0.79	14	10	38	148	88	12	1.5	0.00	0.21	0.04
11	3.8	0.79	11	9.3	30	198	59	13	3.0	0.00	0.13	0.01
12	7.2	0.79	136	8.5	26	762	41	11	2.6	0.02	0.09	0.00
13	66	0.79	162	8.1	19	191	29	178	1.9	0.00	0.08	0.00
14	19	0.79	138	7.6	15	120	22	71	1.5	24	0.71	0.00
15	9.2	0.79	102	6.9	13	92	16	32	1.2	6.6	1.1	0.00
16	6.5	0.79	1130	6.4	12	83	13	18	1.1	3.0	1.0	0.00
17	5.2	0.78	1250	6.1	11	59	18	19	0.97	14	0.74	0.00
18	4.1	0.75	208	6.2	9.7	50	12	16	0.84	21	0.60	0.00
19	e3.3	0.77	114	13	102	530	10	11	0.71	42	0.49	0.00
20	e2.6	0.72	64	13	192	1040	9.4	9.0	0.58	13	0.38	0.19
21	e1.8	0.67	41	13	95	204	8.5	7.8	0.46	7.9	0.26	0.04
22	e1.8	0.68	30	58	57	124	7.6	6.5	0.38	5.6	0.17	0.00
23	e2.0	0.72	21	230	40	88	7.0	5.5	0.27	4.6	0.11	0.00
24	e1.7	1.1	14	246	29	63	6.8	4.8	0.24	7.0	0.07	0.00
25	e1.4	1.1	11	206	21	52	5.9	4.2	0.30	6.0	13	0.00
26	1.2	1.2	10	116	15	126	5.9	3.8	0.30	4.6	5.9	0.00
27	1.2	1.2	9.2	73	12	80	7.6	3.7	0.29	3.6	3.2	0.00
28	1.2	287	8.4	48	11	59	7.6	5.5	0.30	3.0	2.2	0.00
29	1.2	340	7.5	34	---	45	6.3	5.4	0.21	2.4	1.5	0.00
30	1.1	176	6.6	26	---	81	5.7	5.1	0.17	2.1	1.1	0.00
31	1.1	---	6.0	287	---	340	---	4.8	---	1.9	0.90	---
TOTAL	142.97	826.94	3694.0	1504.3	1446.7	5024	1304.3	488.2	39.42	172.94	43.19	3.22
MEAN	4.612	27.56	119.2	48.53	51.67	162.1	43.48	15.75	1.314	5.579	1.393	0.107
MAX	66	340	1250	287	255	1040	290	178	3.9	42	13	0.73
MIN	0.00	0.67	6.0	4.9	9.7	14	5.7	3.3	0.17	0.00	0.07	0.00
AC-FT	284	1640	7330	2980	2870	9970	2590	968	78	343	86	6.4
CFSM	0.17	1.02	4.41	1.80	1.91	6.00	1.61	0.58	0.05	0.21	0.05	0.00
IN.	0.20	1.14	5.09	2.07	1.99	6.92	1.80	0.67	0.05	0.24	0.06	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

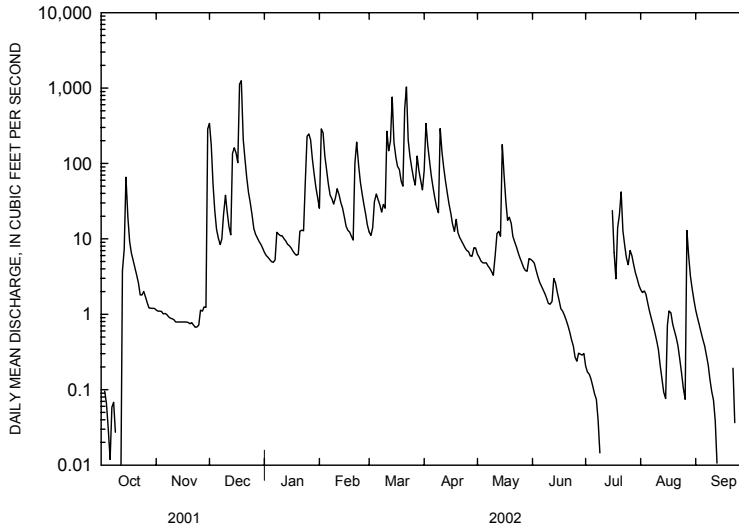
MEAN	21.75	57.54	101.8	75.75	80.18	99.13	79.03	46.34	22.80	4.304	1.852	2.033
MAX	77.5	222	336	135	228	265	296	157	120	24.0	18.3	10.7
(WY)	1997	1997	1991	1991	2001	1990	1991	1990	2000	1994	1994	1996
MIN	0.000	2.22	1.37	31.7	8.81	37.8	8.10	1.18	0.46	0.024	0.000	0.000
(WY)	2001	1990	1990	1996	1996	1996	1992	1992	2002	1998	1991	1995

RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	17543.48		14690.18			
ANNUAL MEAN	48.06		40.25		49.24	
HIGHEST ANNUAL MEAN					84.8	1991
LOWEST ANNUAL MEAN					19.8	1996
HIGHEST DAILY MEAN	2140	Feb 16	1250	Dec 17	5800	Dec 21 1990
LOWEST DAILY MEAN	0.00	Jul 26	0.00	Oct 8	0.00	Aug 21 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 6	0.00	Sep 12	0.00	Aug 21 1990
MAXIMUM PEAK FLOW			5340	Dec 17	13500	Dec 21 1990
MAXIMUM PEAK STAGE			11.80	Dec 17	15.30	Dec 21 1990
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	34800		29140		35670	
ANNUAL RUNOFF (CFSM)	1.78		1.49		1.82	
ANNUAL RUNOFF (INCHES)	24.17		20.24		24.78	
10 PERCENT EXCEEDS	114		102		101	
50 PERCENT EXCEEDS	7.4		5.5		8.8	
90 PERCENT EXCEEDS	0.00		0.07		0.00	

<sup>e</sup>Estimated



RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, PH DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	
FEB	05...	0900	81213	80513	55	5	3.5	758	11.2	91	6.5	18	6.5
MAR	12...	0630	81213	80513	913	60	16	760	11.8	99	6.0	18	7.6
	20...	1230	81213	80513	601	60	8.2	760	10.8	99	6.1	18	11.4
MAY	30...	0945	80020	80513	6.6	15	--	758	8.2	91	6.4	21	20.3
AUG	28...	0945	81213	80513	2.2	20	4.0	765	7.1	83	6.4	23	23.4

Date	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	
FEB	05...	5	.88	.74	.30	.2	1.0	28	4	1.40	<.1	5.30
MAR	12...	6	1.10	.85	.50	.1	.8	20	2	.80	<.1	4.50
	20...	6	1.00	.78	.40	.1	.8	22	3	.90	<.1	4.70
MAY	30...	7	1.01	.978	.27	.2	1.09	26	6	1.35	<.1	4.7
AUG	28...	8	1.50	1.10	.40	.1	.7	15	9	1.40	<.1	4.20

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	
FEB	05...	2.30	.02	2.52	17	14	.025	.40	.03	--	--	.014
MAR	12...	2.70	.04	66.6	27	13	.010	.50	.01	.02	.080	.021
	20...	2.60	.03	32.5	20	13	.005	<.20	.01	--	--	.012
MAY	30...	1.5	.04	.47	26	15	<.015	E.09	--	--	--	<.013
AUG	28...	1.10	.02	.10	16	16	.004	.20	.01	--	--	.00

Date	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
FEB	05...	--	<.001	.38	.41	--	<.02	<.001	<.002	2.3	1.7	1.8
MAR	12...	.010	.003	.49	.52	.006	--	.002	.002	4.1	8.1	8.8
	20...	--	<.001	--	--	.006	--	.002	.003	5.5	6.7	6.9
MAY	30...	--	<.002	--	--	--	--	<.007	.005	4.5	1.3	1.6
AUG	28...	--	<.001	.20	.20	--	--	<.001	.002	6.3	2.7	2.6

## RED RIVER BASIN

## 07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
FEB 05...	E11	3	4.6	46	88	2	2	89	6.0	.89
MAR 12...	E150	500	--	204	343	10	22	81	25	61.6
MAR 20...	E60	410	--	129	310	5	11	76	16	26.0
MAY 30...	E4	E181	--	63	150	4.5	5.5	88	8.0	.14
AUG 28...	110	100	--	140	423	12	13	74	4.0	.02

Remark codes used in this report:

< -- Less than  
E -- Estimated value

RED RIVER BASIN

395

07362590 LAKE WINONA AT REFORM

LOCATION.--Lat 34°47'51", long 92°50'43", in SE1/4SE1/4 sec.19, T.2 N., R.17 W., Saline County, Hydrologic Unit 08040203, at dam on Lake Winona at Reform.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002.

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	RESERVOIR DEPTH (FEET) (72025)	SAMPLING DEPTH (FEET) (00003)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
FEB											
05...	1033	80513	80513	85.0	1.0	758	11.0	93	7.2	17	7.7
05...	1034	80513	80513	85.0	5.10	758	11.0	93	7.1	17	7.7
05...	1035	81213	80513	85.0	6.00	758	11.0	93	7.1	17	7.7
05...	1036	80513	80513	85.0	10.2	758	10.9	92	7.1	17	7.7
05...	1037	80513	80513	85.0	15.1	758	10.9	92	7.0	17	7.7
05...	1038	80513	80513	85.0	19.9	758	10.9	92	6.9	17	7.7
05...	1039	80513	80513	85.0	24.9	758	10.9	92	6.8	17	7.7
05...	1040	80513	80513	85.0	29.9	758	10.8	91	6.8	17	7.7
05...	1041	80513	80513	85.0	35.1	758	10.9	92	6.8	17	7.7
05...	1042	80513	80513	85.0	40.1	758	10.8	91	6.8	17	7.7
05...	1043	80513	80513	85.0	45.1	758	10.6	89	6.8	17	7.7
05...	1044	80513	80513	85.0	50.1	758	10.5	88	6.7	17	7.6
05...	1045	80513	80513	85.0	55.1	758	10.3	87	6.7	17	7.5
05...	1046	80513	80513	85.0	60.0	758	10.3	86	6.6	17	7.5
05...	1047	80513	80513	85.0	65.0	758	10.2	86	6.6	17	7.5
05...	1048	80513	80513	85.0	69.8	758	10.2	86	6.5	17	7.5
05...	1049	80513	80513	85.0	74.9	758	10.2	85	6.5	17	7.4
05...	1050	80513	80513	85.0	80.1	758	10.0	84	6.5	17	7.3
05...	1051	80513	80513	85.0	85.1	758	10.0	83	6.5	21	7.2
MAY											
31...	0849	80513	80513	83.0	1.60	760	9.0	106	6.5	17	23.3
31...	0851	80020	80513	83.0	3.10	760	8.9	105	6.6	17	23.2
31...	0852	80513	80513	83.0	4.90	760	8.9	105	6.7	17	23.2
31...	0853	80513	80513	83.0	10.0	760	8.8	103	6.7	17	23.1
31...	0855	80513	80513	83.0	13.1	760	9.2	106	6.8	17	22.3
31...	0856	80513	80513	83.0	14.0	760	9.3	106	6.8	17	21.6
31...	0857	80513	80513	83.0	15.0	760	9.4	105	6.9	17	20.9
31...	0858	80513	80513	83.0	16.0	760	9.2	102	6.9	17	20.3
31...	0859	80513	80513	83.0	17.0	760	8.3	89	6.8	17	18.7
31...	0900	80513	80513	83.0	18.0	760	7.4	78	6.6	17	17.4
31...	0901	80513	80513	83.0	19.0	760	7.2	73	6.5	17	15.8
31...	0902	80513	80513	83.0	20.0	760	7.2	72	6.5	16	14.8
31...	0903	80513	80513	83.0	21.1	760	7.3	71	6.4	16	13.8
31...	0904	80513	80513	83.0	22.0	760	7.3	70	6.3	16	13.1
31...	0905	80513	80513	83.0	23.0	760	7.3	69	6.3	16	12.6
31...	0906	80513	80513	83.0	25.0	760	7.6	70	6.3	16	11.2
31...	0907	80513	80513	83.0	28.0	760	7.8	71	6.3	16	10.6
31...	0908	80513	80513	83.0	30.0	760	7.9	71	6.3	16	10.4
31...	0909	80513	80513	83.0	35.0	760	8.2	73	6.2	16	9.8
31...	0910	80513	80513	83.0	40.1	760	8.2	72	6.2	16	9.5
31...	0911	80513	80513	83.0	45.2	760	8.5	74	6.2	16	9.3
31...	0912	80513	80513	83.0	50.0	760	8.6	74	6.2	16	9.1
31...	0913	80513	80513	83.0	55.1	760	8.6	74	6.2	16	8.9
31...	0914	80513	80513	83.0	60.0	760	8.2	71	6.1	16	8.8
31...	0915	80513	80513	83.0	65.1	760	7.8	67	6.1	16	8.7
31...	0916	80513	80513	83.0	70.2	760	7.5	65	6.0	17	8.6
31...	0917	80513	80513	83.0	75.0	760	7.6	65	6.0	17	8.5
31...	0918	80513	80513	83.0	80.1	760	7.4	63	6.0	17	8.5
31...	0919	80513	80513	83.0	83.1	760	6.3	54	6.0	19	8.5
AUG											
28...	1111	80513	80513	76.0	1.20	766	7.0	90	6.8	20	28.1
28...	1112	81213	80513	76.0	3.00	766	7.0	90	6.9	20	28.1
28...	1113	80513	80513	76.0	5.10	766	7.0	90	7.0	20	28.1
28...	1114	80513	80513	76.0	10.0	766	6.7	85	7.0	20	28.0
28...	1115	80513	80513	76.0	15.0	766	7.3	92	6.7	20	27.2
28...	1117	80513	80513	76.0	16.1	766	8.3	99	6.4	19	24.6
28...	1118	80513	80513	76.0	17.1	766	9.1	102	6.3	19	21.1
28...	1119	80513	80513	76.0	17.9	766	8.9	94	6.2	18	18.4
28...	1120	80513	80513	76.0	19.1	766	7.7	78	6.0	18	16.2
28...	1121	80513	80513	76.0	20.1	766	6.6	65	5.9	18	14.7
28...	1122	80513	80513	76.0	22.1	766	5.7	55	5.7	18	13.6
28...	1124	80513	80513	76.0	24.1	766	4.5	42	5.6	18	12.3
28...	1125	80513	80513	76.0	25.0	766	4.4	40	5.6	18	11.9
28...	1126	80513	80513	76.0	29.9	766	3.6	32	5.5	19	10.6
28...	1127	81213	80513	76.0	35.0	766	3.9	34	5.5	18	9.9
28...	1128	80513	80513	76.0	40.0	766	4.4	38	5.5	18	9.4
28...	1129	80513	80513	76.0	45.1	766	5.1	44	5.6	18	9.2
28...	1130	80513	80513	76.0	50.0	766	5.2	44	5.6	18	8.9
28...	1131	80513	80513	76.0	55.2	766	5.4	46	5.6	18	8.7
28...	1132	80513	80513	76.0	60.1	766	4.5	39	5.6	20	8.6
28...	1133	80513	80513	76.0	65.0	766	4.1	35	5.6	20	8.5
28...	1134	80513	80513	76.0	70.1	766	3.9	33	5.6	21	8.4
28...	1135	81213	80513	76.0	73.1	766	3.8	32	5.6	21	8.4
28...	1136	80513	80513	76.0	75.3	766	3.3	28	5.7	22	8.4

RED RIVER BASIN

07362590 LAKE WINONA AT REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002.

Date	Time	SAM-PLING DEPTH (FEET) (00003)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TUR-BID-ITY (NTU) (00076)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)
FEB 05...	1035	6.00	5	2.00	3.3	7	1.30	.80	.40	.2
MAY 31...	0851	3.10	10	3.80	--	6	1.12	.826	.35	.2
AUG 28...	1112	3.00	5	2.50	1.1	7	1.30	.86	.40	.1
28...	1127	35.0	10	--	2.4	6	1.20	.85	.40	.1
28...	1135	73.1	10	--	5.3	7	1.30	.90	.40	.1

Date	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
FEB 05...	.9	22	4	1.10	<.1	4.30	2.40	.02	15
MAY 31...	.93	23	10	1.16	<.1	2.7	2.2	.03	22
AUG 28...	.5	13	10	1.20	<.1	2.20	2.40	.02	17
28...	.5	13	4	1.20	<.1	2.60	2.50	.02	16
28...	.9	21	9	1.20	<.1	5.50	2.40	.02	16

Date	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS N) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
FEB 05...	14	.011	.30	.01	.043	<.001	.29	.34	<.001
MAY 31...	16	<.015	.16	--	<.013	<.002	--	--	<.007
AUG 28...	15	<.002	<.20	--	<.002	<.001	--	--	<.001
28...	12	<.002	.20	--	.016	<.001	--	.22	<.001
28...	19	.017	<.20	.02	.132	<.001	--	--	<.001

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
FEB 05...	<.002	.6	3.5	4.1	E2	26	<.1	163	286	95	104
MAY 31...	.005	4.9	2.8	3.4	E10	<1	2.3	11	50	<2.0	6.2
AUG 28...	.007	2.3	3.0	2.7	E1	E8	<.1	4	39	1	10
28...	.009	26	2.9	2.8	--	--	--	15	67	35	52
28...	.003	40	3.0	2.6	--	--	--	101	570	541	541

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

RED RIVER BASIN

397

07362693 MIDDLE FORK SALINE RIVER NEAR OWENSVILLE

LOCATION.--Lat 34°37'50", long 92°49'38", in SW1/4NE1/4NE1/4 sec.2, T.1 S., R.17 W., Saline County, Hydrologic Unit 08040203, on Vance Road, approximately 2.0 mi north of Owensville, off State Hwy 5, 17 mi west of Benton.

DRAINAGE AREA.--93.9 mi<sup>2</sup>.

PERIOD OF RECORD.--May 2002 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

EXTREMES.--Maximum discharge during period June to September 2002, 1420 ft<sup>3</sup>/s July 17, gage height 7.55 ft; minimum 2.9 ft<sup>3</sup>/s Sept. 14-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

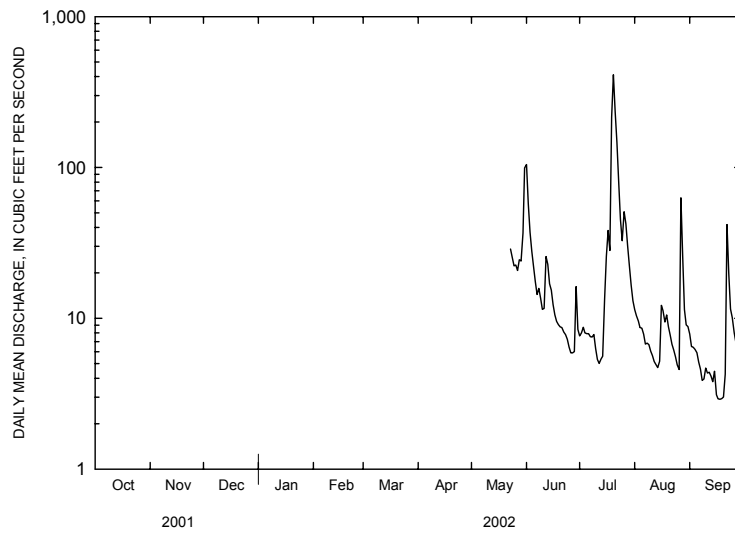
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	37	8.7	9.6	6.4
2	---	---	---	---	---	---	---	---	28	8.0	8.7	6.2
3	---	---	---	---	---	---	---	---	22	7.9	8.6	5.9
4	---	---	---	---	---	---	---	---	17	7.9	7.8	5.1
5	---	---	---	---	---	---	---	---	14	7.6	6.7	4.6
6	---	---	---	---	---	---	---	---	16	7.5	6.8	3.9
7	---	---	---	---	---	---	---	---	14	7.8	6.7	4.0
8	---	---	---	---	---	---	---	---	11	6.3	6.1	4.7
9	---	---	---	---	---	---	---	---	12	5.3	5.7	4.3
10	---	---	---	---	---	---	---	---	26	5.0	5.2	4.4
11	---	---	---	---	---	---	---	---	23	5.4	4.9	4.1
12	---	---	---	---	---	---	---	---	17	5.6	4.7	3.8
13	---	---	---	---	---	---	---	---	15	13	5.2	4.5
14	---	---	---	---	---	---	---	---	12	26	12	3.1
15	---	---	---	---	---	---	---	---	11	38	11	2.9
16	---	---	---	---	---	---	---	---	9.5	28	9.4	2.9
17	---	---	---	---	---	---	---	---	9.1	216	11	2.9
18	---	---	---	---	---	---	---	---	8.8	411	8.8	3.0
19	---	---	---	---	---	---	---	---	8.7	235	7.7	4.3
20	---	---	---	---	---	---	---	---	8.1	147	6.7	4.2
21	---	---	---	---	---	---	---	29	7.8	76	6.2	20
22	---	---	---	---	---	---	---	25	7.3	45	5.6	12
23	---	---	---	---	---	---	---	22	6.4	33	4.9	10
24	---	---	---	---	---	---	---	23	5.9	51	4.6	8.0
25	---	---	---	---	---	---	---	21	5.9	42	63	7.0
26	---	---	---	---	---	---	---	24	6.0	30	26	7.2
27	---	---	---	---	---	---	---	24	16	22	11	6.3
28	---	---	---	---	---	---	---	37	8.4	17	9.0	5.9
29	---	---	---	---	---	---	---	99	7.6	13	8.8	5.5
30	---	---	---	---	---	---	---	104	8.0	11	7.9	4.7
31	---	---	---	---	---	---	---	58	---	10	6.5	---
MEAN	---	---	---	---	---	---	---	---	13.3	49.9	9.90	6.99
MAX	---	---	---	---	---	---	---	---	37	411	63	42
MIN	---	---	---	---	---	---	---	---	5.9	5.0	4.6	2.9

RED RIVER BASIN

07362693 MIDDLE FORK SALINE RIVER NEAR OWENSVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	13.3	49.9	9.90	6.99
MAX	---	---	---	---	---	---	---	---	13.3	49.9	9.90	6.99
(WY)	---	---	---	---	---	---	---	---	2002	2002	2002	2002
MIN	---	---	---	---	---	---	---	---	13.3	49.9	9.90	6.99
(WY)	---	---	---	---	---	---	---	---	2002	2002	2002	2002





RED RIVER BASIN

399

07363000 SALINE RIVER AT BENTON

LOCATION.--Lat 34°34'05", long 92°36'37", in SW1/4NE1/4 sec.9, T.2 S., R.15 W., Saline County, Hydrologic Unit 08040203, on left bank 0.8 mi west of Benton, 3.0 mi downstream from confluence of North Fork and Alum Fork, and at mile 198.1.

DRAINAGE AREA.--550 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to September 1979, October 2000 to current year. Annual maximum 1980-2000. Gage-height records collected at site 0.4 mi downstream since July 1938 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR Ark. 1973: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 259.9 above NGVD of 1929. July 6, 1938, to July 29, 1948, and Feb. 14 to Mar. 24, 1950, nonrecording gage; July 30, 1948, to Feb. 13, 1950, and Mar. 25, 1950, to July 13, 1950, water-stage recorder, all at site 0.4 mi downstream at datum 3.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Little Rock diverts about 35 ft<sup>3</sup>/s daily from Lake Winona on Alum Fork for municipal use and discharges sewage effluent into Arkansas River. Benton diverts about 7.5 ft<sup>3</sup>/s daily for municipal use just upstream from station. At times low flow is augmented by releases from Lake Norrell.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1927 reached a stage of about 32.0 ft, at former site and datum (from information by State Highway and Transportation Department), or about 30.5 ft, at present site and datum, discharge, about 110,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	15	873	142	2800	253	3960	106	209	27	67	21
2	18	18	348	135	1700	655	2290	110	157	25	66	15
3	20	20	240	103	1130	871	1510	151	134	30	61	22
4	24	22	179	77	774	571	1020	195	146	29	44	40
5	32	22	136	97	524	414	718	171	143	23	53	33
6	31	21	104	119	444	349	565	136	103	28	50	18
7	30	22	100	183	416	339	484	92	47	43	53	10
8	28	21	1050	206	501	408	759	77	47	40	68	12
9	28	20	547	196	545	1420	1660	105	33	32	40	14
10	41	20	276	183	469	2180	1090	477	106	38	26	19
11	52	22	197	166	389	2040	765	588	177	26	14	20
12	31	19	1580	151	338	10300	587	340	132	34	12	20
13	94	15	4710	140	300	5260	490	2640	90	41	30	20
14	90	17	1840	127	266	2580	438	1430	90	80	35	18
15	84	18	1150	108	240	1700	400	588	69	93	34	14
16	56	18	7550	112	226	2420	365	381	55	82	54	16
17	37	17	25500	87	216	1700	341	315	48	112	45	15
18	29	16	6340	96	214	1730	340	324	39	479	36	14
19	23	18	2230	166	1200	2420	313	293	36	393	41	20
20	21	18	1300	275	5420	12100	285	239	27	275	51	160
21	20	17	808	228	2180	6400	250	198	19	197	47	152
22	20	20	555	233	1270	2730	182	169	18	147	35	115
23	19	19	444	644	806	1750	156	148	18	118	25	69
24	18	22	364	3330	549	1270	153	119	14	126	16	53
25	18	21	306	2530	413	972	152	82	30	119	142	38
26	18	29	276	1450	344	2280	163	101	35	132	115	28
27	18	34	232	887	306	1610	154	173	41	108	124	24
28	18	233	219	584	264	1120	149	193	30	78	88	22
29	18	2880	200	437	---	857	129	287	35	76	59	27
30	17	2530	172	369	---	2340	124	395	38	91	34	33
31	15	---	151	483	---	7200	---	287	---	67	27	---
TOTAL	990	6184	59977	14044	24244	78239	19992	10910	2166	3189	1592	1082
MEAN	31.94	206.1	1935	453.0	865.9	2524	666.4	351.9	72.20	102.9	51.35	36.07
MAX	94	2880	25500	3330	5420	12100	3960	2640	209	479	142	160
MIN	15	15	100	77	214	253	124	77	14	23	12	10
AC-FT	1960	12270	119000	27860	48090	155200	39650	21640	4300	6330	3160	2150
CFSM	0.06	0.37	3.52	0.82	1.57	4.59	1.21	0.64	0.13	0.19	0.09	0.07
IN.	0.07	0.42	4.06	0.95	1.64	5.29	1.35	0.74	0.15	0.22	0.11	0.07

RED RIVER BASIN

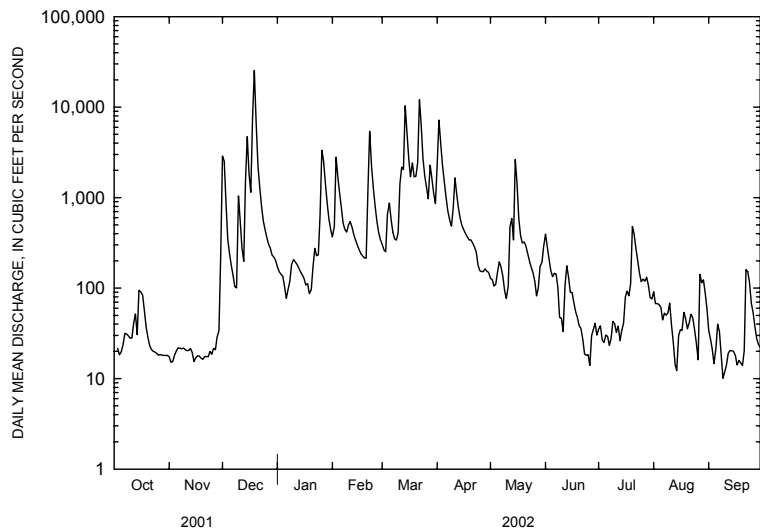
07363000 SALINE RIVER AT BENTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-79, 2001-02, BY WATER YEAR (WY)

MEAN	182.5	671.0	982.0	1057	1341	1509	1394	1222	440.2	152.6	131.7	188.5
MAX	1415	3330	2529	3512	4935	4154	4631	5376	3930	888	951	1103
(WY)	1971	1974	1960	1969	1956	1973	1973	1968	1974	1951	1966	1973
MIN	16.0	49.1	72.3	81.3	242	215	197	114	33.4	3.22	3.59	1.28
(WY)	1957	1954	1966	1964	1963	1954	1972	1959	1954	1954	1954	1954

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1951-79, 2001-02

ANNUAL TOTAL	255194.8		222609		769.5	
ANNUAL MEAN	699.2		609.9		1646	
HIGHEST ANNUAL MEAN					282	
LOWEST ANNUAL MEAN					1963	
HIGHEST DAILY MEAN	25500	Dec 17	25500	Dec 17	66000	Jan 30 1969
LOWEST DAILY MEAN	5.0	Sep 26	10	Sep 7	0.00	Jul 23 1954
ANNUAL SEVEN-DAY MINIMUM	13	Aug 30	16	Sep 6	0.04	Jul 23 1954
MAXIMUM PEAK FLOW			30400	Dec 17	100000	Jan 30 1969
MAXIMUM PEAK STAGE			21.50	Dec 17	29.68	Jan 30 1969
INSTANTANEOUS LOW FLOW			6.7	Aug 12	0.00	at times
ANNUAL RUNOFF (AC-FT)	506200		441500		557500	
ANNUAL RUNOFF (CFSM)	1.27		1.11		1.40	
ANNUAL RUNOFF (INCHES)	17.26		15.06		19.01	
10 PERCENT EXCEEDS	1420		1590		1560	
50 PERCENT EXCEEDS	149		126		206	
90 PERCENT EXCEEDS	18		19		28	



RED RIVER BASIN

401

07363200 SALINE RIVER NEAR SHERIDAN

LOCATION.--Lat 34°06'56", long 92°24'21", in NE1/4NW1/4 sec.15, T.7 S., R.13 W., Grant County, Hydrologic Unit 08040203, on downstream side of bridge on U.S. Highway 167, 13.5 mi south of Sheridan.

DRAINAGE AREA.--1,129 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to September 1982, October 2001 to current year. Annual maximum 1983-2001.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	76	2880	709	2030	1170	10400	792	776	89	117	98
2	18	72	3720	645	1980	1060	13600	734	717	98	119	79
3	24	69	5580	596	2410	1310	12500	620	570	99	119	66
4	27	64	6330	552	2930	1800	10100	1500	451	99	110	57
5	28	60	5280	525	3310	2100	7670	2460	374	97	104	51
6	25	58	3280	535	3250	2110	6030	3010	327	91	97	47
7	21	59	1690	622	2590	1800	4380	2820	289	89	87	45
8	25	58	1140	759	1970	1450	3110	1940	256	84	76	45
9	43	58	1140	812	1760	1310	2210	1100	223	80	79	45
10	42	57	1470	791	1750	1390	1990	779	216	80	82	46
11	395	59	1620	713	1730	1890	2150	1520	245	82	100	42
12	1290	58	1740	649	1580	4100	2140	2400	334	82	86	39
13	1710	56	3010	595	1360	6640	1850	3030	438	104	74	36
14	2090	55	4650	547	1150	10300	1470	3180	379	108	66	34
15	2130	55	7280	507	983	13300	1210	3250	525	107	65	33
16	2040	53	10200	471	869	13100	1040	3430	523	111	81	32
17	1710	51	13200	446	793	11600	918	3550	429	202	88	32
18	1240	50	18600	428	744	12400	852	3070	314	197	102	32
19	717	55	28700	433	733	9010	848	1970	227	204	154	33
20	395	54	27600	525	1460	9720	808	1360	181	365	121	52
21	281	51	17000	750	2400	10300	727	1010	156	499	94	70
22	223	50	10600	949	3230	10700	644	752	139	418	80	129
23	190	50	7620	944	5540	13500	578	589	125	356	71	224
24	159	51	6020	1320	6970	13700	531	490	109	300	73	195
25	138	53	4470	2140	6160	9730	490	419	102	264	71	155
26	121	59	3020	2780	4520	7220	475	370	98	258	73	113
27	107	83	1920	3450	2780	5550	485	348	91	251	83	81
28	95	142	1380	4750	1610	4150	558	334	90	221	181	63
29	87	753	1100	5120	---	3470	615	395	89	191	167	52
30	82	2000	920	4100	---	3840	651	464	86	158	158	46
31	77	---	799	2850	---	6790	---	615	---	e153	129	---
TOTAL	15551	4469	203959	41013	68592	196510	91030	48301	8879	5537	3107	2072
MEAN	502	149	6579	1323	2450	6339	3034	1558	296	179	100	69.1
MAX	2130	2000	28700	5120	6970	13700	13600	3550	776	499	181	224
MIN	18	50	799	428	733	1060	475	334	86	80	65	32
AC-FT	30850	8860	404600	81350	136100	389800	180600	95810	17610	10980	6160	4110
CFSM	0.45	0.13	5.86	1.18	2.18	5.64	2.70	1.39	0.26	0.16	0.09	0.06
IN.	0.52	0.15	6.76	1.36	2.27	6.51	3.02	1.60	0.29	0.18	0.10	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971-82, 2002, BY WATER YEAR (WY)

MEAN	240	1632	2611	2100	2235	3212	3173	2048	1354	318	245	343
MAX	919	5682	6579	4775	4216	6544	10500	6308	7770	915	1177	1627
(WY)	1974	1973	2002	1973	1975	1973	1973	1979	1974	1981	1971	1973
MIN	49.9	119	233	280	618	776	452	349	77.4	55.3	30.7	45.3
(WY)	1983	1976	1982	1981	1972	1972	1972	1977	1972	1980	1972	1982

RED RIVER BASIN

07363200 SALINE RIVER NEAR SHERIDAN--CONTINUED

SUMMARY STATISTICS

FOR 2002 WATER YEAR

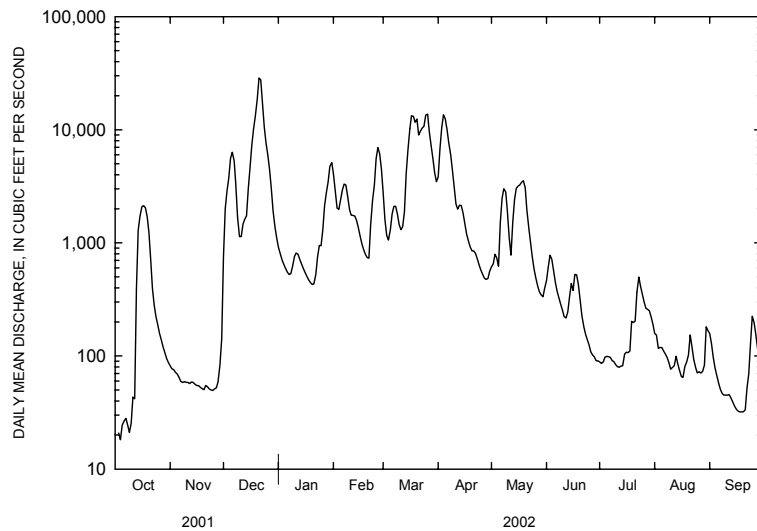
WATER YEARS 1971-82, 2002

ANNUAL TOTAL	689020			
ANNUAL MEAN	1888		1622	
HIGHEST ANNUAL MEAN			3369	1973
LOWEST ANNUAL MEAN			565	1972
HIGHEST DAILY MEAN	28700	Dec 19	55800	Jun 10 1974
LOWEST DAILY MEAN	18	Oct 2	5.5	Sep 15 1980
ANNUAL SEVEN-DAY MINIMUM	23	Oct 1	8.5	Sep 9 1980
MAXIMUM PEAK FLOW	31700	Dec 19	<sup>1</sup> 73900	Dec 28 1987
MAXIMUM PEAK STAGE	18.71	Dec 19	22.66	Dec 28 1987
INSTANTANEOUS LOW FLOW	17	Oct 2	2	
ANNUAL RUNOFF (AC-FT)	1367000		1175000	
ANNUAL RUNOFF (CFSM)	1.68		1.44	
ANNUAL RUNOFF (INCHES)	22.82		19.63	
10 PERCENT EXCEEDS	5540		4380	
50 PERCENT EXCEEDS	507		540	
90 PERCENT EXCEEDS	54		62	

<sup>1</sup>Occurred during period of computation of annual maximum only, water years 1983-01

<sup>2</sup>Undetermined

<sup>e</sup>Estimated



RED RIVER BASIN

403

07363400 HURRICANE CREEK BELOW SHERIDAN

LOCATION.--Lat 34°13'42", long 92°22'21", in SW1/4NW1/4 sec.1, T.6 S., R.13 W., Grant County, Hydrologic Unit 08040203, on downstream side of bridge on State Highway 35, 6.0 mi south of Sheridan.

DRAINAGE AREA.--261 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1995 to current year. Gage-height records 1938-40 and 1947-64 are published in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. January 1, 1938 to Dec. 31, 1940 and Jan. 1, 1947 to Nov. 29, 1948, non-recording gage at present site at datum 180.10 ft above NGVD of 1929. Nov. 30, 1948 to Dec. 31, 1964 water-stage recorder at present site and at datum then in use.

REMARKS.--Records good except estimated discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.10	3.3	1230	134	486	198	6160	74	199	e4.1	e8.5	e2.2
2	e0.10	3.2	1730	120	643	272	3850	46	132	e5.5	e9.2	e1.9
3	e0.10	2.9	1770	112	739	473	2670	338	80	e6.2	e9.0	e1.9
4	e0.10	2.6	1200	103	761	615	1920	1060	51	e5.5	e8.3	e1.7
5	e0.10	2.4	524	98	544	627	1200	1030	35	e4.4	e6.0	e1.6
6	e0.10	2.3	239	121	379	443	596	997	27	e3.0	e4.6	e1.2
7	e0.10	2.2	240	179	385	316	376	610	22	e2.4	e3.9	e1.1
8	e0.10	1.8	272	252	460	302	323	263	20	e1.2	e3.9	e1.1
9	e0.10	1.5	486	216	537	356	376	169	20	e0.80	e4.4	e1.1
10	e0.15	1.4	513	168	549	446	389	398	25	e0.80	e4.6	e1.2
11	e142	1.4	329	147	454	623	337	911	e34	e1.2	e6.2	e1.0
12	e560	1.1	513	131	352	2410	259	1040	e48	e1.1	e3.3	e1.0
13	e674	1.0	1590	116	275	4870	212	1410	e115	e3.0	e3.2	e0.80
14	e818	1.0	2780	104	226	4560	179	1400	e104	e9.5	e3.2	e0.80
15	e950	0.92	3560	94	196	3160	155	951	e212	e9.0	e3.2	e0.60
16	882	0.83	2850	86	178	2220	133	882	e96	e10	e5.8	e0.60
17	500	0.99	5660	78	171	2240	114	692	e48	e10	e6.8	e0.60
18	145	1.0	9350	74	169	2940	106	363	e30	e9.5	e9.5	e0.60
19	69	1.0	7410	90	192	3120	110	328	e18	e22	e14	e0.40
20	45	1.0	4750	171	858	4600	103	256	e14	e48	e8.5	e3.0
21	31	0.86	2330	284	1090	4380	82	161	e11	e86	e4.8	e6.8
22	23	0.80	1680	242	1320	3710	66	112	e8.7	e35	e3.3	e23
23	20	0.99	1110	181	1670	2940	53	84	e6.2	e19	e3.2	e51
24	15	1.1	659	482	1480	2150	44	64	e5.8	e13	e3.3	18
25	12	1.1	506	810	871	1470	39	50	e5.3	e13	e3.2	11
26	8.3	1.2	406	935	418	806	37	39	e5.3	e25	e4.4	10
27	6.5	1.6	339	1160	283	531	45	78	e4.4	e47	e8.3	10
28	6.2	14	281	1240	240	501	56	88	e3.3	e25	e23	10
29	5.2	596	204	892	---	438	59	94	e2.4	e14	e8.0	10
30	4.5	1100	167	489	---	1140	90	126	e2.7	e9.7	e3.3	10
31	3.8	---	149	366	---	4540	---	163	---	e8.3	e2.4	---
TOTAL	4921.55	1751.49	54827	9675	15926	57397	20139	14277	1385.1	452.20	193.3	184.20
MEAN	158.8	58.38	1769	312.1	568.8	1852	671.3	460.5	46.17	14.59	6.235	6.140
MAX	950	1100	9350	1240	1670	4870	6160	1410	212	86	23	51
MIN	0.10	0.80	149	74	169	198	37	39	2.4	0.80	2.4	0.40
AC-FT	9760	3470	108700	19190	31590	113800	39950	28320	2750	897	383	365

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002	1996	1997	1998	1999	2000	2001	2002
MEAN	43.12	85.75	416.4	353.4	566.3	780.2	566.2	159.1	150.4	35.44	24.25	14.34		
MAX	159	284	1769	723	1536	1852	2035	461	538	95.7	131	55.9		
(WY)	2002	1997	2002	1998	2001	2002	1997	2002	1997	1997	1996	1998		
MIN	0.000	1.10	12.5	13.4	32.8	102	88.8	20.7	5.63	2.19	0.000	0.000		
(WY)	1996	2000	1996	2000	2000	1996	2000	1998	1998	1998	2000	1999		

RED RIVER BASIN

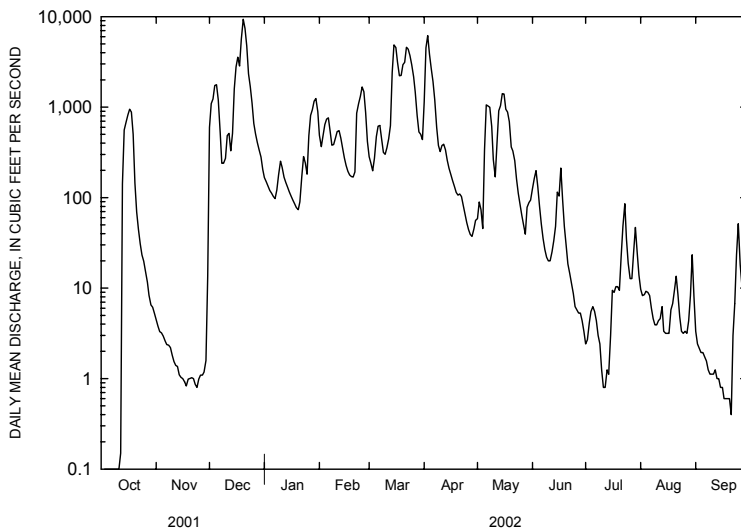
07363400 HURRICANE CREEK BELOW SHERIDAN--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	172088.47		181128.84			
ANNUAL MEAN	471.5		496.2		264.7	
HIGHEST ANNUAL MEAN					496 2002	
LOWEST ANNUAL MEAN					49.3 2000	
HIGHEST DAILY MEAN	9350	Dec 18	9350	Dec 18	20100	Apr 6 1997
LOWEST DAILY MEAN	0.00	Jun 28	0.10	Oct 1	0.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 23	0.10	Oct 1	0.00	Oct 1 1995
MAXIMUM PEAK FLOW			10200	Dec 18	<sup>1</sup> 26400	Apr 6 1997
MAXIMUM PEAK STAGE			14.38	Dec 18	16.34	Apr 6 1997
INSTANTANEOUS LOW FLOW			2		0.00	at times
ANNUAL RUNOFF (AC-FT)	341300		359300		191800	
10 PERCENT EXCEEDS	1300		1270		674	
50 PERCENT EXCEEDS	41		82		40	
90 PERCENT EXCEEDS	0.01		1.1		0.00	

<sup>1</sup>From rating curve extended above 7,500 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow

<sup>2</sup>Not determined

<sup>e</sup>Estimated



RED RIVER BASIN

405

07363500 SALINE RIVER NEAR RYE

LOCATION.--Lat 33°42'03", long 92°01'33", in SW1/4NW1/4 sec.3, T.12 S., R.9 W., Bradley County, Hydrologic Unit 08040204, near left bank on downstream side of bridge on State Highway 15, 3.6 mi southwest of Rye, 5.8 mi upstream from Hudgin Creek, and at mile 71.0.

DRAINAGE AREA.--2,102 mi².

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

REVISED RECORDS.--WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.06 ft above NGVD of 1929. Prior to May 30, 1939, non-recording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1927 reached a stage of 30.5 ft, discharge, about 73,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	146	7310	4220	4440	5400	14400	826	3420	96	191	235
2	29	139	7090	2070	4670	5510	13700	894	2590	91	158	211
3	26	134	6440	1480	4760	5080	13300	1560	1960	94	131	117
4	24	127	5840	1270	4590	3790	13400	4700	1420	95	116	89
5	26	121	5470	1160	4180	2690	15100	5890	1040	92	113	72
6	32	116	5190	1310	3990	2590	17700	5920	784	84	106	57
7	29	111	5200	1510	4340	2750	17800	5440	611	78	95	49
8	34	106	5790	1470	4610	2870	16500	5030	499	73	89	43
9	40	104	6450	1520	4720	2860	14700	4570	418	65	82	39
10	40	103	6300	1600	4640	2640	12900	5830	369	60	76	34
11	244	101	5630	1590	4260	2380	11100	9420	346	59	69	31
12	1620	100	5920	1490	3710	4090	9410	9180	369	81	68	28
13	2360	98	10100	1330	3220	6200	7530	7740	388	92	71	28
14	4050	98	12200	1190	2850	6820	5610	6740	581	91	87	29
15	4140	98	12400	1070	2470	7340	3940	5940	989	88	91	26
16	3790	96	12200	972	2060	7850	2830	5350	1030	83	138	22
17	3560	95	14900	890	1730	8450	2170	5030	976	106	188	22
18	3430	94	17400	840	1500	10300	1860	5460	922	134	112	25
19	3260	95	19700	1330	1380	14300	1580	5300	718	195	87	27
20	2920	92	23300	2240	1960	26300	1370	4990	499	226	80	41
21	2010	90	27600	2030	2660	32200	1270	4630	357	260	93	51
22	1040	91	33100	1820	3280	29000	1220	3900	258	494	123	67
23	632	90	34900	1810	3710	24600	1120	2580	207	650	106	60
24	463	92	30300	2000	3950	21700	977	1530	179	586	84	67
25	367	89	24200	2690	4090	19800	863	1060	161	582	70	191
26	298	89	19200	3050	4320	19200	791	858	156	461	64	258
27	250	119	15600	3340	4660	19600	817	809	194	345	63	215
28	217	271	13100	3600	5050	18800	811	776	177	296	56	223
29	192	3690	11100	3790	---	16600	767	883	122	283	50	120
30	172	6810	9200	3980	---	14600	792	2330	98	265	67	94
31	157	---	7040	4210	---	14700	---	3610	---	230	156	---
TOTAL	35486	13605	420170	62872	101800	361010	206328	128776	21838	6435	3080	2571
MEAN	1145	453.5	13550	2028	3636	11650	6878	4154	727.9	207.6	99.35	85.70
MAX	4140	6810	34900	4220	5050	32200	17800	9420	3420	650	191	258
MIN	24	89	5190	840	1380	2380	767	776	98	59	50	22
AC-FT	70390	26990	833400	124700	201900	716100	409300	255400	43320	12760	6110	5100
CFSM	0.54	0.22	6.45	0.96	1.73	5.54	3.27	1.98	0.35	0.10	0.05	0.04
IN.	0.63	0.24	7.44	1.11	1.80	6.39	3.65	2.28	0.39	0.11	0.05	0.05

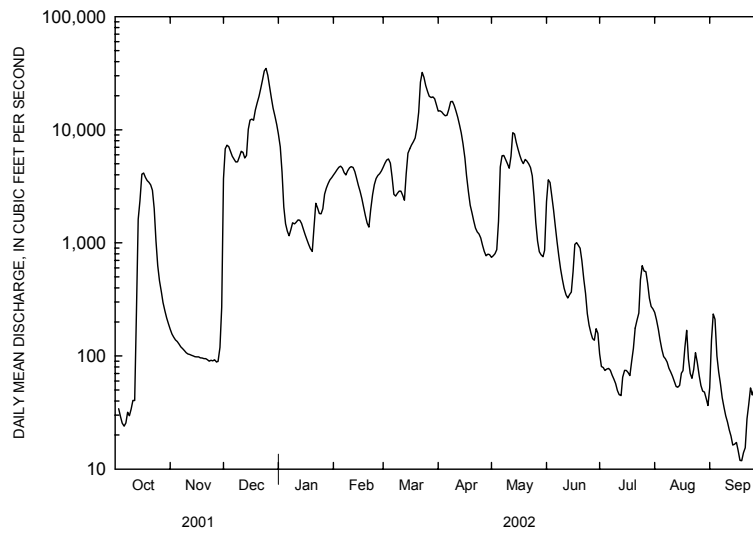
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2002, BY WATER YEAR (WY)

MEAN	496.6	1187	3031	3787	5104	5480	5274	4550	1483	575.0	280.0	333.7
MAX	10570	9690	13550	14830	16710	13920	16340	21470	11950	8191	1573	4511
(WY)	1985	1958	2002	1946	1950	1945	1973	1958	1974	1989	1971	1950
MIN	15.4	50.7	111	143	307	706	640	352	80.5	32.5	10.6	4.95
(WY)	1939	1940	1940	1956	2000	1940	1972	1992	1972	1954	1954	1954

RED RIVER BASIN

07363500 SALINE RIVER NEAR RYE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1937 - 2002	
ANNUAL TOTAL	1335368		1363971			
ANNUAL MEAN	3659		3737		2619	
HIGHEST ANNUAL MEAN					5436	1973
LOWEST ANNUAL MEAN					704	1972
HIGHEST DAILY MEAN	34900	Dec 23	34900	Dec 23	72500	May 18 1968
LOWEST DAILY MEAN	24	Oct 4	22	Sep 16	3.8	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	29	Oct 1	26	Sep 13	4.0	Sep 15 1954
MAXIMUM PEAK FLOW			35600	Dec 23	74500	May 18 1968
MAXIMUM PEAK STAGE			26.57	Dec 23	31.40	May 18 1968
INSTANTANEOUS LOW FLOW			19	Sep 16	3.5	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	2649000		2705000		1898000	
ANNUAL RUNOFF (CFSM)	1.74		1.78		1.25	
ANNUAL RUNOFF (INCHES)	23.63		24.14		16.93	
10 PERCENT EXCEEDS	10900		12300		7470	
50 PERCENT EXCEEDS	935		1040		679	
90 PERCENT EXCEEDS	82		67		65	





RED RIVER BASIN

407

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE

LOCATION.--Lat 33°51'59", long 91°39'22", in SE1/4SW1/4 sec.6, T.10 S., R.5 W., Lincoln County, Hydrologic Unit 08040205, on downstream side of bridge on State Highway 54, 1.9 mi upstream from Flat Creek, at Garrett Bridge.

DRAINAGE AREA.--380 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage 144.13 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	212	1710	2460	613	353	2880	77	366	201	65	43
2	17	142	1970	2140	582	361	2960	76	416	134	99	29
3	17	94	2140	1840	554	360	2990	299	381	88	145	21
4	17	64	2200	1550	518	345	2950	771	303	75	150	15
5	17	45	2150	1300	475	313	2830	1010	235	87	133	11
6	18	34	2020	1120	472	269	2650	1130	200	126	112	9.0
7	17	27	1880	959	495	230	2440	1160	196	133	81	9.1
8	17	23	1790	819	532	202	2270	1090	207	116	59	9.0
9	16	18	1720	695	542	184	2080	981	216	90	50	8.0
10	16	16	1630	582	519	163	1880	1030	214	65	54	7.1
11	165	14	1510	480	486	162	1690	1200	201	51	88	6.3
12	489	13	1720	394	453	378	1500	1240	186	49	111	5.6
13	825	14	2550	331	429	696	1320	1200	170	55	103	5.3
14	1230	14	3090	290	417	1000	1140	1160	150	124	105	5.2
15	1470	14	3290	269	413	1250	986	1090	131	237	136	5.3
16	1590	13	3370	251	417	1310	843	988	124	308	223	5.5
17	1660	13	3770	233	412	1280	719	889	117	324	322	5.4
18	1690	13	4080	218	390	1420	606	802	107	293	410	5.3
19	1650	12	4140	317	354	1750	496	726	95	239	469	5.4
20	1530	12	4160	491	371	2130	388	656	78	199	468	5.6
21	1380	12	4170	552	425	2570	290	589	63	172	417	6.2
22	1220	12	4180	538	446	2750	217	522	57	155	334	7.2
23	1080	12	4250	538	423	2800	163	453	52	130	240	7.2
24	962	14	4250	609	383	2780	128	380	55	107	158	7.8
25	861	15	4170	696	350	2690	104	303	62	91	108	8.8
26	767	16	4040	748	335	2630	90	238	74	94	83	9.9
27	683	25	3870	753	333	2570	81	291	104	120	97	10
28	595	152	3650	728	342	2480	66	271	197	131	137	9.7
29	506	883	3390	695	---	2350	64	244	260	118	133	8.7
30	409	1380	3100	665	---	2260	80	241	254	93	98	7.7
31	306	---	2790	641	---	2570	---	269	---	75	66	---
TOTAL	21238	3328	92750	23902	12481	42606	36901	21376	5271	4280	5254	299.3
MEAN	685.1	110.9	2992	771.0	445.8	1374	1230	689.5	175.7	138.1	169.5	9.977
MAX	1690	1380	4250	2460	613	2800	2990	1240	416	324	469	43
MIN	16	12	1510	218	333	162	64	76	52	49	50	5.2
AC-FT	42130	6600	184000	47410	24760	84510	73190	42400	10460	8490	10420	594
CFSM	1.80	0.29	7.87	2.03	1.17	3.62	3.24	1.81	0.46	0.36	0.45	0.03
IN.	2.08	0.33	9.08	2.34	1.22	4.17	3.61	2.09	0.52	0.42	0.51	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY)

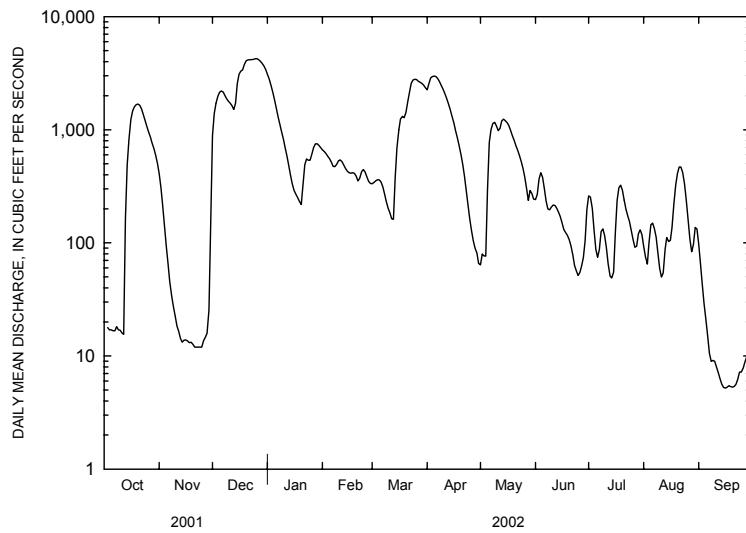
MEAN	139.8	283.5	740.9	984.2	1030	1165	916.7	545.3	262.5	315.8	158.9	54.68
MAX	693	959	2945	2748	2861	3057	2229	1791	726	2488	419	123
(WY)	2002	1988	2002	1988	1990	1997	1991	1991	1989	1989	1989	1989
MIN	1.53	3.03	146	27.5	83.0	321	162	55.3	8.58	31.5	34.3	8.87
(WY)	1996	1996	2000	2000	2000	1988	1998	1988	1988	1990	1995	2002

RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1988 - 2002	
ANNUAL TOTAL	277942		269686.3			
ANNUAL MEAN	761.5		738.9		548.1	
HIGHEST ANNUAL MEAN					966	1989
LOWEST ANNUAL MEAN					174	1996
HIGHEST DAILY MEAN	4250	Dec 23	4250	Dec 23	5210	Mar 7 1997
LOWEST DAILY MEAN	11	Sep 30	5.2	Sep 14	0.25	Oct 21 1995
ANNUAL SEVEN-DAY MINIMUM	12	Nov 17	5.3	Sep 13	0.27	Oct 20 1995
MAXIMUM PEAK FLOW			4270	Dec 23-24	5220	Mar 7 1997
MAXIMUM PEAK STAGE			22.36	Dec 23-24	22.36	<sup>1</sup> Dec 23 2001
INSTANTANEOUS LOW FLOW			5.1	Sep 13-15	0.24	Oct 21 1995
ANNUAL RUNOFF (AC-FT)	551300		534900		397100	
ANNUAL RUNOFF (CFSM)	2.00		1.94		1.44	
ANNUAL RUNOFF (INCHES)	27.21		26.40		19.60	
10 PERCENT EXCEEDS	2150		2390		1600	
50 PERCENT EXCEEDS	291		308		197	
90 PERCENT EXCEEDS	20		14		16	

<sup>1</sup>Also December 24, 2001



RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT	23...	81213	80513	1150	763	3.9	40	7.3	89	17.5	30
JAN	15...	81213	80513	285	783	8.4	68	7.3	71	7.4	22
MAR	04...	81213	80513	337	775	11.0	87	7.5	65	6.0	17
APR	23...	81213	80513	156	776	3.8	43	6.8	66	22.2	23
JUN	25...	81213	80513	52	776	3.3	40	7.7	412	26.0	130
AUG	21...	81213	80513	410	765	4.3	54	7.5	350	27.5	130

Date	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT	7.50	2.70	6.30	.2	2.9	14	3.60	4.20	72	.08
JAN	5.70	2.00	2.90	.3	3.5	23	3.70	4.20	55	.09
MAR	4.20	1.50	2.10	.4	4.0	31	3.80	7.20	50	.04
APR	5.80	2.00	2.50	.2	2.7	18	2.20	3.70	53	.08
JUN	34.0	12.0	3.70	1	26.0	29	44.0	14.0	234	.06
AUG	32.0	11.0	5.40	.7	19.0	24	32.0	6.30	201	.03

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT	.70	.10	--	--	<.02	--	<.010	.62	--	.736	.22
JAN	.80	.12	--	--	.13	--	<.010	.71	.93	.153	.05
MAR	.70	.05	--	--	.18	--	<.010	.66	.88	.215	.06
APR	.90	.10	--	--	.19	--	<.010	.82	1.1	.460	.09
JUN	.80	.08	1.08	4.78	1.10	.066	.020	.74	1.9	.153	.05
AUG	.80	.04	--	--	.19	--	<.010	.77	.99	.307	.10

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT	.24	.30	200	170	190	75	37	115
JAN	.05	.15	100	110	E71	96	38	29.2
MAR	.07	.20	75	100	60	93	40	36.4
APR	.15	.34	E67	190	93	99	52	21.9
JUN	.05	.99	100	120	91	98	27	3.8
AUG	.10	.17	130	93	110	72	46	50.9

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## RED RIVER BASIN

## 07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE

**LOCATION.**--Lat 33°37'40", long 91°26'45", in NE1/4SW1/4 sec.30, T.12 S., R.3 W., Desha County, Hydrologic Unit 08050001, near center of stream on downstream side of bridge on State Highway 4, 2.7 mi west of McGehee, 17.5 mi downstream from Ables Creek, at mile 200.5.

**DRAINAGE AREA.**--576 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1938 to September 1942, October 1945 to current year. Gage-height records collected and occasional discharge measurements made by U.S. Army Corps of Engineers at this site since August 1938. Daily stages 1940 to date and results of discharge measurements 1938, 1947 to date are published in reports of U.S. Army Corps of Engineers.

**REVISED RECORDS.**--WDR Ark. 1979: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 120.48 ft above NGVD of 1929. Prior to Sept. 7, 1949, nonrecording gage at same site. October 1938 to June 6, 1972, at datum 1.00 ft higher. Since Jan. 20, 1971, auxiliary water-stage recorder 14 mi upstream.

**REMARKS.**--No estimated daily discharges. Water-discharge records good except discharges below 50 ft<sup>3</sup>/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	836	2210	4550	1220	492	3580	179	533	135	116	128
2	15	749	2530	4280	1130	464	3680	157	477	137	104	115
3	15	661	2710	3990	1050	438	3740	204	430	151	93	106
4	17	570	2830	3680	973	420	3760	684	395	166	86	95
5	19	477	2890	3370	904	400	3750	1080	372	170	80	83
6	22	393	2900	3180	896	391	3690	1380	366	160	73	71
7	22	339	2930	2920	891	410	3590	1570	356	145	80	62
8	23	256	2960	2650	869	413	3490	1660	335	125	95	55
9	23	187	2930	2380	840	393	3380	1690	303	106	104	48
10	23	134	2850	2140	809	372	3220	1840	266	98	105	41
11	219	95	2740	1910	776	352	3030	2070	237	100	98	35
12	736	70	2840	1700	743	530	2820	2180	221	98	90	32
13	1170	58	3280	1500	705	715	2590	2240	217	96	78	28
14	1530	54	3810	1330	665	830	2370	2250	213	90	75	26
15	1650	52	4220	1170	625	923	2150	2210	206	82	78	24
16	1700	49	4580	1020	592	1130	1910	2120	198	81	87	21
17	1710	47	5060	886	562	1280	1750	2010	190	86	113	20
18	1710	49	5260	775	531	1530	1570	1870	177	92	144	18
19	1710	56	5380	796	513	1760	1400	1720	161	112	168	17
20	1700	61	5430	843	570	2050	1240	1570	145	147	182	21
21	1700	63	5450	846	609	2430	1090	1420	132	185	206	22
22	1680	65	5470	857	626	2690	959	1280	118	209	241	22
23	1640	69	5520	877	626	2910	826	1140	106	212	277	22
24	1580	73	5480	1070	617	3080	706	1020	97	211	305	22
25	1490	72	5430	1320	605	3170	593	898	89	211	322	23
26	1400	74	5370	1430	587	3270	492	800	81	206	322	26
27	1310	122	5300	1490	558	3300	404	759	80	196	303	27
28	1210	171	5210	1500	525	3290	355	738	106	185	269	27
29	1110	828	5100	1470	---	3240	278	705	128	165	226	27
30	1020	1610	4960	1400	---	3210	220	656	134	143	184	28
31	926	---	4770	1310	---	3460	---	594	---	125	150	---
TOTAL	29095	8340	128400	58640	20617	49343	62633	40694	6869	4425	4854	1292
MEAN	938.5	278.0	4142	1892	736.3	1592	2088	1313	229.0	142.7	156.6	43.07
MAX	1710	1610	5520	4550	1220	3460	3760	2250	533	212	322	128
MIN	15	47	2210	775	513	352	220	157	80	81	73	17
AC-FT	57710	16540	254700	116300	40890	97870	124200	80720	13620	8780	9630	2560
CFSM	1.63	0.48	7.19	3.28	1.28	2.76	3.62	2.28	0.40	0.25	0.27	0.07
IN.	1.88	0.54	8.29	3.79	1.33	3.19	4.05	2.63	0.44	0.29	0.31	0.08

RED RIVER BASIN

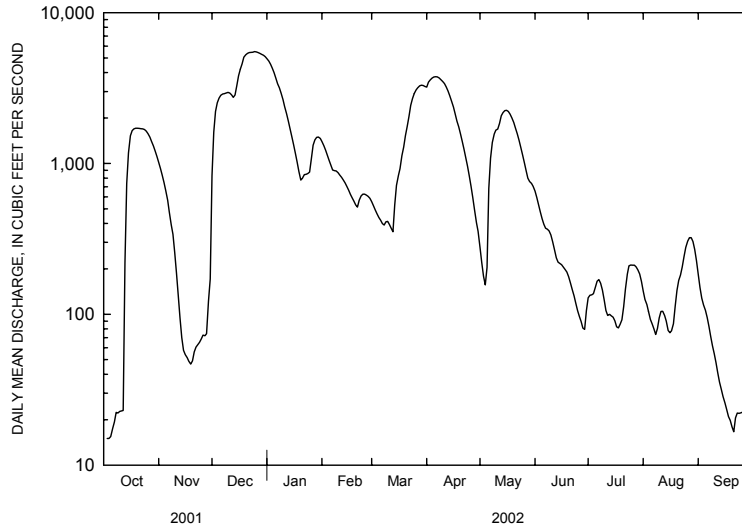
07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-42, 1946-02, BY WATER YEAR (WY)

MEAN	178.2	339.5	775.9	1040	1406	1408	1221	1050	451.1	211.6	151.6	148.2
MAX	1491	2240	4142	3900	5085	4006	3127	5972	2575	3688	1032	1792
(WY)	1985	1958	2002	1946	1990	1997	1991	1958	1974	1989	1989	1974
MIN	8.45	6.88	31.9	39.3	98.3	189	82.8	73.0	22.1	6.03	0.44	14.4
(WY)	1996	1996	1982	1966	2000	1954	1966	1965	1972	1954	1956	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939-42, 1946-02	
ANNUAL TOTAL	400681		415202			
ANNUAL MEAN	1098		1138		694.8	
HIGHEST ANNUAL MEAN					1488 1973	
LOWEST ANNUAL MEAN					149 1972	
HIGHEST DAILY MEAN	5520	Dec 23	5520	Dec 23	6870	May 11 1958
LOWEST DAILY MEAN	15	Sep 30	15	Oct 1	0.20	Aug 15 1956
ANNUAL SEVEN-DAY MINIMUM	16	Sep 27	18	Oct 1	0.20	Aug 15 1956
MAXIMUM PEAK FLOW			5530	Dec 22-23	6870	May 11 1958
MAXIMUM PEAK STAGE			24.52	Dec 23-24	<sup>1</sup> 25.49	May 11 1958
INSTANTANEOUS LOW FLOW			14	Oct 3	0.20	Aug 15 1956
ANNUAL RUNOFF (AC-FT)	794800		823600		503400	
ANNUAL RUNOFF (CFSM)	1.91		1.97		1.21	
ANNUAL RUNOFF (INCHES)	25.88		26.82		16.39	
10 PERCENT EXCEEDS	3280		3270		2010	
50 PERCENT EXCEEDS	428		570		244	
90 PERCENT EXCEEDS	63		53		31	

<sup>1</sup>At present datum



## RED RIVER BASIN

## 07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-1972, October 1973, January 1975, December 1975 to August 1976, Water years 1977 through 1979, and Water years 1996 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
OCT	23..	1400	81213	80513	1710	767	3.8	40	7.1	145	17.3	48	12.0
JAN	15..	1230	81213	80513	1460	782	8.4	67	7.1	54	6.8	17	4.20
MAR	04..	1300	81213	80513	421	775	7.2	58	7.4	89	6.7	27	6.70
APR	23..	1300	81213	80513	851	783	4.4	49	6.9	55	22.4	12	3.30
JUN	25..	1615	81213	80513	88	775	3.5	43	7.5	138	26.6	43	11.0
AUG	21..	1225	81213	80513	207	765	5.7	74	7.6	425	29.1	150	37.0

Date	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	
OCT	23...	4.30	7.90	.3	5.1	16	8.20	6.40	79	.06	.90
JAN	15...	1.50	2.70	.2	2.2	19	2.40	3.40	46	.09	.60
MAR	04...	2.40	2.50	.4	4.8	26	4.90	6.30	60	.05	.80
APR	23...	1.00	1.50	.2	1.3	17	1.50	3.10	41	.04	.70
JUN	25...	3.70	3.50	.5	8.0	27	11.0	6.40	94	.09	1.0
AUG	21...	13.0	4.20	.9	24.0	26	37.0	8.60	237	.03	.60

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	
OCT	23...	.08	--	--	<.02	--	<.010	.84	--	1.07
JAN	15...	.12	--	--	.11	--	<.010	.51	.71	.245
MAR	04...	.06	--	--	.26	--	<.010	.75	1.1	.215
APR	23...	.05	--	--	.15	--	<.010	.66	.85	.583
JUN	25...	.12	.49	2.17	.50	.033	.010	.91	1.5	.184
AUG	21...	.04	--	--	.23	--	<.010	.57	.83	.245

RED RIVER BASIN

07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)
OCT 23...	.31	.35	.39	140	E220	360	96	30	139
JAN 15...	.07	.08	.13	E35	E25	E26	95	28	110
MAR 04...	.08	.07	.25	80	150	62	97	69	78.4
APR 23...	.13	.19	.32	E73	320	90	94	51	117
JUN 25...	.06	.06	.32	120	190	234	96	93	22.1
AUG 21...	.09	.08	.13	96	180	100	96	36	20.1

Remark codes used in this report:  
 < -- Less than  
 E -- Estimated value

## RED RIVER BASIN

## 07364185 BAYOU BARTHOLOMEW NEAR PORTLAND

LOCATION.--Lat 33°13'50", long 91°32'08", in SW1/4NE1/4 sec.8, T.17 S., R.4 W., Ashley County, Hydrologic Unit 08040205, at bridge on State Highway 160, 1.4 mi west of Portland.

DRAINAGE AREA.--1,109 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 96.85 ft above NGVD of 1929. Auxiliary water-stage recorder 7.8 mi upstream.

REMARKS.--Records good except estimated daily discharges and discharges below 100 ft<sup>3</sup>/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	1480	3070	e7000	4630	1210	5480	1300	1630	115	141	240
2	42	1390	3440	e6910	4420	1150	5620	1110	1490	111	138	217
3	41	1300	3740	e6820	4180	1080	5720	921	1350	106	155	185
4	40	1200	3950	e6730	3910	1010	5770	796	1220	103	152	152
5	39	1100	4090	e6630	3630	927	5780	761	1080	99	128	123
6	39	e994	4160	e6520	3470	847	5760	771	947	98	99	98
7	39	e909	4230	e6400	3330	782	5710	877	823	102	74	82
8	39	e806	4310	e6270	3190	715	5790	1070	718	112	58	70
9	38	703	4400	6150	3050	647	5930	1290	626	116	49	61
10	38	603	4460	6000	2900	585	5960	1520	545	116	46	53
11	45	503	4510	5820	2730	537	5940	1730	482	106	45	47
12	e197	408	4800	5610	2550	636	5880	1920	463	97	49	41
13	474	381	5430	5370	2370	843	5770	2120	401	102	58	37
14	906	302	6060	5100	2210	1110	5640	2330	349	172	69	33
15	1180	230	6530	4800	2060	1360	5460	2540	305	235	74	28
16	1420	174	e6830	4480	1920	1600	5260	2710	272	231	83	26
17	e1650	133	e7100	4160	1780	1740	5050	2860	251	223	95	24
18	e1770	106	e7300	3850	1650	1910	4820	2970	232	238	106	24
19	e1840	89	e7390	3630	1560	2110	4550	3040	213	217	118	23
20	e1890	79	e7410	3490	1780	2450	4260	3110	198	171	118	24
21	e1910	72	e7400	3350	1820	2990	3950	3160	181	131	109	23
22	e1910	66	e7390	3240	1800	3380	3630	3100	166	114	103	23
23	e1900	62	e7390	3130	1760	3720	3320	3000	149	106	108	23
24	e1900	61	e7380	3390	1670	3970	3030	2870	133	126	123	22
25	e1880	59	e7370	4290	1570	4150	2750	2720	116	250	150	22
26	1860	57	e7350	4820	1480	4380	2490	2560	102	333	180	23
27	1820	271	e7320	5060	1390	4520	e2220	2390	94	331	205	22
28	1780	678	e7270	5120	1300	4620	1980	2220	93	289	229	22
29	1710	1590	e7210	5060	---	4700	1740	2060	99	241	246	21
30	1640	2500	e7150	4930	---	4750	1510	1910	109	198	256	20
31	1570	---	e7090	4780	---	5240	---	1770	---	165	254	---
TOTAL	31650	18306	183530	158910	70110	69669	136770	63506	14837	5154	3818	1809
MEAN	1021	610.2	5920	5126	2504	2247	4559	2049	494.6	166.3	123.2	60.30
MAX	1910	2500	7410	7000	4630	5240	5960	3160	1630	333	256	240
MIN	38	57	3070	3130	1300	537	1510	761	93	97	45	20
AC-FT	62780	36310	364000	315200	139100	138200	271300	126000	29430	10220	7570	3590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MEAN	287.5	246.4	2037	2682	3041	2755	3067	1019	343.0	125.1	85.56	95.62
MAX	1021	610	5920	5126	5159	6299	4559	2049	495	182	124	266
(WY)	2002	2002	2002	2002	1999	2001	2002	2002	2002	1999	2001	2001
MIN	32.0	27.8	152	66.2	114	667	2010	572	244	59.4	40.3	33.0
(WY)	2000	2000	2000	2000	2000	2000	2001	1999	1999	2000	2000	2000

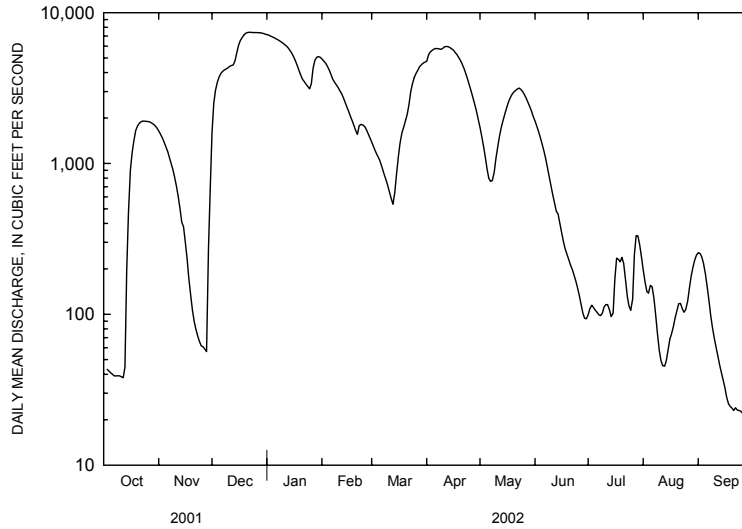


RED RIVER BASIN

07364185 BAYOU BARTHOLOMEW NEAR PORTLAND--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	746622		758069			
ANNUAL MEAN	2046		2077		1307	
HIGHEST ANNUAL MEAN					2077	2002
LOWEST ANNUAL MEAN					441	2000
HIGHEST DAILY MEAN	7530	Mar 5	7410	Dec 20	7530	Mar 5 2001
LOWEST DAILY MEAN	38	Oct 9	20	Sep 30	20	Sep 30 2002
ANNUAL SEVEN-DAY MINIMUM	39	Oct 4	22	Sep 24	22	Sep 24 2002
MAXIMUM PEAK FLOW			7460	Dec 19	7540	Mar 6 2001
MAXIMUM PEAK STAGE			<sup>1</sup> 36.65	Dec 19	<sup>a</sup> 36.65	Dec 19 2001
INSTANTANEOUS LOW FLOW			20	Sep 30	20	Sep 30 2002
ANNUAL RUNOFF (AC-FT)	1481000		1504000		946900	
10 PERCENT EXCEEDS	6730		5770		4170	
50 PERCENT EXCEEDS	994		1300		287	
90 PERCENT EXCEEDS	76		55		34	

<sup>1</sup>From floodmark  
<sup>a</sup>Estimated



## RED RIVER BASIN

## 07369680 BAYOU MACON AT EUDORA

**LOCATION.**--Lat 33°06'09", long 91°15'08", in SE1/4SE1/4 sec.25, T.18 S., R.2 W., Chicot County, Hydrologic Unit 08030100, near left bank on downstream side of bridge on U.S. Highway 65, 0.6 mi south of Eudora.

**DRAINAGE AREA.**--500 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1988 to current year. Gage-height record and results of discharge measurements since January 1938, are contained in reports of the U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder. Datum of gage is 80.92 ft above NGVD of 1929. Satellite telemeter at station.

**REMARKS.**--Records good except estimated daily discharges, which are fair. Satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage since at least 1938, 27.43 ft May 10, 22, 1958.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e52	e39	2810	113	805	102	1680	e67	88	145	95	63
2	e56	e37	2670	88	810	97	1300	e60	80	92	113	60
3	e37	e39	2470	76	719	91	983	55	75	75	93	60
4	e53	e37	2170	71	610	89	777	161	72	74	75	61
5	e38	53	e1610	124	528	87	643	100	76	70	65	61
6	e43	60	e1220	979	918	92	536	82	114	63	60	59
7	e73	60	e948	941	909	85	295	72	101	63	60	60
8	e57	60	953	547	632	80	621	65	105	56	62	61
9	e43	59	1010	321	289	84	1240	64	97	45	68	61
10	e32	60	941	232	163	80	1000	78	123	49	71	60
11	e54	63	840	188	124	79	735	73	122	40	71	62
12	67	58	1030	156	108	348	590	65	129	53	69	62
13	339	57	2180	127	97	358	488	64	141	130	90	61
14	701	58	2670	106	86	177	244	64	132	156	105	62
15	484	56	2580	92	82	120	158	63	76	133	95	63
16	244	58	2390	79	81	929	131	99	47	95	123	63
17	131	61	2410	73	80	764	119	190	49	82	236	63
18	93	62	2330	74	78	612	115	203	37	82	139	48
19	77	60	2090	138	103	484	e102	140	31	79	102	43
20	e74	58	e1820	148	710	728	e92	133	25	68	79	55
21	e65	59	1410	114	550	1370	e86	114	26	65	71	51
22	e55	59	1050	101	541	1050	e84	107	24	73	65	49
23	e45	61	1310	315	472	820	e90	105	36	86	57	48
24	e55	48	1260	e882	291	680	e84	114	54	100	57	46
25	e69	36	933	e1190	165	560	e81	105	65	130	67	47
26	e59	65	655	e1430	134	316	e66	102	79	115	68	76
27	e56	510	673	e1640	122	235	e62	104	89	87	69	102
28	e51	922	648	e1570	110	207	e62	102	164	72	69	72
29	e41	e2200	572	e1430	---	170	e68	93	230	68	63	63
30	e40	2890	502	1130	---	149	e72	93	206	65	60	53
31	e35	---	275	852	---	1350	---	82	---	62	61	---
TOTAL	3319	7945	46430	15327	10317	12393	12604	3019	2693	2573	2578	1795
MEAN	107.1	264.8	1498	494.4	368.5	399.8	420.1	97.39	89.77	83.00	83.16	59.83
MAX	701	2890	2810	1640	918	1370	1680	203	230	156	236	102
MIN	32	36	275	71	78	79	62	55	24	40	57	43
AC-FT	6580	15760	92090	30400	20460	24580	25000	5990	5340	5100	5110	3560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

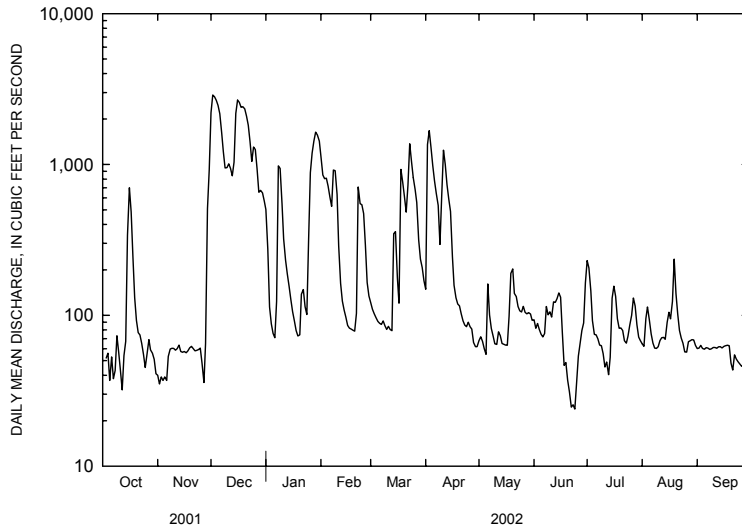
MEAN	90.61	132.7	372.8	476.5	502.2	401.1	402.0	279.0	175.9	246.5	156.1	94.93
MAX	297	265	1498	924	1174	858	1053	1510	330	847	425	150
(WY)	1995	2002	2002	1999	1991	1995	1991	1991	1989	1994	1994	1994
MIN	41.8	51.5	58.5	51.0	51.1	98.1	63.0	72.0	89.8	83.0	83.2	59.8
(WY)	1994	1996	2000	2000	2000	1993	1998	1992	2002	2002	2002	2002

RED RIVER BASIN

07369680 BAYOU MACON AT EUDORA--CONTINUED

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	128013		120993			
ANNUAL MEAN	350.7		331.5		276.7	
HIGHEST ANNUAL MEAN					493	1991
LOWEST ANNUAL MEAN					130	1996
HIGHEST DAILY MEAN	2890	Nov 30	2890	Nov 30	4170	Apr 23 1995
LOWEST DAILY MEAN	32	Oct 10	24	Jun 22	24	Jun 22 2002
ANNUAL SEVEN-DAY MINIMUM	38	Oct 29	33	Jun 17	33	Jun 17 2002
MAXIMUM PEAK FLOW			2900	Nov 30	4280	Apr 23 1995
MAXIMUM PEAK STAGE			22.92	Nov 30	24.41	Apr 29 1991
INSTANTANEOUS LOW FLOW			23	Jun 22	23	Jun 22 2002
ANNUAL RUNOFF (AC-FT)	253900		240000		200400	
10 PERCENT EXCEEDS	1050		981		648	
50 PERCENT EXCEEDS	98		90		107	
90 PERCENT EXCEEDS	59		53		56	

<sup>e</sup>Estimated



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

**Crest-Stage Partial-Record Stations**

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation of each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but it is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

**Maximum discharge at crest-stage partial-record stations**

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
<b>ST. FRANCIS RIVER BASIN</b>								
07047823 Murray Creek Tributary near Jonesboro	Lat 35°51'51", long 90°38'27", in SW1/4SW1/4 sec.2, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203, on wingwall at culvert on U.S. Highway 49, 4.0 mi northeast of Jonesboro. Drainage area is 0.36 mi <sup>2</sup> .	1986-02	12-17-01	10.16	145	2-15-01	12.06	310
07047860 Higginbotham Creek at Jonesboro	Lat 35°48'48", long 90°42'29", in NE1/4NW1/4 sec.30, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203. Drainage area is 0.95 mi <sup>2</sup> .	1992-02	8-13-02	19.48	1,200	8-13-02	19.48	1,200
07047880 Pope Creek Tributary at Birdeye	Lat 35°22'35", long 90°42'00", in NE1/4SE1/4 sec.30, T.9 N., R.4 E., Cross County, Hydrologic Unit 08020203, at culvert on State Highway 42, 0.9 mi west of Birdeye. Drainage area is 0.08 mi <sup>2</sup> .	1963-02	--	<3.73	--	9-13-78	7.73	253
070479475 Spring Creek at Forrest City	Lat 35°00'56", long 90°47'34", in SE1/4NW1/4 sec.28, T.5 N., R.3 E., St. Francis County, Hydrologic Unit 08020205, on Cherry Street in Forrest City. Drainage area is 0.54 mi <sup>2</sup> .	1990-02	12-17-01	16.19	300	4-5-97	16.94	380
<b>WHITE RIVER BASIN</b>								
07048900 Whitener Branch Tributary near Spring Valley	Lat 36°10'24", long 93°54'59", in SE1/4NW1/4 sec.1, T.17 N., R.28 W., Washington County, Hydrologic Unit 11010001, at culvert on State Highway 68, 1.0 mi east of Spring Valley. Drainage area is 1.07 mi <sup>2</sup> .	1960-02	--	<4.84	--	7-25-60	17.60	1,410
07050285 Osage Creek at Osage	Lat 36°11'19", long 93°24'51", in NW1/4SE1/4 sec.27, T.18 N., R.23 W., Carroll County, Hydrologic Unit 11010001, at bridge on State Highway 68, 0.7 mi northwest of Osage. Drainage area is 82.3 mi <sup>2</sup> .	1989-02	4-8-02	13.47	19,700	5-3-90	14.91	27,000
07054450 East Sugarloaf Tributary near Lead Hill	Lat 36°22'28", long 92°49'52", in NW1/4NW1/4 sec.19, T.20 N., R.17 W., Marion County, Hydrologic Unit 11010003, at culvert on State Highway 14, 5.0 mi southeast of Lead Hill. Drainage area is 0.85 mi <sup>2</sup> .	1962-02	4-8-02	8.39	270	10-13-68	15.30	2,480
07055000 White River near Flippin	Lat 36°18'35", long 92°33'28", in NE1/4NW1/4 sec.10, T.19 N., R.15 W., Marion County, Hydrologic Unit 11010003, on right bank 1.4 mi upstream from Hightower Creek, 3.2 mi northeast of Flippin. Drainage area is 6,081 mi <sup>2</sup> .	1928-80 <sup>f</sup> 1981-91 1992-02 <sup>g</sup>	4-8-02	13.18	--	4-17-45	39.82	215,000
07060728 White River at Allison	Lat 35°56'21", long 91°38'28", in NW1/4NW1/4 sec.13, T.15 N., R.11 W., Stone County, Hydrologic Unit 11010004, on right upstream side of wingwall of bridge on State Highway 9 at Allison. Drainage area is 10,458 mi <sup>2</sup> .	1997-02 <sup>g</sup>	3-20-02	311.91	--	3-20-02	311.91	--

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

419

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum			
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge ft <sup>3</sup> /s)
<b>WHITE RIVER BASIN—Continued</b>								
07069250 Brush Creek near Mammoth Spring	Lat 36°25'36", long 91°29'27", in SE1/4SE1/4 sec.34, T.21 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at culvert on U.S. Highway 63, 5.5 mi southeast of Mammoth Spring. Prior to 1967 published as Spring River Tributary near Mammoth Spring. Drainage area is 0.48 mi <sup>2</sup> .	1961-02	7-19-02	8.11	155	4-22-73	15.05	960
07069410 Ferguson Creek near Ravenden Springs	Lat 36°17'29", long 91°14'29", in NE1/4SE1/4 sec.13, T.19 N., R.3 W., Randolph County, Hydrologic Unit 11010010, at bridge on State Highway 90, 1.9 mi southwest of Ravenden Springs. Drainage area is 3.79 mi <sup>2</sup> .	1989-02	12-16-01	7.80	1,480	4-28-98	10.02	3,200
07074850 White River near Augusta	Lat 35°18'02", long 91°23'35", in SE1/4SE1/4 sec.22, T.8 N., R.4 W., Woodruff County, Hydrologic Unit 11010013, on left bank of Taylor Bay 0.5 mi upstream from White River, 0.7 mi from bridge on U.S. Highway 64 and 1.5 mi northwest of Augusta. Drainage area is 20,464 mi <sup>2</sup> .	1983-94 1995-02 <sup>g</sup>	3-30-02	34.12	--	12-7-82	38.31	250,000
07074865 Glaise Creek near Bradford	Lat 35°27'45", long 91°32'49", in NW1/4SW1/4 sec.28, T.10 N., R.5 W., Jackson County, Hydrologic Unit 11010013, at bridge on State Highway 87, 5.9 mi northwest of Bradford. Drainage area is 8.35 mi <sup>2</sup> .	1989-02	12-17-01	8.37	3,100	1-6-91	8.4	3,200
07075000 Middle Fork of Little Red River at Shirley	Lat 35°39'25", long 92°17'34", in SW1/4 sec.20, T.12 N., R.12 W., Van Buren County, Hydrologic Unit 11010014, on right bank 0.5 mi downstream from Sugar Camp or Weavers Creek, 1.0 mi east of Shirley. Drainage area is 302 mi <sup>2</sup> .	1939-84 <sup>f</sup> 1985-94 1995-02 <sup>g</sup>	12-17-01	22.03	30,700	12-3-82	37.53	241,000
07075600 Choctaw Creek Tributary near Choctaw	Lat 35°31'30", long 92°25'03", in SE1/4SW1/4 sec.6, T.10 N., R.13 W., Van Buren County, Hydrologic Unit 11010014, at culvert on State Highway 330, 1.4 mi east of Choctaw. Drainage area is 1.36 mi <sup>2</sup> .	1964-02	3-20-02	10.54	324	12-3-82	19.07	1,760
07075800 Dill Branch Tributary near Ida	Lat 35°32'36", long 91°57'25", in SW1/4NE1/4 sec.33, T.11 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, at culvert on State Highway 25, 3.5 mi southwest of Ida. Prior to 1975 published as Peter Creek Tributary near Ida. Drainage area is 0.11 mi <sup>2</sup> .	1964-02	12-17-01	7.54	88	4-2-79	9.96	230
07076630 Key Branch near Searcy	Lat 35°14'47", long 91°47'01", in NW1/4SW1/4 sec.8, T.7 N., R.7 W., White County, Hydrologic Unit 11010014, at culvert on State Highway 36, 2.8 mi west of Searcy. Prior to 1964 published as Little Red River Tributary near Searcy. Drainage area is 0.66 mi <sup>2</sup> .	1961-02	12-17-01	6.43	320	11-24-73	7.79	573
07076634 Litte Red River at Judsonia	Lat 35°16'01", long 91°38'23", in NW1/4NW1/4 sec.3, T.7 N., R.7 W., White County, Hydrologic Unit 11010014, at highway bridge on county road just south of Highway 385 curve at south edge of Judsonia, at mile 25.2. Drainage area is 1,693 mi <sup>2</sup> .	1982-02	12-17-01	33.23	--	a	a	a
07076750 White River at Geor- getown	Lat 35°07'45", long 91°27'00", in SW1/4SW1/4 sec.20, T.6 N., R.4 W., White County, Hydrologic Unit 08020301, on right bank at Arkansas Game and Fish Commission boat launching area at Georgetown, and at mile 167. Drainage area is 22,387 mi <sup>2</sup> .	1978-90 1991-94 <sup>f</sup> 1995-02	3-31-02 4-01-02	24.24	99,300	3-31-02 4-01-02	24.24	99,300
07076870 Pigeon Roost Creek at Butlerville	Lat 34°58'36", long 91°50'38", in NW1/4NE1/4 sec.15, T.4 N., R.8 W., Lonoke County, Hydrologic Unit 08020301, at bridge on State Highway 38, 0.6 mi west of Butlerville. Drainage area is 23.0 mi <sup>2</sup> .	1961-02	12-17-01	11.39	3,700	4-21-74	12.62	8,800
07077100 Big Creek near Boydsville	Lat 36°22'12", long 90°19'50", in SE1/4NW1/4, sec.16, T.20 N., R.7 E., Clay County, Hydrologic Unit 08020302, at bridge on county road, 0.5 mi south of Crockett and 4.0 mi northeast of Boydsville. Drainage area is 12.9 mi <sup>2</sup> .	1962-81 1993-02	12-17-01	18.82	4,500	4-19-73	19.14	4,700

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum			
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
<b>WHITE RIVER BASIN—Continued</b>								
07077200 Big Creek Tributary near Boydsville	Lat 36°22'32", long 90°19'56", in SE1/4SW1/4 sec.9, T.20 N., R.7 E., Clay County, Hydrologic Unit 08020302, at culvert on county road, 0.1 mi west of Crockett, and 4.1 mi northeast of Boydsville. Drainage area is 1.58 mi <sup>2</sup> .	1962-02	12-17-01	9.26	650	7-25-98	9.94	790
07077430 Willow Ditch near Egypt	Lat 35°56'29", long 90°56'33", in SW1/4SW1/4 sec.12, T.15 N., R.1 E., Lawrence County, Hydrologic Unit 08020302, at culvert on State Highway 91, 5.1 mi north of Egypt. Drainage area is 0.25 mi <sup>2</sup> .	1963-02	12-17-01	7.22	102	12-21-91	<sup>i</sup> 6.37	112
07077650 Big Creek near Jonesboro	Lat 35°51'11", long 90°45'00", in SE1/4SE1/4 sec.10, T.14 N., R.3 E., Craighead County, Hydrologic Unit 08020302, at bridge on State Highway 63, 1.3 mi west of Jonesboro. Drainage area is 50.6 mi <sup>2</sup> .	1989-02	12-17-01	<sup>b</sup> 25.10	4,250	12-17-01	<sup>b</sup> 25.10	4,250
07077655 Christian Creek at GE Drive at Jonesboro	Lat 35°50'29", long 90°43'33", in NW1/4SW1/4, sec.3, T.14 N., R.3 E., Craighead County, Hydrologic Unit 08020302, 100 ft west of Gee Street in Jonesboro, on bridge at entrance to General Electric plant. Drainage area is 3.78 mi <sup>2</sup> .	1993-02	8-13-02	17.56	2,130	8-13-02	17.56	2,130
*07077920 Big Creek at Goodwin	Lat 34°56'22", long 91°00'55", in NE1/4NE1/4 sec.29, T.4 N., R.1 E., St. Francis County, Hydrologic Unit 08020304, at bridge on U.S. Highway 70, 0.3 mi east of Goodwin. Drainage area is 31.1 mi <sup>2</sup> .	1961-02	8-26-02	8.59	120	12-25-87	10.35	1,250
07077940 Spring Creek near Aubrey	Lat 34°41'16", long 90°53'45", in SW1/4SE1/4, sec.16, T.1 N., R.2 E., Lee County, Hydrologic Unit 08020304, at bridge on State Highway 121, 2.1 mi south of Aubrey. Drainage area is 38.0 mi <sup>2</sup> .	1962-80 1993-02	1-24-02	15.55	1,600	4-5-97	16.11	2,050
<b>ARKANSAS RIVER BASIN</b>								
07249444 Mill Creek near Jenny Lind Road in Fort Smith	Lat 35°18'14", long 94°24'42", in NW1/4SE1/4 sec.9, T.7 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, on downstream side of bridge on Jenny Lind Road in Fort Smith. Drainage area is 1.18 mi <sup>2</sup> .	1999-02	4-8-02	4.30	565	6-30-99	<sup>b</sup> 7.42	1,600
07249447 Mill Creek at Fort Smith	Lat 35°20'34", long 94°25'20", in NW1/4NW1/4 sec.33, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110104, on right bank 30 ft upstream from bridge on Towson Avenue in Fort Smith. Drainage area is 10 mi <sup>2</sup> .	1981-02	5-21-02	31.39	<sup>a</sup>	5-02-90	36.40	2,400
07249457 May Branch at Fort Smith	Lat 35°22'30", long 94°23'51", in NE1/4SW1/4 sec.15, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110104, on upstream side of bridge on Free Ferry Road. Drainage area is 1.0 mi <sup>2</sup> .	1981-86 <sup>f</sup> 1993-02	4-8-02	6.82	550	12-2-82	8.01	580
07249490 Lee Creek near Lee Creek	Lat 35°42'12", long 94°19'37", in NW1/4SE1/4 sec.19, T.12 N., R.31 W., Crawford County, Hydrologic Unit 11110104, at bridge on State Highway 220, 1.8 mi northeast of Lee Creek. Drainage area is 93.5 mi <sup>2</sup> .	1988-02	12-17-01	11.14	7,600	6-21-00 5-3-90	5.39 15.39	23,700 23,700
07249500 Cove Creek near Lee Creek	Lat 35°43'20", long 94°24'28", in SW1/4NW1/4 sec.16, T.12 N., R.32 W., Crawford County, Hydrologic Unit 11110104, at bridge on U.S. Forest Service road, 4.5 mi northwest of Lee Creek. Drainage area is 35.3 mi <sup>2</sup> .	1951-70 <sup>f</sup> 1971-02	4-8-02	7.55	3,000	5-5-60	15.60	33,600
07249950 Webber Creek Tributary near Cedarville	Lat 35°36'00", long 92°22'49", in SE1/4SE1/4 sec.27, T.11 N., R.32 W., Crawford County, Hydrologic Unit 11110104, at culvert on State Highway 59, 2.3 mi north of Cedarville. Drainage area is 0.34 mi <sup>2</sup> .	1962-02	4-8-02	6.04	86	10-26-70	7.71	274
07250514 Sunnymede Creek at North 46th Terrace at Ft Smith	Lat 35°23'53", long 94°22'50", in NE1/4NW1/4 sec.11, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, on upstream side of bridge at North 46th Terrace in Ft. Smith. Drainage area is 1.13 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	4-8-02	5.51	370	6-30-99	6.02	423

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	
<b>ARKANSAS RIVER BASIN—Continued</b>									
07251500 Frog Bayou at Rudy	Lat 35°31'32", long 94°16'18", in SW1/4SW1/4 sec.23, T.10 N., R.31 W., Crawford County, Hydrologic Unit 11110104, at bridge on State Highway 282 at Rudy. Drainage area is 216 mi <sup>2</sup> .	1951-70 <sup>f</sup> 1971-02	4-8-02	16.97	29,400	5-30-90	18.76	41,300	
07251790 Mulberry River near Oark	Lat 35°41'01", long 93°35'57", in NW1/4SE1/4 sec.24, T.12 N., R.25 W., Johnson County, Hydrologic Unit 11110201, at bridge on State Highway 103, 1.5 mi west of Oark. Drainage area is 70.2 mi <sup>2</sup> .	1988-02	12-17-01	12.31	12,600	6-17-00	17.63	32,900	
07256490 Greenbrier Creek at Clarksville	Lat 35°28'15", long 93°27'09", in NW1/4NW1/4 sec.4, T.9 N., R.23 W., Johnson County, Hydrologic Unit 1111020, on State Highway 64 about 0.7 mi west of State Highway 21 North junction, at Clarksville. Drainage area is 26.7 mi <sup>2</sup> .	1993-02	1-31-02	8.76	1,920	1-31-02	8.76	1,920	
*07256500 Spadra Creek at Clarksville	Lat 35°28'06", long 93°27'46", in NW1/4NE1/4 sec.5, T.9 N., R.23 W., Johnson County, Hydrologic Unit 11110202, on right bank at Clarksville, 0.2 mi downstream from bridge on U.S. Highway 64. Drainage area 61.1 mi <sup>2</sup> .	1953-70 <sup>f</sup> 1971-02 <sup>d</sup>	1-31-02	13.93	8,900	6-5-74	19.93	27,400	
07256700 Big Shoal Creek near New Blaine	Lat 35°17'30", long 93°27'37", in NW1/4SE1/4 sec.5, T.7 N., R.23 W., Logan County, Hydrologic Unit 11110202, at bridge on State Highway 22, 2.3 mi west of New Blaine. Drainage area is 50.0 mi <sup>2</sup> .	1989-02	12-16-01	16.43	15,300	5-3-90	19.11	26,100	
07257100 Minnow Creek Tributary near Hagarville	Lat 35°30'11", long 93°21'56", in SE1/4SE1/4 sec.19, T.10 N., R.22 W., Johnson County, Hydrologic Unit 11110202, at culvert on State Highway 123, 2.6 mi southwest of Hagarville. Drainage area is 0.20 mi <sup>2</sup> .	1962-02	1-31-02	5.09	94	4-24-70	6.62	176	
07258200 Pack Saddle Creek Tributary near Waldron	Lat 34°58'19", long 94°05'46", in SE1/4SE1/4 sec.29, T.4 N., R.29 W., Scott County, Hydrologic Unit 11110105, at culvert on U.S. Highway 71, 5.2 mi north of Waldron. Drainage area is 0.92 mi <sup>2</sup> .	1961-02	12-17-01 2-16-01 12-12-99 10-5-98 1-5-98 11-7-96 4-22-96 5-8-95 1-4-93 11-17-91 4-14-91 5-3-90	4.13 2.68 2.74 2.87 3.53 3.53 3.53 3.28 3.44 2.97 3.38 4.22	600 h165 h182 h210 h400 h400 h400 h325 h370 h240 h353 h640	5-13-68	9.42	689	
07260640 Petit Jean River near Centerville	Lat 35°04'30", long 93°11'58", in NE1/4 sec.23, T.5 N., R.21 W., Yell County, Hydrologic Unit 11110204, on right bank 300 ft upstream from State Highway 7, 3.0 mi southeast of Centerville. Drainage area is 927 mi <sup>2</sup> .	1988-90 <sup>g</sup> 1991-94 1995-02 <sup>g</sup>	12-18-01	22.06	--	5-5-90	26.40	--	
07260679 East Fork Point Remove Creek Tributary near Saint Vincent	Lat 35°16'09", long 92°44'00", in NE1/4NE1/4 sec.7, T.7 N., R.16 W., Conway County, Hydrologic Unit 11110203, at culvert on State Highway 213, 2.2 mi south of Saint Vincent. Drainage area is 0.06 mi <sup>2</sup> .	1967-02	--	<4.45	--	12-3-82	<sup>h</sup> 8.24	102	
07260800 Arkansas River at Morrilton	Lat 35°07'39", long 92°43'55", in SE1/4SW1/4 sec.29, T.6 N., R.16 W., Conway County, Hydrologic Unit 11110203, on left bank upstream from bridge on State highway 9, 2.0 mi southeast of Morrilton, 4.0 mi downstream from A.V. Ormon (No. 9) Lock and Dam, and at mile 189.1. Drainage area is 155,484 mi <sup>2</sup> .	1927-02 <sup>g</sup>	4-7-02	32.48	--	5-15-43	40.8	--	
07261800 Brogan Creek near Rover	Lat 34°54'27", long 93°24'06", in NW1/4SE1/4 sec.13, T.3 N., R.23 W., Yell County, Hydrologic Unit 11110206, at culvert on State Highway 27, 2.7 mi south of Rover. Prior to 1968 published as Fourche LaFave River Tributary near Rover. Drainage area is 1.04 mi <sup>2</sup> .	1963-02	12-17-01	5.58	268	12-3-82	<sup>h</sup> 10.65	1,260	
07263000 South Fourche LaFave River near Hollis	Lat 34°54'41", long 93°03'21", in SE1/4NE1/4 sec.18, T.3 N., R.19 W., Perry County, Hydrologic Unit 11110206, on left bank 0.8 mi upstream from Big Cove Creek, 2.1 mi downstream from Cedar Creek, 4.0 mi northeast of Hollis, and at mile 5.6. Drainage area is 210 mi <sup>2</sup> .	1941-95 <sup>f</sup> 1996-02	12-17-01	12.98	18,700	12-3-82	24.55	94,000	

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum		Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
			Date	Gage height (ft)	Date	Gage height (ft)			
<b>ARKANSAS RIVER BASIN—Continued</b>									
07263012 Fourche LaFave River near Aplin	Lat 34°57'37", long 92°58'50", in E1/2NE1/4 sec.35, T.4 N., R.19 W., Perry County, Hydrologic Unit 11110204, on right bank 30 ft upstream from bridge on State Highway 155, 1.0 mi south of Aplin. Drainage area is 957 mi <sup>2</sup> .	1980-02	12-17-01	29.24	17,200	12-3-82	36.10	a	
07263100 Fourche LaFave Tributary near Perryville	Lat 35°01'14", long 92°46'06", in SE1/4NE1/4 sec.25, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at left bank on downstream side of bridge on State Highway 10, 4.1 mi south of Wye. Drainage area is 89.4 mi <sup>2</sup> .	1962-02	3-19-02	8.80	510	12-3-82	11.45	c	1,550
072632966 Maumelle River at Highway 10 near Wye	Lat 34°52'30", long 92°39'13", in NW1/4SE1/4 sec.25, T.2 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at bridge on Congo Road, 0.2 mi northeast of Ferndale. Drainage area is 15.0 mi <sup>2</sup> .	2002	3-20-02	17.88	--	3-10-73	15.01		10,800
07263400 Little Maumelle River at Ferndale	Lat 34°46'48", long 92°33'15", in NW1/4SE1/4 sec.25, T.2 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at bridge on Congo Road, 0.2 mi northeast of Ferndale. Drainage area is 15.0 mi <sup>2</sup> .	1963-86 1993-02	10-11-01	6.43	760	3-20-02	17.88		--
07263426 Hickory Creek at Bent Tree Court in Little Rock	Lat 34°47'18", long 92°25'54", in SE1/4SE1/4 sec.19, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream side of bridge at Bent Tree Court in Little Rock. Drainage area is 2.44 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	12-16-01	5.16	2,000	8-10-01 12-16-01	5.16		2,000
07263465 Storm Ditch at Rolling Oaks Drive at Maumelle	Lat 34°52'41", long 92°24'03", in NW1/4SW1/4 sec.21, T.3 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream side of culvert apron at Rolling Oaks Drive at Maumelle. Drainage area is 0.36 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	12-16-01	3.04	100	5-28-97	4.23		211
07263500 Arkansas River at Little Rock	Lat 34°45'00", long 92°16'25", sec.3, T.1 N., R.12 W., on top of the second pier from the right bank of the new Main Street Bridge, 0.25 mile above Missouri Pacific Railway bridge at Little Rock, Pulaski County, and at mile 165.5. Gage can be reached by going east of Main Street on Markham Street to Cumberland Street (2 blocks east of Main) and to the left to the river. Drainage area is 158,201 mi <sup>2</sup> of which 22,242 mi <sup>2</sup> is probably noncontributing (determined from "Drainage Area Data, Arkansas, White, and Red River Basins").	1928-69 <sup>f</sup> 1970-02 <sup>g</sup>	3-21-02	17.62	--	5-27-43	30.05		536,000
07263570 Grassy Flat Creek at Reservoir Road at Little Rock	Lat 34°46'01", long 92°22'03", in SE1/4NE1/4 sec.34, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream left bank of Reservoir Road bridge in Little Rock. Drainage area is 3.88 mi <sup>2</sup> .	1974-87 1988-92 <sup>g</sup> 1996-98 <sup>f</sup> 1999-02	12-16-01	7.82	2,020	5-17-81	11.47		3,230
07263590 Coleman Creek at Little Rock	Lat 34°45'07", long 92°20'02", in SE1/4NW1/4 sec.6, T.1 N., R.12 W., Pulaski County, Hydrologic Unit 11110207, at Markham and N. Tyler in Little Rock. Drainage area is 1.08 mi <sup>2</sup> .	1990-02	--	<13.17	--	5-19-90	17.50		1,260
07263594 Coleman Creek at West 28th Street in Little Rock	Lat 34°43'36", long 92°20'17", in SW1/4SW1/4 sec.7, T.1 N., R.12 W., Pulaski County, Hydrologic Unit 11110207, at culvert on West 28th Street, 0.2 mi east of University Avenue, 1.1 mi upstream from mouth, and in Little Rock. Drainage area is 2.78 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	12-16-01	10.57	1,270	8-10-01	11.86		2,320
07263650 Arkansas River at Pine Bluff	Lat 34°17'26", long 91°59'14", in NW1/4SW1/4 sec.9, T.5 S., R.9 W., Jefferson County, Hydrologic Unit 11110207, under U.S. Highway 79 bridge on top of pier cap near left bank, 1.0 mile northeast of Pine Bluff. 0.7 mile upstream from Boyd Point Cutoff, and at mile 73.7. Drainage area is 158,595 mi <sup>2</sup> .	1948-02 <sup>g</sup>	3-22-02	40.21	--	6-1-57	50.74		--
07263930 Rocky Branch at Braden and Marshall Roads at Jacksonville	Lat 34°52'14", long 92°07'41", in NE1/4SE1/4 sec.24, T.3 N., R.11 W., Pulaski County, Hydrologic Unit 11110207, at Braden and Marshall Roads at Jacksonville. Drainage area is 0.48 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	12-16-01	4.64	71	3-5-97	4.15		<sup>h</sup> 85



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	
<b>ARKANSAS RIVER BASIN—Continued</b>									
07264050 Bayou Two Prairie near Furlow (published as near Cabot 1993-99)	Lat 34°51'32", long 91°58'48" in SW1/4NW1/4 sec.28, T.3 N., R.9 W., Lonoke County, Hydrologic Unit 08020402, at bridge on State Highway 89, 1.8 mi north of Furlow. Drainage area is 84.9 mi <sup>2</sup> .	1988-02	12-17-01	10.42	2,250	12-28-87	12.12	5,200	
07265280 Arkansas River at Pendleton	Lat 33°58'45", long 91°22'40", at Pendleton, and approximately 9 miles NE of Dumas, AR, 44.5 miles above mouth. Drainage area is 160,200 mi <sup>2</sup> .	1993-02 <sup>b</sup>	3-22-02	30.22	--	5-11-95	30.02	--	
<b>RED RIVER BASIN</b>									
07339500 Rolling Fork near DeQueen	Lat 34°02'51", long 94°24'47" in SW1/4SW1/4 sec.21, T.8 N., R.32 W., Sevier County, Hydrologic Unit 11140109, near span on downstream side of bridge on U.S. Highway 70, 4.0 mi, west of DeQueen. Drainage area is 182 mi <sup>2</sup> .	1948-80 <sup>f</sup> 1981-02	3-30-02	9.91	2,240	12-10-71	24.23	71,000	
07340500 Cossatot River near DeQueen	Lat 34°02'45", long 94°12'42", in NE1/4NE1/4 sec.29, T.8 S., R.30 W., Sevier County, Hydrologic Unit 11140109, near right bank on downstream side of bridge on U.S. Highway 71, 7.0 mi east of DeQueen. Drainage area is 360 mi <sup>2</sup> .	1938-80 <sup>f</sup> 1981-02	12-17-01	12.47	8,800	5-13-68	22.60	122,000	
07341000 Saline River near Dierks	Lat 34°05'45", long 94°05'04", in NW1/4SW1/4 sec.3, T.8 S., R. 29 W., Howard County, Hydrologic Unit 11140109, near left bank on downstream side of U.S. Highway 70, 4.0 mi southwest of Dierks. Drainage area is 121 mi <sup>2</sup> .	1938-80 <sup>f</sup> 1981-02	3-20-02	10.07	2,390	5-13-68	22.95	59,200	
07341260 Dillard Creek near Nashville	Lat 33°26'04", long 93°54'45", in NE1/4NE1/4 sec.30, T.9 S., R.27 W., Howard County, Hydrologic Unit 11140109, at bridge on State Highway 24, 4.1 mi west of Nashville. Drainage area is 5.82 mi <sup>2</sup> .	1989-02	12-17-01	9.85	1,320	2-16-01	10.03	1,370	
07344280 Nix Creek at E. 12th Street at Texarkana	Lat 33°26'04", long 94°01'33", in NW1/4SW1/4 sec.20, T.15 S., R.28 W., Miller County, Hydrologic Unit 11140302, at bridge on E. 12th Street at Texarkana, 0.1 mi west of junction with U.S. Highway 67. Drainage area is 8.87 mi <sup>2</sup> .	1993-02	10-11-01	18.26	a	5-28-98	<sup>b</sup> 20.50	8,260	
07344285 Swampoodle Creek at Broad Street at Texarkana, Texas	Lat 33°25'06", long 94°02'57", in Bowie County, Texas, Hydrologic Unit 11140302, at bridge on Broad Street, 0.4 mi southwest of Arkansas-Texas State line. Drainage area is 424 mi <sup>2</sup> .	1993-02	12-16-01	17.65	2,500	5-28-98	19.52	3,330	
07348635 Big Creek Tributary at Magnolia	Lat 33°15'51", long 93°13'56", in NW1/4NE1/4 sec.13, T.17 S., R.21 W., Columbia County, Hydrologic Unit 11140203, at Dugney and Grayson St. in Magnolia. Drainage area is 0.34 mi <sup>2</sup> .	1990-02	10-11-01	16.88	a	4-28-91	17.70	a	
07355800 Lewis Creek Tributary near Mena	Lat 34°37'15", long 95°12'15", in NE1/4SW1/4 sec.33, T.1 S., R.30 W., Polk County, Hydrologic Unit 08040101, at culvert on U.S. Highway 71, 3.1 mi northeast of Mena. Drainage area is 0.65 mi <sup>2</sup> .	1961-02	12-17-01	4.10	240	10-8-90	6.23	560	
07357740 Bear Creek near Royal	Lat 34°30'30", long 93°15'21", in NE1/4NW1/4 sec.4, T.3 S., R.21 W., Garland County, Hydrologic Unit 08040101, at bridge on U.S. Highway 270, 1.0 mi west of Royal. Drainage area is 5.99 mi <sup>2</sup> .	1989-02	12-17-01 7-18-02	5.40	a	3-8-90	<sup>i</sup> 6.42	1,600	
07357860 Stokes Creek at Kimery Road at Hot Springs	Lat 34°28'36", long 93°04'52", in SE1/4NW1/4 sec.18, T.3 S., R.19 W., Garland County, Hydrologic Unit 08040101, at bridge on Kimery Road, 2.8 mi southwest of Hot Springs Post Office. Drainage area is 3.02 mi <sup>2</sup> .	1993-02	3-19-02	4.51	a	11-5-94	6.49	a	
07359710 Rock Creek near Glenwood	Lat 34°18'34", long 93°32'21", in NW1/4NE1/4 sec.14, T.5 S., R.24 W. Pike County, Hydrologic Unit 08040102, at bridge on State Highway 8, 1.3 mi southeast of Glenwood. Drainage area is 8.62 mi <sup>2</sup> .	1989-02	12-17-01	8.60	2,220	5-20-90	13.58	7,450	

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	
<b>RED RIVER BASIN—Continued</b>									
07359805 Valley Creek near Point Cedar	Lat 34°19'17", long 93°15'24", in NW1/4NE1/4 sec.9, T.5 S., R.21 W., Hot Spring County, Hydrologic Unit 08040102, at bridge on State Highway 84, 2.9 mi east of Point Cedar. Drainage area is 7.62 mi <sup>2</sup> .	1989-02	3-30-02	6.53	535	5-20-90	16.9	10,500	
07360100 L'Eau Frais at Joan	Lat 34°06'27", long 92°55'22", in SW1/4NE1/4 sec.22, T.7 S., R.18 W., Clark County, Hydrologic Unit 08040102, at bridge on State Highway 128, 0.7 mi southeast of Joan. Drainage area is 74.2 mi <sup>2</sup> .	1989-02	12-16-01	6.91	3,000	04-14-93	8.16	<sup>c</sup> 5,400	
07360225 Little Blocker Creek near Langley	Lat 34°18'41", long 93°49'06", in SE1/4NE1/4 sec.18, T.5 S., R.26 W., Pike County, Hydrologic Unit 08040103, at bridge on State Highway 84, 1.3 mi east of Langley. Drainage area is 5.74 mi <sup>2</sup> .	1989-02	12-16-01	7.84	12-3-93	690	11.79	<sup>h</sup> 3,420	
07361180 South Fork Ozan Creek near Ozan	Lat 33°49'15", long 93°42'28", in SE1/4SW1/4 sec.5, T.11 S., R.25 W., Hempstead County, Hydrologic Unit 08040103, at bridge on State Highway 4, 2.0 mi south of Ozan. Drainage area is 17.7 mi <sup>2</sup> .	1963-02	12-17-01	17.42	1,500	4-19-73	25.06	8,360	
07361760 Bell Creek near Hollywood	Lat 34°05'47", long 93°16'53", in NW1/4NE1/4 sec.31, T.7 S., R.21 W., Clark County, Hydrologic Unit 08040103, at bridge on State Highway 26, 2.0 mi west of Hollywood. Drainage area is 9.22 mi <sup>2</sup> .	1988-02	12-16-01	9.30	900	12-26-87	14.0	2,600	
07361894 Mill Creek near Holly Springs	Lat 33°46'01", long 92°39'52", in SE1/4SW1/4 sec.17, T.11 S., R.15 W., Ouachita County, Hydrologic Unit 08040102, at bridge on State Highway 203, 4.2 mi southeast of Holly Springs. Drainage area is 9.01 mi <sup>2</sup> .	1989-02	3-19-02	12.15	550	4-5-97	14.47	4,500	
07362330 Dunn Creek near Hampton	Lat 33°32'05", long 92°30'55", in SE1/4NW1/4 sec.2, T.14 S., R.14 W., Calhoun County, Hydrologic Unit 08040201, at bridge on State Highway 4, 2.8 mi west of Hampton. Drainage area is 13.6 mi <sup>2</sup> .	1962-02	5-30-02	10.14	3,360	5-1-66	10.11	4,240	
07362591 Alum Fork Saline River at Winona Dam at Reform	Lat 34°47'51", long 92°50'43", in NE1/4NE1/4 sec.30, T.2 N., R.17 W., Saline County, Hydrologic Unit 08040203, at water intake 500 ft above dam, 0.8 mi northwest of Reform. Drainage area is 44.4 mi <sup>2</sup> .	1995-02	3-20-02	41.53	--	2-16-01	42.52	--	
07362715 Big Creek near Crow	Lat 34°37'00", long 92°43'35", in NE1/4NW1/4 sec.28, T.1 S., R.16 W., Saline County, Hydrologic Unit 08040203, at bridge on State Highway 5, 2.5 mi east of Crow. Drainage area is 4.7 mi <sup>2</sup> .	1988-02	12-16-01	8.17	2,350	12-28-87	9.68	5,300	
07363435 Derriusseau Creek near Grapevine	Lat 34°08'44", long 92°14'38", in NE1/4NW1/4 sec.5, T.7 S., R.11 W., Grant County, Hydrologic Unit 08040203, at bridge on State Highway 54, 4.2 mi east of Grapevine. Drainage area is 77.0 mi <sup>2</sup> .	1988-02	3-18-02	10.66	a	4-5-97	11.50	a	
07364030 L'Aigle Creek Tributary near Hermitage	Lat 33°24'30", long 92°12'30", in SE1/4NW1/4 sec.14, T.15 S., R.11 W., Bradley County, Hydrologic Unit 08040204, at culvert on State Highway 15, 3.3 mi southwest of Hermitage. Prior to 1975 published as Eagle Creek Tributary near Hermitage. Drainage area is 0.36 mi <sup>2</sup> .	1963-02	11-29-01	3.67	23.5	4-14-91	<sup>i</sup> 7.06	260	
07364110 Nevins Creek Tributary near Pine Bluff	Lat 34°10'08", long 92°05'12", in NW1/4SE1/4 sec.26, T.6 S., R.10 W., Jefferson County, Hydrologic Unit 08040205, at culvert on U.S. Highway 79, 6.0 mi southwest of Pine Bluff. Prior to 1962 published as Bayou Bartholomew Tributary near Pine Bluff. Drainage area is 0.75 mi <sup>2</sup> .	1961-02	12-17-01 2-16-01	6.01 <sup>c</sup> 5.28	a a	9-24-84	10.58	600	
07364114 Pitts Drain at Louisiana Street in Pine Bluff	Lat 34°12'29", long 91°59'48", in NW1/4NE1/4 sec.15, T.6 S., R.9 W., Jefferson County, Hydrologic Unit 08040205, at culvert on U.S. Highway 79, 6.0 mi southwest of Pine Bluff. Prior to 1962 published as Bayou Bartholomew Tributary near Pine Bluff. Drainage area is 0.75 mi <sup>2</sup> .	1997-98 <sup>f</sup> 1999-02	12-17-01	5.16	429	5-6-00	6.15	600	

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

425

Station number and name	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum			
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge ft <sup>3</sup> /s)
<b>RED RIVER BASIN—Continued</b>								
07359805 Valley Creek near Point Cedar	Lat 34°02'03", long 91°42'34", in NW1/4NW1/4 sec.16, T.8 S., R.6 W., Lincoln County, Hydrologic Unit 08040205, at bridge on State Highway 11, 2.7 mi south of Grady. Drainage area is 84 mi <sup>2</sup> .	1989-02	12-13-01	15.92	1,650	7-18-89	18.1	2,350
07360100 L'Eau Frais at Joan	Lat 33°49'29", long 91°44'06", in NE1/4SE1/4 sec.20, T.10 S., R.6 W., Lincoln County, Hydrologic Unit 08040205, on left downstream bridge pier on State Highway 54, 1.3 mi south- west of Tyro. Drainage area is 36 mi <sup>2</sup> .	1993-02	12-13-01	12.79	5,100	4-5-97	14.28	13,700
07360225 Little Blocker Creek near Langley	Lat 33°11'22", long 92°36'28", in NE1/4NW1/4 sec.1, T.18 S., R.15 W., Union County, Hydrologic Unit 08040202, at cul- vert on U.S. Highway 82, 3.5 mi southeast of El Dorado. Drainage area is 0.07 mi <sup>2</sup> .	1961-02	5-30-02	7.86	72	6-8-74	12.40	978
07361180 South Fork Ozan Creek near Ozan	Lat 33°02'21", long 92°56'15", in SW1/4NW1/4 sec.36, T.19 S., R.18 W., Union County, Hydrologic Unit 08040206, on left bank at downstream side of bridge on State Highway 15, 6.0 mi southwest of Three Creeks. Drainage area is 180 mi <sup>2</sup> .	1956-87 <sup>f</sup> 1990-02	12-17-01	12.73	11,400	6-8-74	17.50	65,000

<sup>a</sup> Not determined<sup>b</sup> From floodmarks<sup>c</sup> Revised<sup>d</sup> Prior to December 20, 1989 at datum 2.00 ft higher

\* Also a low-flow partial-record station

<sup>f</sup> Operated as a continuous-record gaging station<sup>g</sup> Operated as a stage-only station<sup>h</sup> Not previously published<sup>i</sup> At site and datum then in use

**Special Study and Miscellaneous Sites**

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the State.

**Discharge measurements made at special study and miscellaneous sites during water year 2002**

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
<b>ST. FRANCIS RIVER BASIN</b>						
07047947 Second Creek near Palestine	L'Anguille River	Lat 35°02'20", long 90°54'40", in SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.17, T.5 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on county road, 4.0 mi north of Palestine.	a	1986-01	4-11-02	36.3
					5-22-02	372
					7-24-02	259
					9-13-02	16.3
<b>WHITE RIVER BASIN</b>						
07047984 Middle Fork White River southeast of Fayetteville	White River	Lat 35°59'47", long 94°04'21", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.5, T.15 N., R.29 W., Washington County, Hydrologic Unit 11010001, at ford on farm road 2.0 mi south or State Hwy 16 and 5.9 mi southeast of Fayetteville.	a	1997-01	10-26-01	11.2
					1-9-02	23.7
					2-28-02	55.1
					5-23-02	26.0
07050206 Kings River near Alabam	White River	Lat 36°11'20", long 93°38'58", in SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.28, T.18 N., R.25 W., Madison County, Hydrologic Unit 11010001, at bridge on county road, 3.6 mi northeast of Alabam.	a	1997-01	10-25-01	12.2
					7-16-02	27.6
					8-29-02	9.96
07050390 Osage Creek southwest of Berryville	Kings River	Lat 36°20'55", long 93°35'26", in SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.36, T.20 N., R.25 W., Carroll County, Hydrologic Unit 11010001, at bridge on State Highway 221 at McKennon Ford, and 1.0 mi southwest of Berryville.	a	1988-90 <sup>c</sup> 1997-01	2-18-01	1300
					7-15-02	26.4
07069170 Warm Fork Spring River near Thayer, Missouri	Black River	Lat 36°30'10", long 92°31'31", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.5, T.21 N., R.5 W., Oregon County, Mo., Hydrologic Unit 11010010 at bridge on county road, 0.6 mi east of U.S. Highway 63, 0.2 mi north of Missouri-Arkansas State line, and 1.1 mi southeast of Thayer, Mo.	a	1971-75 1983-01	12-11-01	7.97
					7-16-02	95.4
					9-11-02	51.0
07069266 Spring River near Hardy	Spring River	Lat 36°20'00", long 91°30'30", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.34, T.20 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at low-water bridge on county road, 1.8 mi upstream from South Fork Spring River, and 2.2 mi northwest of Hardy.	35	1974-88 2000-01	10-26-01	200
					7-16-02	443
					9-11-02	463
07069295 South Fork Spring River at Saddle	Spring River	Lat 36°21'00", long 92°38'00", in NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.33, T.20 N., R.6 W., Fulton County, Hydrologic Unit 11010010, at bridge on State Highway 289, 0.2 mi southeast of Saddle.	a	1974-01	10-24-01	3.88
					2-26-02	122
					4-9-02	1740
					9-11-02	20.6
07072875 Strawberry River at Wiseman	Black River	Lat 36°14'01", long 91°49'00", in NW <sup>1</sup> / <sub>4</sub> sec.11, T.18 N., R.8 W., IZARD County, Hydrologic Unit 11010012, on side road south of Hwy 354, 2.8 mi west of intersection of Hwys 354 and 289.	a	2001	1-23-02	12.5
					2-26-02	34.3
					6-21-02	7.45
					9-10-02	3.52
07072880 Little Strawberry River near Wiseman	Strawberry River	Lat 36°14'02", long 91°47'25", in NE <sup>1</sup> / <sub>4</sub> sec.12, T.18 N., R.8 W., IZARD County, Hydrologic Unit 11010012, on Hwy 354 1.3 mi west of intersection of Hwys 354 and 289.	a	2001	1-23-02	5.63
					2-26-02	19.0
					6-21-02	4.29
					9-10-02	0.20
07072908 Strawberry River near Myron	Black River	Lat 36°09'39", long 91°42'25", in NE <sup>1</sup> / <sub>4</sub> sec.2, T.17 N., R.7 W., IZARD County, Hydrologic Unit 11010012, on county road 1.7 mi south of Myron.	a	2001	1-23-02	39.7
					2-26-02	103
					6-21-02	26.9
					9-10-02	6.27
07073000 Strawberry River near Evening Shade	Black River	Lat 36°05'56", long 91°36'30", in NE <sup>1</sup> / <sub>4</sub> sec.27, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, on Hwy 167, 1.7 mi north of Evening Shade.	a	2001	1-23-02	62.8
					1-24-02	5020
					2-26-02	171
					6-20-02	43.5
					9-11-02	11.2
07073500 Piney Fork at Evening Shade	Strawberry River	Lat 36°04'50", long 91°36'39", in NE <sup>1</sup> / <sub>4</sub> sec.34, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, on Hwy 167 .8 mi north of Evening Shade.	a	2001	1-23-02	32.1
					1-24-02	1120
					2-26-02	87.8
					6-20-02	18.0
					9-11-02	1.20

## Discharge measurements made at special study and miscellaneous sites during water year 2002

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
<b>WHITE RIVER BASIN--continued</b>						
07073995 North Big Creek near Evening Shade	Strawberry River	Lat 36°08'17", long 91°30'12", in NE <sup>1</sup> / <sub>4</sub> sec.10, T.17 N., R.5 W., Sharp County, Hydrologic Unit 11010012, on Hwy 354, 3.4 mi west of intersection of Hwys 354 and 58.	a	2001	1-23-02 2-26-02 6-20-02 9-11-02	35.0 89.2 32.1 8.77
07074050 Mill Creek south of Sitka	Strawberry River	Lat 36°07'13", long 91°24'12", in SE <sup>1</sup> / <sub>4</sub> sec.16, T.17 N., R.4 W., Sharp County, Hydrologic Unit 11010012, 2.5 mi east of Hwy 58, 4.2 mi northeast of Poughkeepsie, and 4.5 mi south of Sitka on Strawberry Road.	a	2001	1-23-02 2-26-02 6-20-02 9-11-02	29.7 24.9 6.85 0.88
07074100 Strawberry River near Smithville	Black River	Lat 36°01'40", long 91°19'31", in SE <sup>1</sup> / <sub>4</sub> sec.17, T.16 N., R.3 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 115, 1 mi northwest of intersection of Hwys 117 and 115.	a	2001	1-22-02 2-27-02 6-20-02 9-11-02	197 550 183 60.9
07074248 South Big Creek near Strawberry	Strawberry River	Lat 36°01'12", long 91°20'09", in NE <sup>1</sup> / <sub>4</sub> sec.19, T.16 N., R.3 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 117, 4.0 mi northwest of intersection of Hwys 230 and 25.	a	2001	1-22-02 2-27-02 6-19-02 9-12-02	39.6 81.2 32.3 17.2
07074250 Reeds Creek near Strawberry	Strawberry River	Lat 35°58'58", long 91°20'12", in SW <sup>1</sup> / <sub>4</sub> sec.32, T.16 N., R.3 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 117, 1.4 mi north of intersection of Hwys 230 and 25.	a	2001	1-22-02 2-27-02 6-19-02	25.7 44.8 15.8
07074325 Strawberry River near Saffell	Black River	Lat 35°55'06", long 91°14'52", in NW <sup>1</sup> / <sub>4</sub> sec.30, T.15 N., R.2 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 361, 2.4 mi north of intersection of Hwys 361 and 25.	a	2001	1-22-02 2-27-02 6-19-02 9-12-02	273 717 256 92.1
07076950 Wattensaw Bayou near Hazen	White River	Lat 34°52'34", long 92°33'56", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.18, T.3 N., R.5 W., Prairie County, Hydrologic Unit 08020301, at bridge on State Highway 11, 7.0 mi north of Hazen.	a	1984-01	4-3-02 5-30-02 7-10-02	0 0 0.6
07077660 Bayou DeView near Gibson	Cache River	Lat 35°47'36", long 90°50'18", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.36, T.14 N., R.2 E., Craighead County, Hydrologic Unit 08020302, at bridge on State Highway 226, 1.8 mi northwest of Gibson.	a	1974-88 1995-96 1998-01	10-25-01 4-10-02 9-12-02	2.35 36.1 0.04
<b>ARKANSAS RIVER BASIN</b>						
07195400 Illinois River near Siloam Springs	Arkansas River	Lat 36°08'41", long 94°29'41", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.15, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 16, 4.6 mi southeast of Siloam Springs.	509	1979-81 <sup>b</sup> 1982-85 1986 <sup>b</sup> 1987-01	10-17-01 1-8-02	351 287
07246940 Poteau River at Waldron	Arkansas River	Lat 34°53'46", long 94°03'57", in SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.22, T.3 N., R.29 W., Scott County, Hydrologic Unit 11110105, at bridge on State Highway 80, in Waldron.	a	1986-01	3-5-02 6-17-02	7.62 0.14
07260620 Chickalah Creek near Chickalah	Petit Jean River	Lat 35°09'36", long 93°17'34", in SW <sup>1</sup> / <sub>4</sub> sec.24, T.6 N., R.22 W., Yell County, Hydrologic Unit 11110204, at bridge on State Highway 27, 0.5 mi upstream from Little Chickalah Creek and 1.0 mi southwest of Chickalah.	a	1964-67 <sup>c</sup> 1986-01	1-9-02 5-3-02 8-16-02	21.7 30.7 1.91
<b>RED RIVER BASIN</b>						
07338720 Mountain Fork near Hatfield	Little River	Lat 34°30'18", long 94°25'50", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.3, T.6 S., R.5 W., Polk County, Hydrologic Unit 11140108 at bridge on State Highway 246, 3.1 mi northwest of Hatfield.	168	1962-67 <sup>c</sup> 1971-73 1986-01	10-4-01 3-5-02 6-17-02	13.2 270 55.1
07339780 Rolling Fork near West Otis	Little River	Lat 33°58'32", long 94°26'03", in SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.20, T.9 S., R.32 W., Sevier County, Hydrologic Unit 11140109, on right bank downstream from bridge on county road, 1.5 mi north of West Otis.	290	1962 1982-83 1999-01	12-5-01 4-24-02 7-16-02	348 671 57.3

## Discharge measurements made at special study and miscellaneous sites during water year 2002

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
<b>RED RIVER BASIN--continued</b>						
07344300 <sup>9</sup> Days Creek southeast of Texarkana	Sulphur River	Lat 33°19'06", long 94°00'16", in NE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.33, T.16 S., R.28 W., Miller County, Hydrologic Unit 11140302, at bridge on State Highway 237, 7.0 mi south of Texarkana.	78.5	1973-01	12-4-01	57.3
					4-23-02	46.5
07349440 Bodcau Creek near Lewisville	Red Chute Bayou	Lat 33°15'42", long 93°33'05", in SE <sup>1</sup> / <sub>4</sub> sec.14, T.17 S., R.24 W., Lafayette County, Hydrologic Unit 11140205, at bridge on State Highway 313, 6.7 mi southeast of Lewisville.	292	1974-85 1987-90 1995, 98 2001	1-28-02	422
					5-21-02	508
07359770 Caddo River near Amity	Ouachita River	Lat 34°17'05", long 93°24'56", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.24, T.5 S., R.23 W., Clark County, Hydrologic Unit 08040102, at bridge on State Highway 84, 2.9 mi northeast of Amity.	292	1987-01	11-14-01	55.3
					1-31-02	697
					5-24-02	185
07362550 Moro Creek near Banks	Ouachita River	Lat 33°32'38", long 92°19'00", in sec.35, T.13 S., R.12 W., Bradley-Calhoun County, Hydrologic Unit 08040201, at bridge on State Highway 4, 4.0 mi west of Banks.	385	1958-63 <sup>c</sup> 1974-01	4-4-02	3610
					6-17-02	219
					7-26-02	5.37
07363270 Hurricane Creek near Sardis	Saline River	Lat 34°30'40", long 92°24'54", in SW <sup>1</sup> / <sub>4</sub> sec.28, T.2 S., R.13 W., Saline County line, Hydrologic Unit 08040203, at crossing on county road, 200 ft downstream from Brushy Creek, 1.5 mi southwest of Sardis.	66.0	1974-01	5-28-02	75.2
07364143 Ables Creek north of Selma	Bayou Bartholo- mew	Lat 33°44'10", long 91°33'40", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.24, T.11 S., R.4 W., Drew County, Hydrologic Unit 08040205, at bridge on State Highway 138, 0.7 mi downstream from Prairie Creek and 2.7 mi north of Selma.	<sup>a</sup>	1998-01	10-26-01	30.8
07364600 Bayou DeLoutre near El Dorado	Ouachita River	Lat 33°05'55", long 92°35'32", in SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.6, T.19 S., R.14 W., Union County, Hydrologic Unit 08040201, at bridge on county road, 8.5 mi southeast of El Dorado.	78.4	1959-64 1971-75 1978-85 1987-01	10-18-01	35.3
					4-3-02	165
					7-25-02	11.4

<sup>a</sup>Not determined<sup>b</sup>Operated as a continuous-record station<sup>c</sup>Operated as a low-flow partial-record station<sup>d</sup>Not previously published<sup>e</sup>Estimated

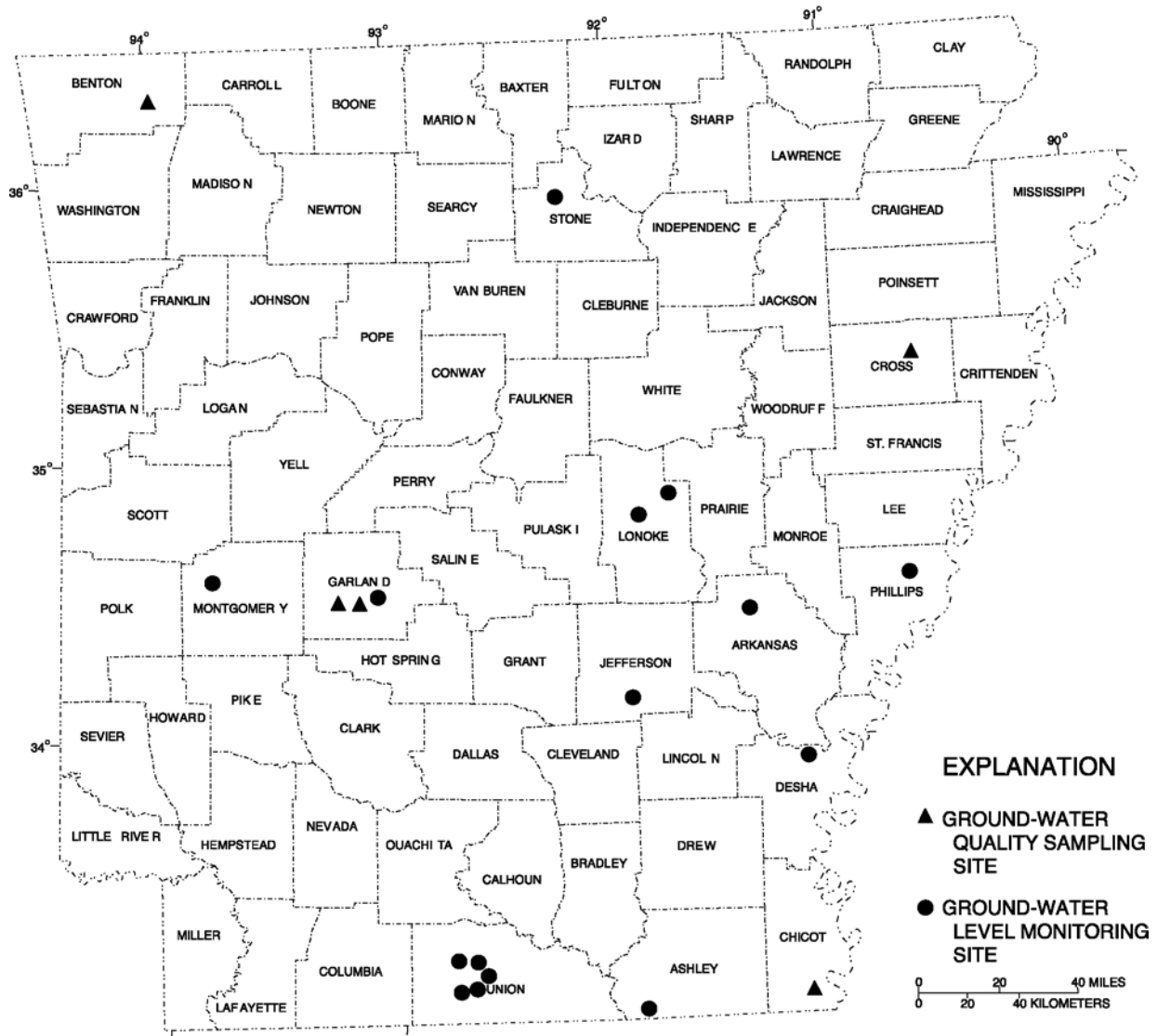


Figure 4. Locations of ground-water quality sampling sites and ground-water monitoring sites in Arkansas.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ARKANSAS COUNTY

342649091251916. Local number, 03S04W03DCA16

LOCATION.--Lat 34°27'53", long 91°25'15", Hydrologic Unit 08020303, near Stuttgart.

Owner: University of Arkansas Rice Experimental Station.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS--Drilled for observation well, diameter 26 in, depth 126 ft, screened 120-126 ft.

DATUM.--Land Surface 205 ft above NGVD of 1929. Measuring point: Top of casing inside housing, 1.0 ft above land surface.

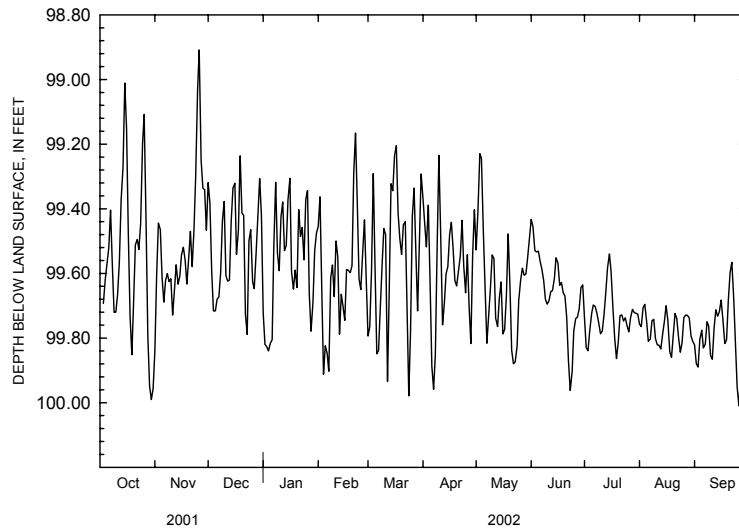
PERIOD OF RECORD.--5-day water levels June 1961 to July 1969. Annual water levels March 1968 to March 2000, and June 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 95.20 ft below land surface, January 10, 1963: lowest, 100.01 ft below land surface, September 24,2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.40	99.62	99.67	99.52	99.90	99.84	99.96	99.82	99.59	99.70	99.80	99.82
10	99.56	99.65	99.62	99.38	99.55	99.93	99.76	99.74	99.66	99.73	99.82	99.77
15	99.48	99.52	99.54	99.59	99.59	99.20	99.44	99.77	99.64	99.71	99.74	99.74
20	99.50	99.58	99.73	99.49	99.17	99.44	99.55	99.88	99.87	99.73	99.74	99.57
25	99.44	99.25	99.65	99.66	99.43	99.34	99.70	99.58	99.73	99.74	99.73	99.91
EOM	99.61	99.38	99.82	99.36	99.77	99.45	99.41	99.46	99.83	99.76	99.88	98.04
MEAN	99.56	99.48	99.54	99.54	99.63	99.53	99.58	99.63	99.68	99.73	99.78	99.70
MAX	99.99	99.73	99.82	99.84	99.91	99.98	99.96	99.88	99.96	99.86	99.88	100.01
MIN	99.01	98.91	99.24	99.31	99.17	99.20	99.23	99.23	99.53	99.54	99.70	98.04

WTR YR 2002 MEAN 99.62 HIGH 98.04 SEP 30 LOW 100.01 SEP 24





**GROUND-WATER LEVELS AND QUALITY OF GROUND WATER**

**431**

**ASHLEY COUNTY**

**330624091552801. Local number, 18S08W28DDD2.**

**LOCATION.**--Lat 33°06'24", long 91°55'28", Hydrologic Unit 08040205, near Crossett.

Owner: Georgia-Pacific Paper Co.

**AQUIFER.**--Sand and gravel of Quaternary age.

**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 4 in, depth 155 ft, screened 142-152 ft.

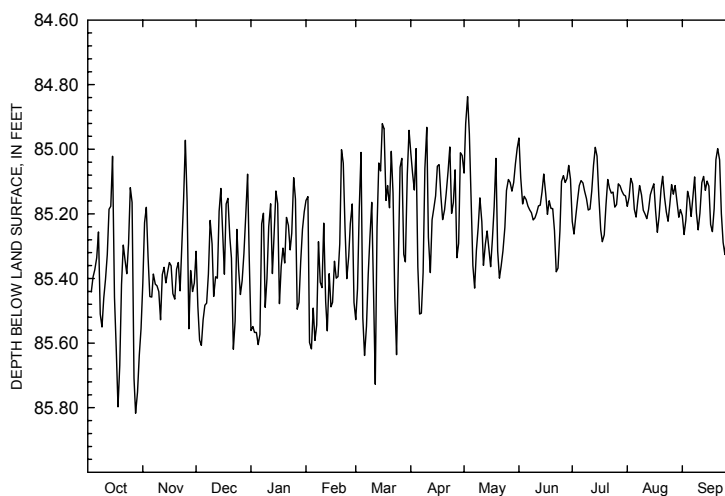
**DATUM.**--Land surface, 163.26 ft above NGVD of 1929. Measuring point: Top of casing, 3.27 ft above land surface.

**PERIOD OF RECORD.**--Monthly water levels June 1960 to August 1963 and continuous water levels April 1971 to September 1994, October 1996 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 84.74 ft below land surface, Mar. 15, 1996; lowest, 93.28 ft below land surface, Aug. 22, 1963.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.26	85.39	85.48	85.23	85.54	85.55	85.51	85.43	85.19	85.10	85.16	85.15
10	85.33	85.39	85.39	85.17	85.47	85.73	85.38	85.36	85.18	85.13	85.21	85.10
15	85.62	85.36	85.39	85.48	85.35	84.94	85.05	85.28	85.20	85.25	85.19	85.23
20	85.34	85.44	85.62	85.24	85.04	85.14	85.07	85.36	85.38	85.12	85.15	85.03
25	85.71	85.56	85.41	85.50	85.17	85.03	85.34	85.10	85.10	85.11	85.14	85.09
EOM	85.23	85.49	85.55	85.15	85.43	85.07	84.92	85.09	85.26	85.15	85.26	85.05
MAX	85.82	85.56	85.62	85.60	85.62	85.73	85.51	85.43	85.38	85.29	85.26	85.33
MIN	85.02	84.97	85.08	85.09	85.00	84.92	84.92	84.84	85.05	84.99	85.08	84.75
CAL YR 2001	HIGH 84.74 MAR 15		LOW 85.82 JAN 2									
WTR YR 2002	HIGH 84.75 SEP 26		LOW 85.82 OCT 26									



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

BENTON COUNTY

361540094130701. Local number, 18N30W01DBB1SP.

LOCATION.--Lat 36°15'40", long 94°13'07", Hydrologic Unit 11070209, at Cave Springs.

Owner: Mark Collier.

AQUIFER.--Boone Formation of Mississippian age.

SPRING CHARACTERISTICS.--Free flowing spring for private use.

DATUM.--Land surface, 1,100 ft NGVD of 1929.

PERIOD OF RECORD.--August 1996, July 1997, August 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	ELEV. OF LAND SURFACE (FT. ABOVE NGVD) (72000)	COLOR (PLAT-INUM- COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM HG) (00025)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
AUG 2002	12..	80020	80513	1100.00	<5	770	7.2	366	15.1	170	65.0	
Date		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CaCO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
AUG 2002	12..	1.70	1.50	.2	5.6	7	157	7.60	<.1	10.0	2.20	.30
Date		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	
AUG 2002	12...	223	218	<.01	<.20	6.80	<.010	.031	.01	20	52.0	
Date		BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
AUG 2002	12...	<1	6	<.5	<1	<1	<2	<2	<2	<1	<1	
Date		MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB CARBO-WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	3HYDRXY CARBO-FURAN, WAT,FLT GF 0.7U REC (UG/L) (49308)	
AUG 2002	12..	<2	<1	<1	49.0	<1	5	<.07	<.16	<.25	<.11	
Date		ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI-CARB SULFONE WAT,FLT REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT REC (UG/L) (49314)	ALDI-CARB, WATER, FLTRD, REC (UG/L) (49312)	BDMC, SURROG, WATER, UNFLTRD PERCENT (99835)	BENTA-ZON, WATER, FLTRD, (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	
AUG 2002	12...	<.05	<.20	<.27	<.21	66.6	<.05	<.09	<.07	<.080	<.15	

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

433

BENTON COUNTY--CONTINUED

361540094130701. Local number, 18N30W01DBB1SP.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	AMBN, METHYL ESTER WATER FLTRD (UG/L) (61188)	THALO- NIL, WAT,FLT GF 0.7U (UG/L) (49306)	ALID, WATER, FLTRD, GF 0.7U (UG/L) (49305)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U (UG/L) (49304)	DICAMBA WATER, FLTRD, GF 0.7U (UG/L) (38442)	DICHLOR BENIL, WATER, FLTRD, GF 0.7U (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U (UG/L) (49302)	DINOSEB WATER, FLTRD, GF 0.7U (UG/L) (49301)	DIURON, WATER, FLTRD, GF 0.7U (UG/L) (49300)	DNOC WAT,FLT GF 0.7U (UG/L) (49299)
AUG 2002 12...	<.21	<.25	<.42	<.07	<.11	<.09	<.12	<.09	<.12	<.25
Date	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN WATER, FLTRD, GF 0.7U REC (UG/L) (49292)
AUG 2002 12...	<.07	<.06	<.06	<.20	<.26	<.07	<.22	<.07	<.04	<.28
Date	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER DISS AS CS-137 (PCI/L) (75989)	GROSS BETA, DIS- SOLVED (PCI/L) AS CS-137 (03515)
AUG 2002 12...	<.16	<.09	<.22	<.12	<.03	<.07	2.7	.9	1.6	2.9

Remark codes used in this report:  
< -- Less than

CHICOT COUNTY

330640091154103. Local number, 18S02W25ABB3.

LOCATION.--Lat 33°06'40", long 91°15'41", Hydrologic Unit 08050001, at Eudora.

Owner: City of Eudora

AQUIFER.--Cockfield Formation of Eocene age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 18 in, depth 332 ft, cased 0-280 ft, screened 280-330 ft.

DATUM.--Land surface, 135 ft above NGVD of 1929. Measuring point: Top of hole in west side of turbine pump, 2.50 ft above land surface.

REMARKS.--Water-quality records for June 1970, June 1975, May 1979, June 1983, August 1993, August 1998 and August 2002 are available in files of District Office.

PERIOD OF RECORD.--January 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.75 ft below land surface, Mar. 20, 1975; lowest, 47.65 ft below land surface, June 14, 1988.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 2002 14...	0835	80020	80513	332	135.00	5	770	7.1	892	23.9	300

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

CHICOT COUNTY--CONTINUED

330640091154103. Local number, 18S02W25ABB3.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
AUG 2002 14...	76.0	27.0	1.80	2	71.0	34	349	83.0	.2	29.0	<.20
Date	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS CR) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE SOLVED (MG/L AS CO2) (00405)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)
AUG 2002 14...	491	.24	.20	.31	<.02	<.010	<.01	49	230	<1	132
Date	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
AUG 2002 14...	<.5	<1	<1	<2	1160	<2	9	194	<2	<1	<1
Date	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
AUG 2002 14...	460	<1	<2	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041
Date	FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
AUG 2002 14...	<.020	<.005	<.018	<.003	<.006	97.3	<.005	<.005	<.02	<.002	
Date	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FONOFOS FLTRD DISS GF, REC (UG/L) (82672)	HCH ALPHA D6 SRG WATER WAT FLT DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (39415)	
AUG 2002 14...	<.009	<.005	<.003	90.2	<.004	<.035	<.027	<.050	<.006	<.013	

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

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CHICOT COUNTY--CONTINUED

330640091154103. Local number, 18S02W25ABB3.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	METRI- BUZIN SENCOR WATER	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	P,P' DDE	PARA- THION, DIS-	PEB- ULATE WATER FILTRD 0.7 U	PENDI- METH- ALIN WAT FLT 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U	PHORATE WATER FLTRD 0.7 U	PRO- METON, WATER, DISS, 0.7 U	PRON- AMIDE WATER FLTRD 0.7 U
Date	DISSOLV (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	DISSOLV (UG/L)	SOLVED (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)
	(82630)	(82671)	(82684)	(34653)	(39542)	(82669)	(82683)	(82687)	(82664)	(04037)	(82676)
AUG 2002											
14...	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01	<.004

	PROPA- CHLOR, WATER, DISS, 0.7 U	PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	SI- MAZINE, WATER, DISS, 0.7 U	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U
Date	REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)	GF, REC (UG/L)
	(04024)	(82679)	(82685)	(04035)	(82670)	(82665)	(82675)	(82681)	(82678)
AUG 2002									
14...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002

	TRI- FLUR- ALIN WAT FLT 0.7 U	ALPHA COUNT, 2 SIGMA WAT DIS AS	ALPHA RADIO. WATER DISS AS	BETA, 2 SIGMA WATER, DISS, AS	GROSS BETA, DIS- SOLVED (PCI/L)
Date	GF, REC (UG/L)	TH-230 (PCI/L)	TH-230 (PCI/L)	CS-137 (PCI/L)	AS CS-137 (03515)
	(82661)	(75987)	(04126)	(75989)	(03515)
AUG 2002					
14...	<.009	6.4	.8	3.6	3.8

Remark codes used in this report:  
< -- Less than

CROSS COUNTY

352231090421501. Local number, 09N04E30DCA1.

**LOCATION.**--Lat 35°22'23", long 90°42'15", Hydrologic Unit 08020205, near Birdeye.  
 Owner: Vanndale-Birdeye Water Association.  
**AQUIFER.**--Memphis Sand of Eocene age.  
**WELL CHARACTERISTICS.**--Drilled public supply artesian well, diameter 10 in, depth 1148 ft, cased 0-1038 ft, screened 1038-1148 ft.  
**DATUM.**--Land surface, 429.32 ft NGVD of 1929. Measuring point: Edge of 1-in pipe south side of pump base, 2.50 ft above land surface.  
**REMARKS.**--Water-quality records for December 1976, June 1981, July 1984, August 1989, August 1994, and August 2002 are available in files of District Office.  
**PERIOD OF RECORD.**--July 1973 to March 1986, April 1989 to April 1990, May 1993 to 1994, August 2002.  
**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 240.47 ft below land surface, Mar. 22, 1976; lowest, 275.57 ft below land surface, Aug. 29, 1994.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

CROSS COUNTY--CONTINUED

352231090421501. Local number, 09N04E30DCA1.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM ABOVE NGVD (72000)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL AS CACO3 (00900)
AUG 2002	15...	80020	80513	1132	429.32	5	764	7.1	510	22.2	220

Date	Time	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
AUG 2002	15...	57.0	19.0	2.10	.7	25.0	20	273	3.60	.2	17.0	6.40

Date	Time	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS BA) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L AS BE) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
AUG 2002	15...	.38	282	296	.20	<.20	.26	<.02	<.010	.061	.02

Date	Time	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
AUG 2002	15...	43	130	<1	15	<.5	<1	<1	<2	815	<2

Date	Time	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	2,6-DI-ETHYL WAT FLT GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
AUG 2002	15...	2	102	<2	<1	<1	240	<1	<2	<.006	<.006

Date	Time	ALA-CHLOR, WATER DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER DISS, REC (UG/L) (04028)	CAR-BARYL, WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN, WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER DISS, REC (UG/L) (04041)	DCPA, WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
AUG 2002	15...	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003

**GROUND-WATER LEVELS AND QUALITY OF GROUND WATER**

437

**CROSS COUNTY--CONTINUED**

**352231090421501. Local number, 09N04E30DCA1.--CONTINUED**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ATRA-ZINE, DISS, REC (04040)	INON D10 SRG WAT FLT 0.7 U GF, REC (91063)	DI-AZINON, DIS-SOLVED (39572)	DI-ELDRIN, DIS-SOLVED (39381)	DISUL-FOTON WATER FLTRD (UG/L) (82677)	EPTC WATER FLTRD (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (UG/L) (82663)	ETHO-PROP WATER FLTRD (UG/L) (82672)	FONOFOS WATER REC (04095)	HCH ALPHA D6 SRG WAT FLT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)
AUG 2002 15...	<.006	108	<.005	<.005	<.02	<.002	<.009	<.005	<.003	94.6	<.004
Date	LIN-URON WATER FLTRD 0.7 U GF, REC (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT (UG/L) (82686)	METHYL PARA-THION WAT FLT (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	
AUG 2002 15...	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	
Date	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT (UG/L) (82683)	PER-METHRIN CIS WAT FLT (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)	PRO-METON, WATER DISS, REC (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PRO-CHLOR, WATER DISS, REC (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER DISS, REC (04035)	
AUG 2002 15...	<.004	<.022	<.010	<.011	<.01	<.004	<.010	<.011	<.02	<.005	
Date	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-FLUR-ALIN WAT FLT (UG/L) (82661)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. 2 SIGMA WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER DISS AS CS-137 (PCI/L) (75989)	GROSS BETA, DIS-SOLVED (PCI/L) AS CS-137 (03515)	
AUG 2002 15...	<.02	<.034	<.02	<.005	<.002	<.009	3.9	1.1	2.3	5.8	

Remark codes used in this report:  
< -- Less than

**DESHA COUNTY**

**335258091152301. Local number, 09S02W26DDC1.**

**LOCATION.**--Lat 33°52'58", long 91°15'23", Hydrologic Unit 08050002, near Watson.

Owner: Ed Smith.

**AQUIFER.**--Sand and gravel of Quaternary age.

**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 5-2 in, depth 97 ft, cased 0-94 ft, screened 94-97 ft.

**DATUM.**--Land surface, 149.27 ft above NGVD of 1929. Measuring point: Top of casing, 1.71 ft above land surface.

**REMARKS.**--Water level fluctuates largely with stage of Arkansas River.

**PERIOD OF RECORD.**--Continuous water levels October 1957 to September 1994, October 1996 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 2.94 ft below land surface, Feb. 17, 1959; lowest, 32.74 ft below land surface, Aug. 30, 2001.

**GROUND-WATER LEVELS AND QUALITY OF GROUND WATER**

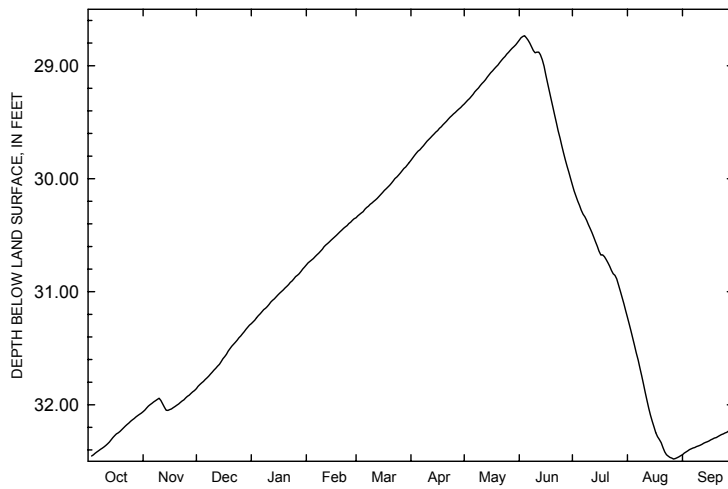
**DESHA COUNTY--CONTINUED**

**335258091152301. Local number, 09S02W26DDC1.--CONTINUED**

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.41	31.97	31.76	31.18	30.67	30.26	29.73	29.23	28.80	30.31	31.60	32.38
10	32.35	31.99	31.68	31.09	30.59	30.19	29.64	29.14	28.88	30.48	31.96	32.35
15	32.26	32.04	31.57	31.01	30.51	30.10	29.55	29.05	29.16	30.68	32.25	32.31
20	32.19	31.98	31.46	30.94	30.44	30.02	29.47	28.95	29.51	30.77	32.42	32.27
25	32.12	31.92	31.37	30.85	30.37	29.93	29.40	28.86	29.84	30.94	32.48	32.23
EOM	32.05	31.84	31.27	30.75	30.33	29.82	29.32	28.75	30.11	31.29	32.43	32.19
MEAN	32.25	31.97	31.55	31.00	30.52	30.08	29.55	29.03	29.29	30.68	32.13	32.30
MAX	32.45	32.05	31.82	31.25	30.73	30.32	29.79	29.30	30.11	31.29	32.48	32.42
MIN	32.05	31.84	31.27	30.75	30.33	29.82	29.32	28.75	28.73	30.15	31.35	32.19

CAL YR 2001 MEAN 30.81 HIGH 29.01 MAY 15 LOW 32.74 AUG 30  
WTR YR 2002 MEAN 30.87 HIGH 28.73 JUN 2 LOW 32.48 AUG 25





GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

439

GARLAND COUNTY

34305309304201. Local number, 02S19W31DAA1.

LOCATION.--Lat 34°30'53", long 93°04'20", Hydrologic Unit 08040101, at Crystal Springs.

Owner: Jack Bridges.

AQUIFER.--Big Fork Chert of Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled well for aquaculture.

DATUM.--Land surface, 695 ft above NGVD of 1929.

PERIOD OF RECORD.--July 1997, August 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE OF HG) (00025)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL AS CACO3) (00900)
AUG 2002	13...	80020	80513	50	695	<5	764	7.2	324	20.1	160

Date	Time	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
AUG 2002	13...	61.0	2.80	1.40	.1	3.2	4	160	2.20	.1	12.0

Date	Time	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
AUG 2002	13...	7.90	.24	179	187	.02	<.20	.03	<.02	<.010	<.01

Date	Time	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	BARIUM DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
AUG 2002	13...	20	15.0	<1	8	<.5	<1	<1	<2	363	<2

Date	Time	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)
AUG 2002	13...	6	57	<2	2	<1	230	<1	13	<.07	<.16

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

GARLAND COUNTY--CONTINUED

34305309304201. Local number, 02S19W31DAA1.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,3-DB WATER FLTRD GF 0.7U REC (UG/L) (38746)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ACIFL- UORFEN WATER, FLTRD GF 0.7U REC (UG/L) (49315)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD GF 0.7U REC (UG/L) (49312)	BDMC, SURROG, WATER, UNFLTRD REC (99835)	BENTA- ZON, WATER, FLTRD GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, GF 0.7U REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD GF 0.7U REC (UG/L) (49311)	CAR- BARYL, WATER, FLTRD GF 0.7U REC (UG/L) (49310)
AUG 2002 13...	<.25	<.11	<.05	<.20	<.27	<.21	66.2	<.05	<.09	<.07	<.080
Date	CARBO- FURAN, WATER, FLTRD GF 0.7U REC (UG/L) (49309)	CHLOR- AMBEN, METHYL ESTER WATER GF 0.7U FLTRD REC (UG/L) (61188)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR- ALID, WATER, FLTRD GF 0.7U REC (UG/L) (49305)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICAMBA WATER, FLTRD GF 0.7U REC (UG/L) (38442)	DICHLO- BENIL, WATER, FLTRD GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD GF 0.7U REC (UG/L) (49302)	DINOSEB WATER, FLTRD GF 0.7U REC (UG/L) (49301)	DIURON, WATER, FLTRD GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)
AUG 2002 13...	<.15	<.21	<.25	<.42	<.07	<.11	<.09	<.12	<.14	<.12	<.25
Date	FEN- URON, WATER, FLTRD GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD GF 0.7U REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD GF 0.7U REC (UG/L) (49296)	NEB- URON, WATER, FLTRD GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD GF 0.7U REC (UG/L) (49292)	
AUG 2002 13...	<.07	<.06	<.06	<.20	<.26	<.07	<.22	<.07	<.04	<.28	
Date	OXAMYL, WATER, FLTRD GF 0.7U REC (UG/L) (38866)	PIC- LORAM, WATER, FLTRD GF 0.7U REC (UG/L) (49291)	PRO- PHAM, WATER, FLTRD GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED GF 0.7U REC (UG/L) (39762)	TRI- CLOPYR, WATER, FLTRD GF 0.7U REC (UG/L) (49235)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS AS CS-137 (PCI/L) (75989)	GROSS BETA, DIS- SOLVED (PCI/L) AS CS-137 (03515)	
AUG 2002 13...	<.16	<.09	<.22	<.12	<.03	<.07	3.2	7.1	1.5	4.5	

Remark codes used in this report:  
< -- Less than

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

441

GARLAND COUNTY--CONTINUED

343048093030401. Local number, 02S19W33CBD1.

LOCATION.--Lat 34°30'48", long 93°03'04", Hydrologic Unit 08040101, at Hot Springs.

Owner: Hot Springs Rehabilitation Center.

AQUIFER.--Hot Springs Sandstone of Mississippian age.

WELL CHARACTERISTICS.--Drilled unused well, depth 336.5 ft.

DATUM.--Land surface, 740 ft above NGVD of 1929. Measuring point: Top of casing, 1.30 ft above land surface.

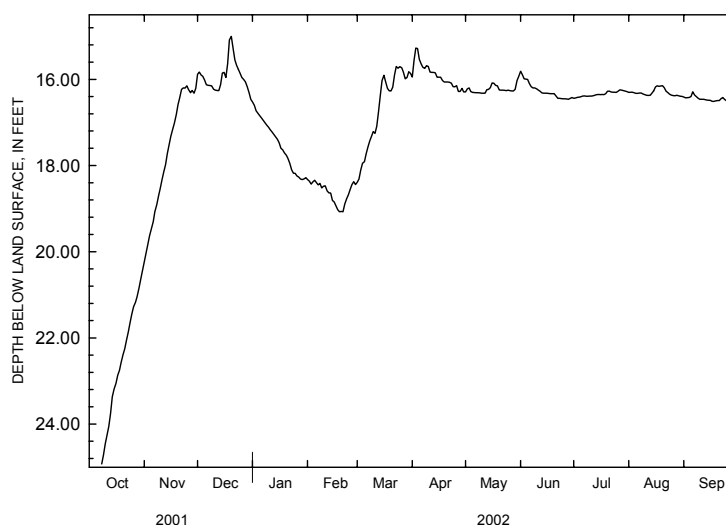
PERIOD OF RECORD.--Continuous water levels February 1991 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft below land surface Dec. 18, 2001; lowest, 117.21 ft below land surface, Feb. 20, 1991.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.09	19.07	16.14	16.95	18.45	17.57	15.72	16.31	16.17	16.38	16.32	16.36
10	24.06	18.14	16.26	17.22	18.59	17.09	15.84	16.32	16.28	16.38	16.37	16.46
15	22.87	17.15	15.96	17.60	18.93	16.05	15.95	16.09	16.33	16.35	16.15	16.51
20	22.05	16.23	15.54	17.96	18.89	15.90	16.07	16.25	16.44	16.29	16.27	16.45
25	21.17	16.31	16.00	18.27	18.37	15.83	16.28	16.27	16.45	16.24	16.38	16.50
EOM	20.03	15.83	16.60	18.36	18.31	15.56	16.22	15.89	16.43	16.30	16.43	16.58
MAX	25.67	19.83	16.60	18.36	19.07	18.10	16.29	16.32	---	16.42	16.43	16.59
MIN	20.03	15.83	15.00	16.73	18.31	15.56	15.27	15.81	---	16.24	16.15	16.29

CAL YR 2001 HIGH 15.00 DEC 18 LOW 25.67 OCT 2



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

GARLAND COUNTY--CONTINUED

343153093215801. Local number, 02S22W28CBD1SP.

LOCATION.--Lat 34°31'53", long 93°21'58", Hydrologic Unit 11110206, at Crystal Springs.

Owner: U.S. Forest Service.

AQUIFER.--Big Fork Chert of Middle Ordovician age

SPRING CHARACTERISTICS.--Free flowing spring for public use.

DATUM.--Land surface, 640 ft above NGVD of 1929.

PERIOD OF RECORD.--July 1997, August 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	COLOR (PLAT-INUM- OF COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
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AUG 2002  
13... 1300 80020 80513 640.0 <5 755 7.9 253 26.9 130 42.0

Date	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
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AUG 2002  
13... 5.60 1.70 .1 1.5 2 129 1.80 .2 14.0 2.90 .19

Date	RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ORTHO-CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)
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AUG 2002  
13... 141 147 <.01 <.20 <.02 <.010 .061 .02 3.1

Date	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
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AUG 2002  
13... 23.0 <1 5 <.5 <1 <1 <2 3 <2 6

Date	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, REC (UG/L) (38746)	3HYDRXY CARBO-FURAN WAT,FLT REC (UG/L) (49308)
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AUG 2002  
13... <1 <2 <1 <1 83.0 2 2 <.07 <.16 <.25 <.11

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

GARLAND COUNTY--CONTINUED

343153093215801. Local number, 02S22W28CBD1SP.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	BDMC, SURROG, WATER, UNFLTRD REC PERCENT (99835)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, GF 0.7U REC (UG/L) (49311)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)
AUG 2002 13...	<.05	<.20	<.27	<.21	70.8	<.05	<.09	<.07	<.080	<.15
Date	CHLOR- AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)
AUG 2002 13...	<.21	<.25	<.42	<.07	<.11	<.09	<.12	<.13	<.12	<.25
Date	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)
AUG 2002 13...	<.07	<.06	<.06	<.20	<.26	<.07	<.22	<.07	<.04	<.28
Date	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED REC (UG/L) (39762)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 REC (PCI/L) (75987)	ALPHA RADIO. 2 SIGMA WATER DISS AS TH-230 REC (PCI/L) (04126)	BETA, 2 SIGMA ATER, DISS AS CS-137 REC (PCI/L) (75989)	GROSS BETA DIS- SOLVED (PCI/L) AS CS-137 REC (03515)
AUG 2002 13...	<.16	<.09	<.22	<.12	<.03	<.07	2.0	-.2	1.3	2.2

Remark codes used in this report:  
< -- Less than

**GROUND-WATER LEVELS AND QUALITY OF GROUND WATER**

**JEFFERSON COUNTY**

341138091551601. Local number, 06S08W16CCC1.

**LOCATION.**--Lat 34°11'38", long 91°55'16", Hydrologic Unit 08040205, at intersection of U.S. Highway 62 and State Highway 81 near Pine Bluff (company observation well No. 3).

Owner: International Paper Company.

**AQUIFER.**--Sparta Sand of Eocene age.

**WELL CHARACTERISTICS.**--Drilled observation well, diameter 2 in, depth 1,106 ft, cased 0-1, 317 ft, 1,033-1,053 ft, 1,068-1,090 ft, screened 1,017-1,033 ft 1,053-1,068 ft, 1,090-1,106 ft.

**DATUM.**--Land surface, 202.42 ft above NGVD of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

**PERIOD OF RECORD.**--August 1958 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 108.98 ft below land surface, Sept. 4, 1958; lowest, 275.20 ft below land surface, Nov. 30, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM  
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
OCT 10	261.70	DEC 31	262.80	MAR 01	262.20	MAY 01	260.00	JUL 01	254.80	SEP 03	261.40
NOV 07	261.80	FEB 05	262.50	29	261.00	JUN 01	260.10	31	260.80		
WATER YEAR 2002	HIGHEST 254.80	JUL 01, 2002	LOWEST 262.80	DEC 31, 2001							
PERIOD OF RECORD	HIGHEST 108.98	SEP 04, 1958	LOWEST 275.20	NOV 30, 1999							

**LONOKE COUNTY**

345057091525601. Local number, 03N08W32ABB1

**LOCATION.**--Lat 34°50'57", long 91°52'56", Hydrologic Unit 08020402, near Wattensaw.

Owner: University of Arkansas at Pine Bluff.

**AQUIFER.**--Sand and gravel of Quaternary age.

**WELL CHARACTERISTICS.**--Drilled for observation well, diameter 4 in, depth 154 ft, screened 124-154 ft.

**DATUM.**--Land Surface 250 ft above NGVD of 1929. Measuring point: Top of casing, 1.6 ft above land surface.

**PERIOD OF RECORD.**--June 2000 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 110.92 ft below land surface, June 20, 2000; lowest, 120.88 ft below land surface, Aug. 31, 2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	116.43	116.33	116.12	115.91	115.90	116.18	115.58	115.75	115.69	117.79	119.06	120.26
10	116.54	116.29	115.95	115.40	115.78	116.19	115.29	115.69	116.11	118.39	119.31	119.85
15	116.01	116.08	115.69	115.30	116.07	115.66	115.04	115.72	116.57	118.74	119.81	119.71
20	116.39	115.99	115.67	115.39	115.50	115.69	115.04	115.65	117.73	119.67	120.08	119.44
25	115.97	115.41	115.77	115.29	115.69	115.68	115.23	115.69	117.90	118.91	119.75	119.53
EOM	116.72	115.71	115.74	115.15	116.01	115.20	115.49	115.37	118.03	120.17	120.88	119.35
MEAN	116.41	116.02	115.79	115.48	115.79	115.84	115.25	115.62	116.85	118.77	119.69	119.80
MAX	116.82	116.53	116.12	116.00	116.09	116.31	115.67	115.83	118.28	120.17	120.88	120.80
MIN	115.92	115.41	115.45	115.15	115.22	115.20	114.97	115.33	115.38	117.78	119.06	119.11
CAL YR 2001	MEAN 115.12	HIGH 112.92	MAR 16	LOW 116.90	SEP 12							
WTR YR 2002	MEAN 116.78	HIGH 114.97	APR 21	LOW 120.88	AUG 31							

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

LONOKE COUNTY--CONTINUED

345057091525601. Local number, 03N08W32ABB1--CONTINUED



345413091493401. Local number, 03N08W11ACA1

LOCATION.--Lat 34°54'13", long 91°49'34", Hydrologic Unit 08020301, near Wattensaw.

Owner: Cabot, City of.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS--Drilled for observation well, diameter 4 in, depth 144 ft, screened 123-143 ft.

DATUM.--Land surface 256 ft above NGVD of 1929. Measuring point: Top of casing, 0.53 ft above land surface.

PERIOD OF RECORD.--January 1999 to present year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 89.78 ft below land surface, January 11, 1999; lowest, 97.26 ft below land surface, September 16, 2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.43	94.44	93.96	94.70	95.08	95.06	94.65	94.63	94.81	94.98	96.44	96.96
10	94.11	93.86	94.08	94.06	95.27	95.34	94.53	94.83	94.78	95.12	96.60	97.11
15	94.74	94.38	93.95	94.12	94.39	94.06	94.39	95.02	94.71	95.10	96.49	97.24
20	93.97	94.52	94.17	94.53	94.28	94.37	94.97	94.78	95.10	94.91	96.64	96.80
25	94.10	93.91	93.90	94.85	94.89	94.22	94.89	94.65	94.89	95.69	96.64	96.82
EOM	94.28	94.04	94.65	94.98	95.01	94.69	94.34	94.85	95.03	96.03	96.89	96.22

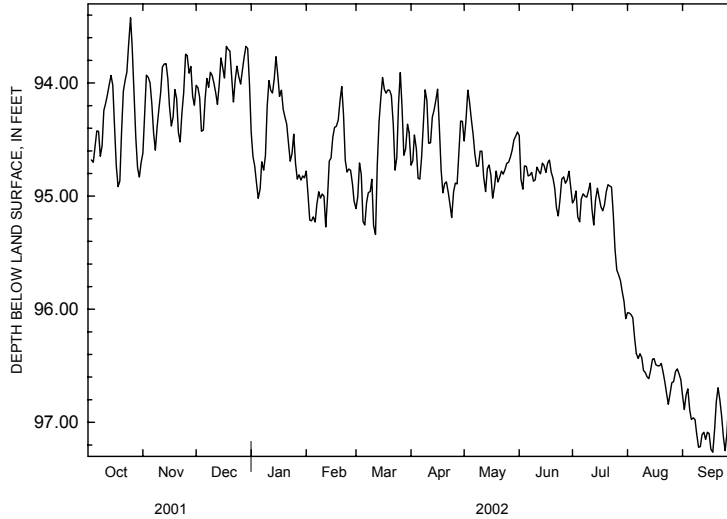
GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

LONOKE COUNTY--CONTINUED

345413091493401. Local number, 03N08W11AC1--CONTINUED

MEAN	94.33	94.11	94.00	94.51	94.81	94.57	94.59	94.66	94.85	95.26	96.53	96.93
MAX	94.92	94.59	94.65	95.02	95.27	95.34	95.19	95.02	95.17	96.08	96.89	97.26
MIN	93.42	93.74	93.68	93.77	94.03	93.91	94.05	94.06	94.68	94.88	96.05	96.22

WTR YR 2002 MEAN 94.93 HIGH 93.42 OCT 23 LOW 97.26 SEP 16



MONTGOMERY COUNTY

343726093481801. Local number, 01S26W29DCC1.

LOCATION.--Lat 34°37'26", long 93°48'18", Hydrologic Unit 08040101, near Oden.

Owner: U.S. Forest Service.

AQUIFER.--Stanley Shale of Devonian age.

WELL CHARACTERISTICS.--Drilled well, diameter 7 in, depth 208 ft, cased 0-84 ft.

DATUM.--Land surface, 895 ft above NGVD of 1929. Measuring point: Top of casing, 2.6 ft below land surface.

PERIOD OF RECORD.--Monthly water levels January 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.38 ft below land surface, Feb. 23, 2001; lowest, 54.00 ft below land surface, Aug. 27, 1937.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM  
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL
OCT 29 50.71	DEC 03 44.50	MAR 26 32.29	MAY 28 41.45	JUL 24 47.75	AUG 30 48.46
NOV 08 49.34	JAN 14 43.51	MAY 06 39.25	JUN 26 46.53	AUG 02 48.08	
WATER YEAR 2002 HIGHEST 32.29	MAR 26, 2002	LOWEST 50.71	OCT 29, 2001		
PERIOD OF RECORD HIGHEST 31.38	FEB 23, 2001	LOWEST 54.00	AUG 27, 1937		



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

447

PHILLIPS COUNTY

343108090462601. Local number, 02S03E15ACD1.

LOCATION.--Lat 34°31'08", long 90°46'26", Hydrologic Unit 08020304, near Barton.

Owner: Don R. Dearing.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 in, depth 112 ft.

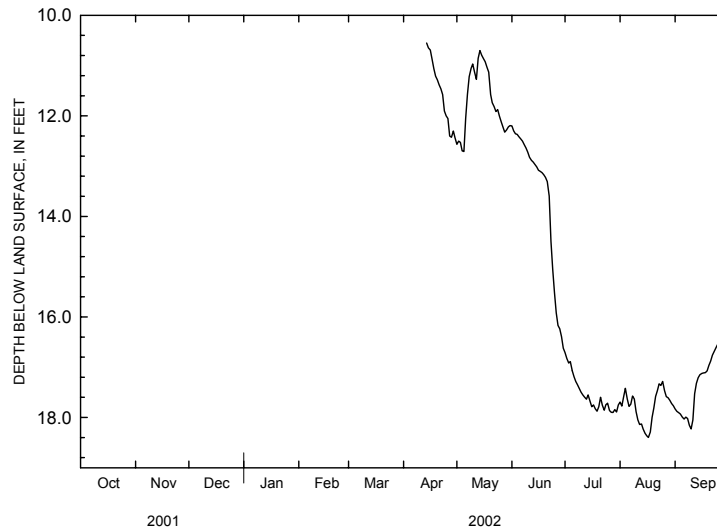
DATUM.--Land surface, 147 ft above NGVD of 1929. Measuring point: Top of casing, at land surface.

PERIOD OF RECORD.--Annual water levels March 1955 and continuous water levels January 1957 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.61 ft below land surface, Apr. 25, 1973; lowest, 36.99 ft below land surface, Jan. 7, 2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	11.57	12.50	17.28	17.74	17.99
10	---	---	---	---	---	---	---	11.28	12.88	17.60	18.14	17.53
15	---	---	---	---	---	---	10.86	10.93	13.11	17.75	18.40	17.11
20	---	---	---	---	---	---	11.46	11.82	13.59	17.75	17.47	16.76
25	---	---	---	---	---	---	12.40	12.22	16.17	17.90	17.59	16.43
EOM	---	---	---	---	---	---	12.50	12.30	16.82	17.77	17.88	16.13
MAX	---	---	---	---	---	---	---	12.71	16.82	17.90	18.40	18.23
MIN	---	---	---	---	---	---	---	10.70	12.36	16.89	17.28	16.13



**GROUND-WATER LEVELS AND QUALITY OF GROUND WATER**

**STONE COUNTY**

355927092122401. Local number, 16N12W25DCB1.

**LOCATION.**--Lat 35°59'27", long 92°12'24", Hydrologic Unit 11010004, near Fifty-Six.

Owner: U.S. Forest Service.

**AQUIFER.**--Boone Formation.

**WELL CHARACTERISTICS.**--Drilled well, diameter 6.5 in, depth 88 ft, cased 0-29 ft.

**DATUM.**--Land surface, 485 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

**PERIOD OF RECORD.**--Monthly water levels March 1998 to present.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 60.80 ft below land surface, Apr. 22, 1998; lowest, 69.84 ft below land surface, Mar. 14, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM  
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
NOV 27	69.84	MAY 07	66.00	JUL 04	66.45	SEP 27	66.90				
DEC 13	68.44	29	65.70	AUG 01	66.65						
WATER YEAR 2002	HIGHEST	65.70	MAY 29, 2002	LOWEST	69.84	NOV 27, 2001					
PERIOD OF RECORD	HIGHEST	60.80	APR 22, 1998	LOWEST	69.84	NOV 27, 2001	NOV 27, 2001				

**UNION COUNTY**

330855092505601. Local number, 18S17W22BDD1

**LOCATION.**--Lat 33°08'55", long 92°50'56", Hydrologic Unit 08040206, near Shuler.

Owner: McKinnon.

**AQUIFER.**--Sparta Sand of Eocene age.

**WELL CHARACTERISTICS.**--Drilled unused artesian well, diameter 10 in, depth 705 ft., cased 0-605 ft, screened 605-705 ft.

**DATUM.**--Land Surface 285 ft above NGVD of 1929. Measuring point: Top of casing, 1.20 ft above land surface.

**PERIOD OF RECORD.**--April 1968 to September 1992, October 1996 to current year.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level measured, 315.37 ft below land surface, April 3, 1968; lowest, 365.60 ft below land surface, September 23, 1996.

DEPTH BELOW LAND SURFACE, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	362.64	362.40	362.00	361.71	361.55	361.70	---	---
10	---	---	---	362.59	362.56	362.41	361.88	361.70	361.57	361.75	---	---
15	---	---	---	362.70	362.47	362.01	361.72	361.69	361.60	361.76	---	---
20	---	---	---	362.56	362.27	361.98	361.72	361.72	361.72	---	---	---
25	---	---	---	362.64	362.29	361.94	361.82	361.65	361.70	---	---	---
EOM	---	---	---	362.51	362.36	361.86	361.61	361.47	361.72	---	---	---

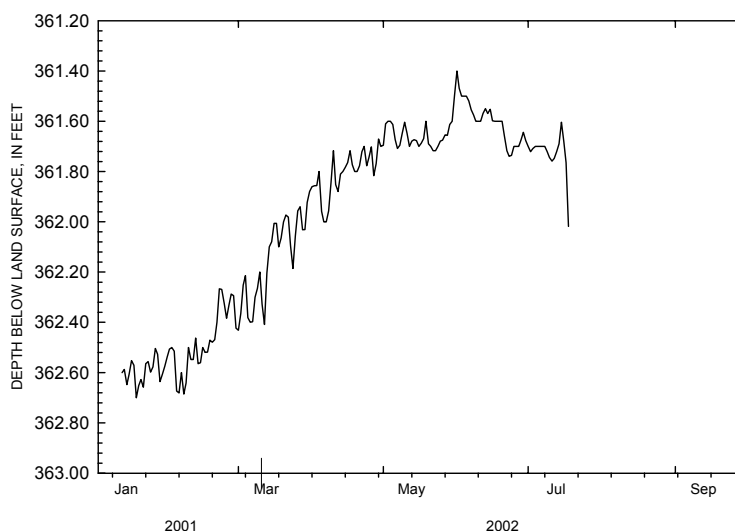
GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

449

UNION COUNTY--CONTINUED

330855092505601. Local number, 18S17W22BDD1--CONTINUED

MAX	---	---	---	---	362.69	362.41	362.00	361.72	361.74	---	---	---
MIN	---	---	---	---	362.27	361.86	361.61	361.40	361.50	---	---	---



331041092431401. Local number, 18S16W11AAB1

LOCATION.--Lat 33°10'41", long 92°43'14", Hydrologic Unit 08040202, near El Dorado.

Owner: Great Lakes Chemical.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Diameter 4 in, depth 520 ft.

DATUM.--Land Surface 225 ft above NGVD of 1929. Measuring point: Top of casing, 0.89 ft above land surface.

PERIOD OF RECORD.--Continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 385.36 ft below land surface, March 31, 2002; lowest, 400.23 ft below land surface, September 7, 2000.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	390.86	390.68	388.90	387.97	387.52	386.51	385.76	386.14	387.24	387.18	389.06	389.82
10	390.92	390.63	388.71	387.96	387.25	386.56	385.83	386.04	387.12	387.78	389.75	389.72
15	390.95	390.23	388.20	388.24	386.29	386.10	385.68	386.37	386.99	387.74	389.70	390.16
20	391.09	389.53	388.01	387.79	386.73	385.91	385.87	386.19	387.08	387.87	389.55	389.71
25	391.15	389.18	388.09	387.78	386.61	385.78	386.39	387.12	387.34	388.17	389.56	389.34
EOM	390.64	388.95	387.97	387.71	386.56	385.45	386.30	387.42	387.11	388.48	389.82	389.08

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

331041092431401. Local number, 18S16W11AAB1--CONTINUED

MEAN	---	390.00	388.31	387.96	387.03	386.09	385.87	386.49	387.16	387.73	389.50	389.70
MAX	---	390.68	388.99	388.28	387.74	386.67	386.39	387.77	387.38	388.49	389.95	390.16
MIN	---	388.94	387.80	387.70	386.29	385.45	385.45	385.92	386.84	387.09	388.55	389.08



331144092410601. Local number, 17S15W31DDA1

LOCATION.--Lat 33°11'44", long 92°41'05", Hydrologic Unit 08040202, near El Dorado.

Owner: Lion Oil.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled for industrial production well, converted to observation, diameter 16 in, depth 740 ft, screened 650-730 ft.

DATUM.--Land Surface 261 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

PERIOD OF RECORD.--Annual water levels April 1951 and March 1952 and continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 329 ft below land surface, April 1, 1951: lowest, 467.12 ft below land surface, March 3, 1999.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

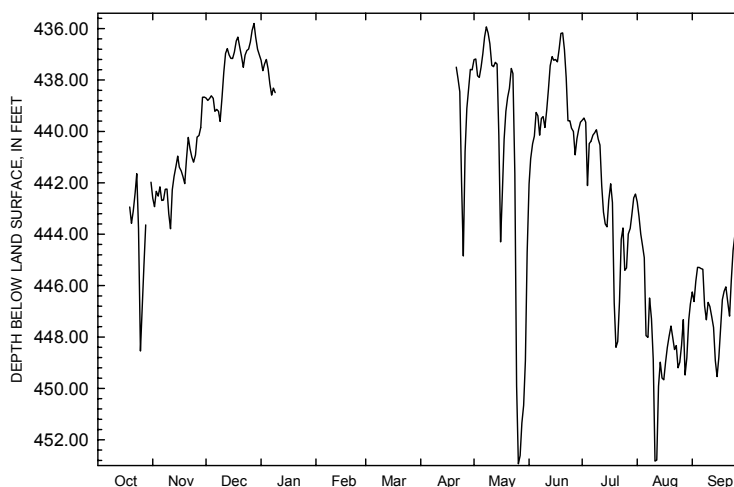
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	442.68	439.14	438.59	---	---	---	436.32	440.15	440.15	448.02	445.36
10	---	442.27	436.96	---	---	---	---	437.48	438.36	442.11	452.79	447.22
15	---	441.54	436.92	---	---	---	---	442.38	437.30	442.04	448.99	447.67
20	442.39	440.68	437.51	---	---	---	437.95	437.55	437.91	446.63	448.49	447.19
25	445.20	440.16	436.07	---	---	---	439.11	452.62	440.91	443.99	447.32	446.45
EOM	442.93	438.80	437.64	---	---	---	437.18	441.06	439.48	443.31	446.62	445.54

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

331144092YP410601. Local number, 17S15W31DDA1

MEAN	---	441.24	437.42	---	---	---	---	441.27	438.83	443.04	448.14	446.17
MAX	---	443.79	439.61	---	---	---	---	452.93	440.91	448.40	452.83	449.54
MIN	---	438.66	435.80	---	---	---	---	435.93	436.17	439.64	443.99	442.82



331346092391101. Local number, 17S15W28DBA1

LOCATION.--Lat 33°12'46", long 92°39'10", Hydrologic Unit 08040201, near El Dorado.

Owner: El Dorado, City of.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled for public water supply well, converted to observation, diameter 16 in, depth 668 ft, screened 588-688 ft.

DATUM.--Land Surface 230 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

PERIOD OF RECORD.--Annual water levels April 1982 to March 1990, June 1993, and March 1999. Continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 363.27 ft below land surface, September 28, 2000; lowest, 427.22 ft below land surface, March 3, 1999.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

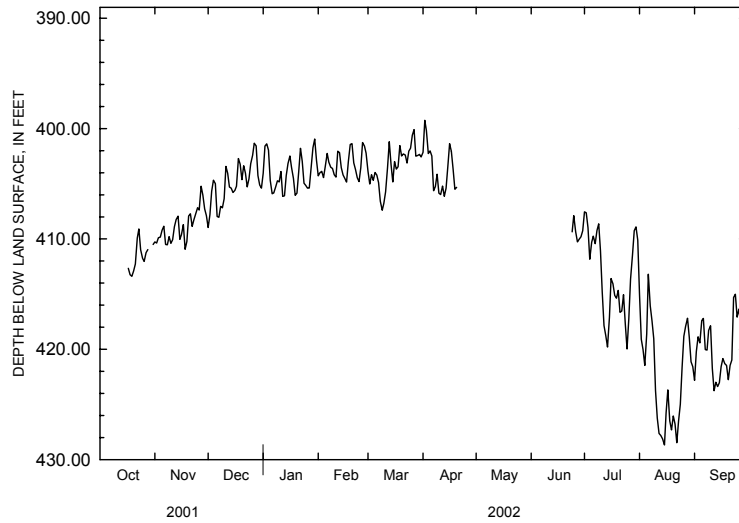
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	410.51	408.04	405.83	403.04	404.88	405.63	---	---	410.43	416.05	420.04
10	---	408.89	404.04	406.13	402.04	403.55	405.20	---	---	417.85	427.62	423.76
15	412.67	408.70	405.23	403.51	404.85	403.67	402.06	---	---	414.07	423.69	420.84
20	409.92	408.86	404.03	401.78	403.71	402.39	---	---	---	416.53	428.47	420.98
25	411.25	405.22	401.32	405.38	401.58	400.08	---	---	410.27	413.63	417.93	417.62
EOM	410.36	407.80	401.59	403.99	405.02	399.24	---	---	407.62	419.09	420.21	417.64

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

331346092391101. Local number, 17S15W28DBA1--CONTINUED

MEAN	---	408.73	404.62	404.11	403.33	403.19	---	---	---	413.94	422.72	419.17
MAX	---	410.93	408.04	406.13	405.02	407.41	---	---	---	419.97	428.67	423.76
MIN	---	405.22	401.32	400.94	401.26	399.24	---	---	---	408.63	413.20	414.87



331438092411901. Local number, 17S15W18DBB1.

LOCATION.--Lat 33°14'38", long 92°41'19", Hydrologic Unit 08040201, at El Dorado.

Owner: Monsanto Chemical Company.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 540 ft, cased 0-520 ft, screened 520-540 ft.

DATUM.--Land surface, 182.93 ft above NGVD of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

PERIOD OF RECORD.--Annual water levels July 1954 to 1963 and continuous water levels 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.00 ft below land surface, 1942; lowest, 381.37 ft below land surface, Apr. 29, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM  
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL
OCT 19 379.74	DEC 20 377.34	FEB 20 377.39	MAY 19 377.40	JUL 20 375.67	SEP 20 377.54
NOV 20 378.43	JAN 22 377.42	APR 19 377.45	JUN 20 377.64	AUG 20 378.19	

WATER YEAR 2002 HIGHEST 375.67 JUL 20, 2002 LOWEST 379.74 OCT 19, 2001  
PERIOD OF RECORD HIGHEST 122.00 , 1942 LOWEST 381.37 APR 29, 1993

**CHEMICAL QUALITY OF PRECIPITATION**

453

00040380 NATIONAL TRENDS NETWORK SITE NEAR CADDO VALLEY

**PRECIPITATION QUALITY**

**LOCATION.**--Lat 34°10'45", long 93°05'54", in NW<sub>1</sub>/4NW<sub>1</sub>/4 sec.36, T.6 S., R.20 W., Clark County, Hydrologic Unit 08040102, approximately 1.6 mi west of Caddo Valley.

**PERIOD OF RECORD.**--January 1984 to current year.

**INSTRUMENTATION.**--An automatic wet-dry precipitation collector is used to collect 7-day accumulations. The collector is equipped with a precipitation sensor which activates a motor to operate the sample bucket cover. The sample bucket remains uncovered for the duration of each precipitation event and covered during dry periods. Dryfall samples are not collected. A standard 8.0-inch recording rain gage is used to obtain onsite precipitation records.

**REMARKS.**--Data for this site are verified by the National Atmospheric Deposition Program/ National Trends Network (NADP/NTN) Coordinator. Additional data are available from the NADP/NTN Coordinator, NADP Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, Illinois 61820. Data for all sites in the network are published quarterly by the NADP/NTN Coordinator's Office. Laboratory analyses were performed by the Central Analytical Laboratory of the Illinois State Water Survey.

Finalized quality assured data from all 200 NADP/NTN sites including the U.S. Geological Survey site near Caddo Valley, Arkansas, are available online via the internet at <http://btdqs.usgs.gov/acidrain>. Paper copies of the data for Caddo Valley are available by contacting the Arkansas District Office, 401 Hardin Road, Little Rock, Arkansas 72211, (501) 228-3600.





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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

*Sea level:* In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.