

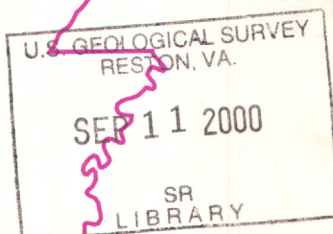
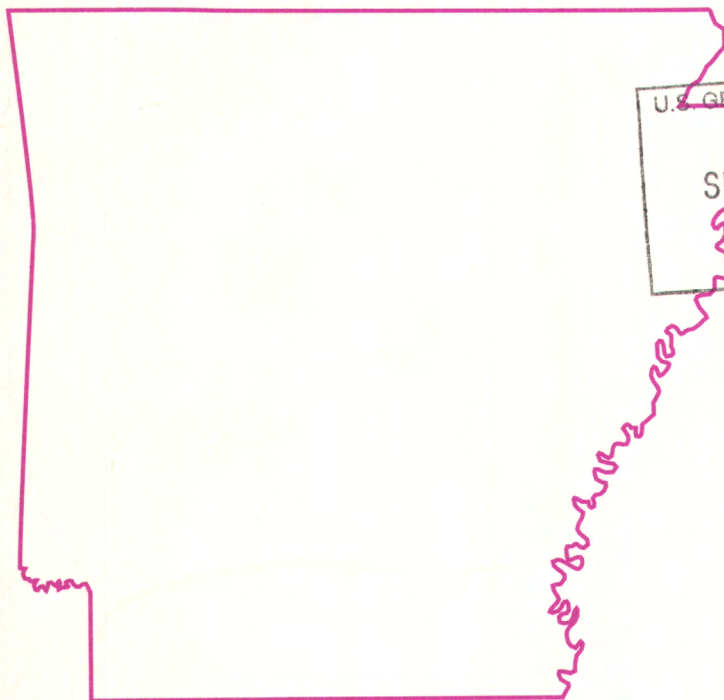
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Water Resources Data Arkansas Water Year 1999

Water-Data Report AR-99-1



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 1999

1998

OCTOBER							NOVEMBER							DECEMBER						
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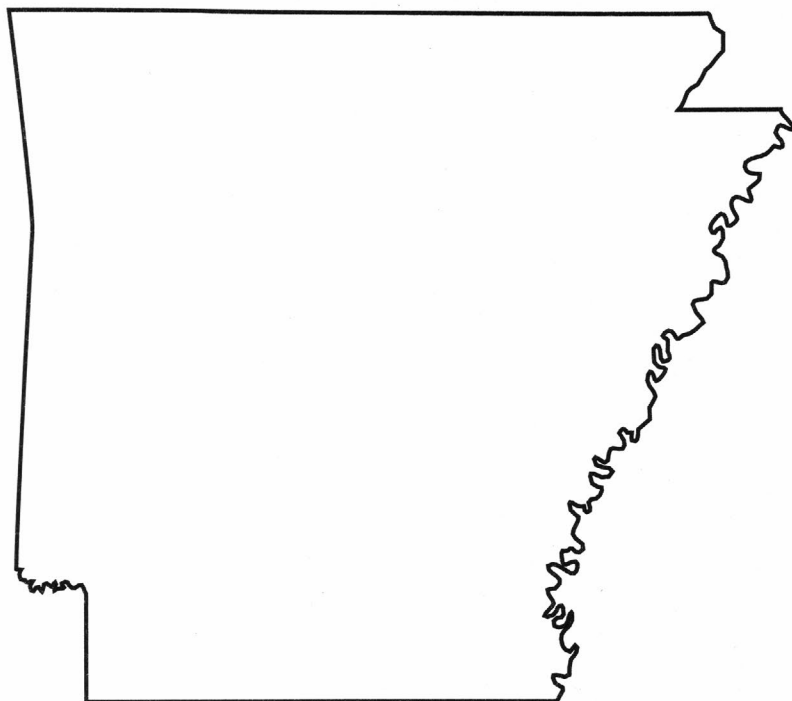
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U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Arkansas Water Year 1999

By J.E. Porter, D.A. Evans, and L.M. Remsing

Water-Data Report AR-99-1



Prepared in cooperation with the State of Arkansas
and with other agencies 10



UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in Arkansas write to
District Chief, Water Resources Division
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Little Rock, Arkansas 72211

2000

PREFACE

This volume of the annual hydrologic data report of Arkansas is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by local, State, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for ensuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

These data were collected, computed, and processed by the following personnel:

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This report was prepared in cooperation with the State of Arkansas and with other agencies under the general supervision of C. Shane Barks, Surveillance & Analysis Section Chief and Robert A. (Bob) Lidwin, District Chief, Arkansas.

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[Letters after station name designate type of data: (d) daily mean discharge, (c) chemical, (b) biological, (m) microbiological, (o) dissolved oxygen, (t) water temperature, (s) sediment.]

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INTRODUCTION

The Water Resources Division 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 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 1999 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 72 surface-water gaging stations and 4 daily sediment stations; water-quality data for 62 surface-water stations, 5 wells and springs, and 1 precipitation-quality station; and water levels for 8 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-99-1. 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 1999 are:

Arkansas Department of Environmental Quality, Randall Mathis, Director
Arkansas Game and Fish Commission, Steve Wilson, Director
Arkansas Geological Commission, William Bush, State Geologist
Arkansas Soil and Water Conservation Commission, J. Randy Young, Director
Arkansas State Highway and Transportation Department, Dan Flowers, Director
Arkansas Department of Parks and Tourism, Richard W. Davies, Director
Beaver Water District, Richard Starr, Engineer-Manager
City of Batesville, Jim Woods, Project Director
City of Fayetteville, Jim Beavers, City Engineer
City of Fort Smith, Steve Parke, Director of Utilities
Little Rock Municipal Water Works, James T. Harvey, Manager

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

WATER RESOURCES DATA FOR ARKANSAS, 1999

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Streamflow varies seasonally in Arkansas and generally reflects precipitation patterns unless a stream is regulated. Average rainfall resulted in slightly above average runoff over the State during the 1999 water year. Streamflow for the year (as a percentage of the median for the base period 1961-1990) was 104 percent for the index station on the Saline River near Rye, in southern Arkansas, 119 percent for the index station on the Buffalo River near St. Joe, in northern Arkansas, 128 percent for the index station on the Big Piney Creek at Highway 164 near Dover, in west central Arkansas, and 141 percent for the index station on the James Fork near Hackett, in western Arkansas. Monthly and annual mean discharges for the 1999 water year, and median for the monthly and annual mean discharges for the base period 1961-1990 at the St. Joe, Hackett, Dover, and Rye sites are shown on figure 1.

Normal rainfall for most of the year gave way to dry conditions in August and September. Less than an inch of rain fell in most areas during these two months. On June 30, a storm system produced moderate to heavy rainfall in the northwestern part of the State, which caused some minor flooding. However, no outstanding peaks were recorded during this period.

Streamflow statistics for the 1999 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 1999 water year (cubic feet per second)			Statistics of discharge during period of record (cubic feet per second)		
		Maximum instan- taneous	Minimum instan- taneous	Mean	Maximum instan- taneous	Minimum instan- taneous	Mean
07047942 L'Anguille River near Colt	1970-99	5,160	1.9	513	16,600	0.99	731
07060710 North Sylamore Creek near Fifty-Six	1965-99	3,220	1.8	31.4	25,200	1.2	46.8
07077380 Cache River at Egypt	1964-99	4,630	5.5	876	8,490	0	864
07196900 Baron Fork at Dutch Mills	1958-99	10,200	0	56.1	20,900	0	45.7
07249400 James Fork near Hackett	1958-99	6,520	0	192	30,000	0	147
07261000 Cadron Creek near Guy	1954-99	3,850	0	131	24,200	0	277
07264000 Bayou Meto near Lonoke	1954-99	1,090	0	185	5,750	0	293
07340300 Cossatot River near Vandervoort	1967-99	17,400	10	177	32,000	7.2	197
07356000 Ouachita River near Mt. Ida	1941-99	34,300	18	749	102,000	2.3	734
07364150 Bayou Bartholomew near McGehee	1938-42, 1945-99	4,560	11	637	6,870	0.20	694

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.

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 1999 water year are compared to concentrations for the period of record to indicate changes in water quality.

The highest suspended-sediment concentration found in the selected streams in 1999 was 724 mg/L in the Red River at Index. Suspended-sediment concentrations, in milligrams per liter, for selected stream sampling sites are presented below.

	1999		Period of record through 1999	
	Minimum	Maximum	Minimum	Maximum
Right Hand Chute of Little River at Rivervale	67	388	25	1,070
L'Anguille River near Colt	52	434	4	2,410
North Sylamore Creek near Fifty-Six	20	80	0	198
Arkansas River at David D. Terry Lock and Dam below Little Rock	8	352	2	4,140
Ouachita River at Camden	18	75	6	639
Red River at Index	98	724	16	8,200

The highest fecal-coliform bacteria density found in selected streams in 1999 was K1,000 colonies per 100 mL in North Sylamore Creek near Fifty-Six. Fecal-coliform bacteria densities, in colonies per 100 mL, for selected stream sampling sites are presented below. [K, Results based on colony count outside the acceptance range (non-ideal colony count)]

	1999		Period of record through 1999	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	80	530	<3	K6,800
Yocum Creek near Oak Grove	K12	450	<1	K15,000
North Sylamore Creek near Fifty-Six	K1	K1,000	<1	1,400
Ouachita River at Camden	K14	390	<1	1,300

The highest dissolved-solids concentration found in selected streams in 1999 was 378 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.

	1999		Period of record through 1999	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	69	355	46	412
Yocum Creek near Oak Grove	191	245	146	245
North Sylamore Creek near Fifty-Six	117	177	72	212
Arkansas River at David D. Terry Lock and Dam below Little Rock	199	378	85	690

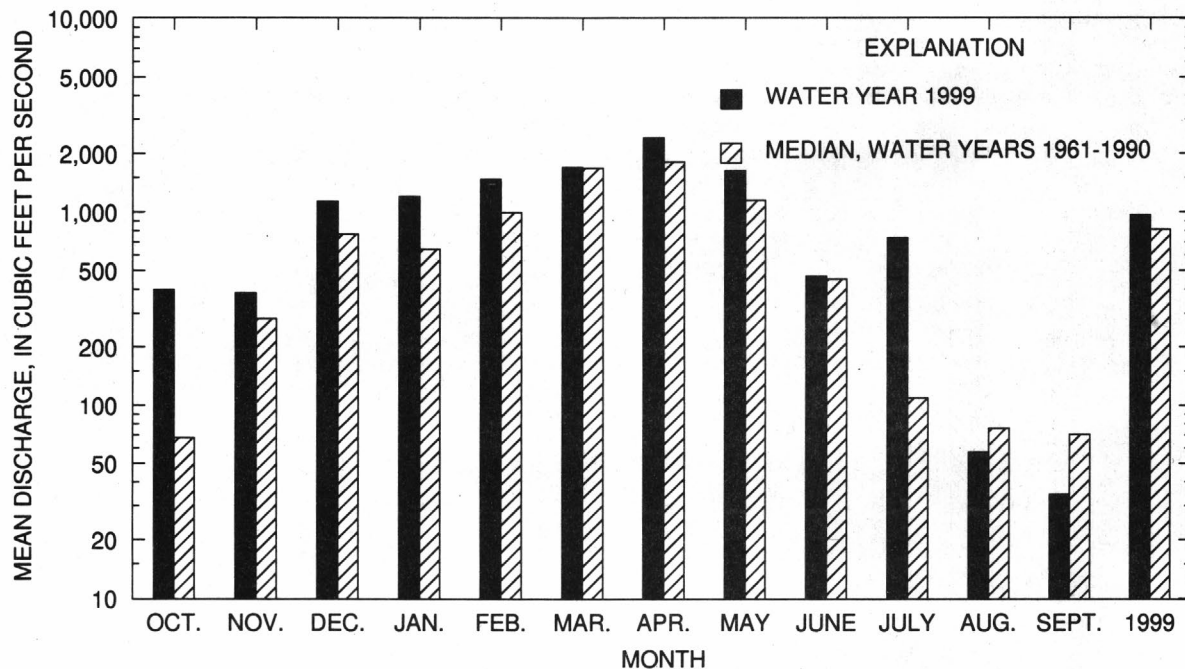
The highest dissolved chloride concentration found in selected streams in 1999 was 100 mg/L in the Arkansas River at David D. Terry Lock and Dam below Little Rock. Dissolved chloride concentrations, in milligrams per liter, for selected sampling sites are presented below.

	1999		Period of record through 1999	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	4.0	49	1.9	49
Yocum Creek near Oak Grove	8.0	13	4.6	13
North Sylamore Creek near Fifty-Six	1.2	2.3	.3	18
Arkansas River at David D. Terry Lock and Dam below Little Rock	31	100	11	290
Ouachita River at Camden	2.7	5.8	2.1	79

The highest total phosphorus concentration found in selected streams in 1999 was 0.325 mg/L in Arkansas River at David D. Terry Dam below Little Rock. Total phosphorus concentrations, in milligrams per liter, for selected sampling sites are presented below.

	1999		Period of record through 1999	
	Minimum	Maximum	Minimum	Maximum
Yocum Creek near Oak Grove	0.030	0.084	<0.01	0.45
North Sylamore Creek near Fifty-Six	<.004	<.05	<.004	.34
Arkansas River at David D. Terry Lock and Dam below Little Rock	.061	.325	<.01	.61
Ouachita River at Camden	<.02	.100	<.01	.31

07056000 BUFFALO RIVER NEAR ST. JOE, DRAINAGE AREA 829 SQUARE MILES



07249400 JAMES FORK NEAR HACKETT, DRAINAGE AREA 147 SQUARE MILES

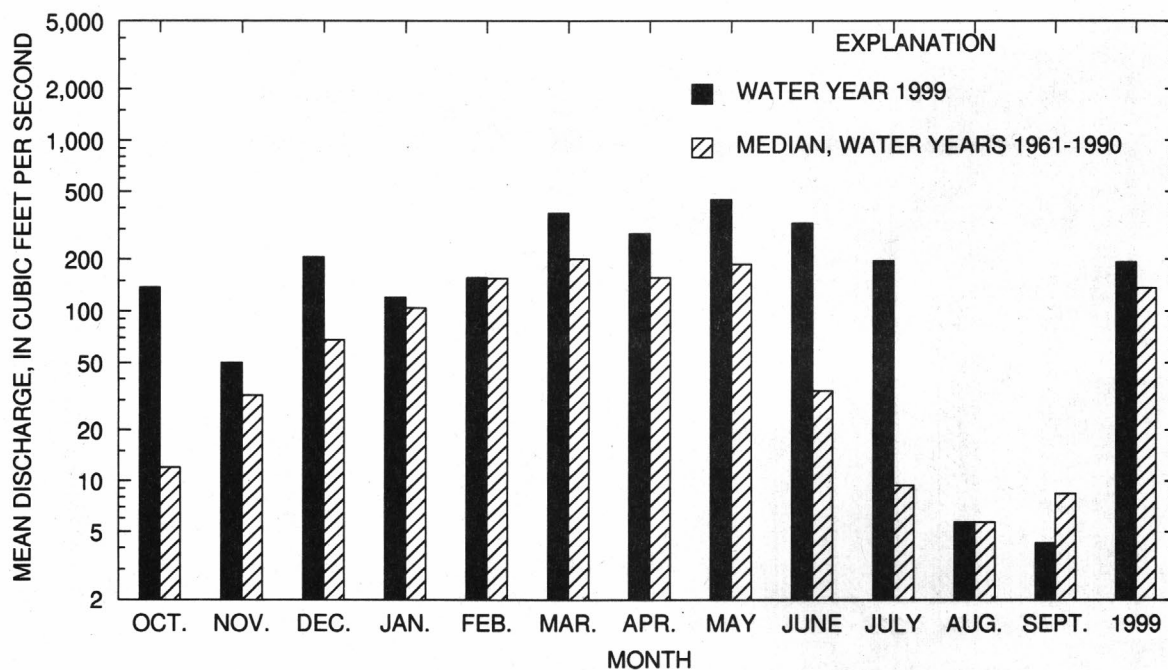
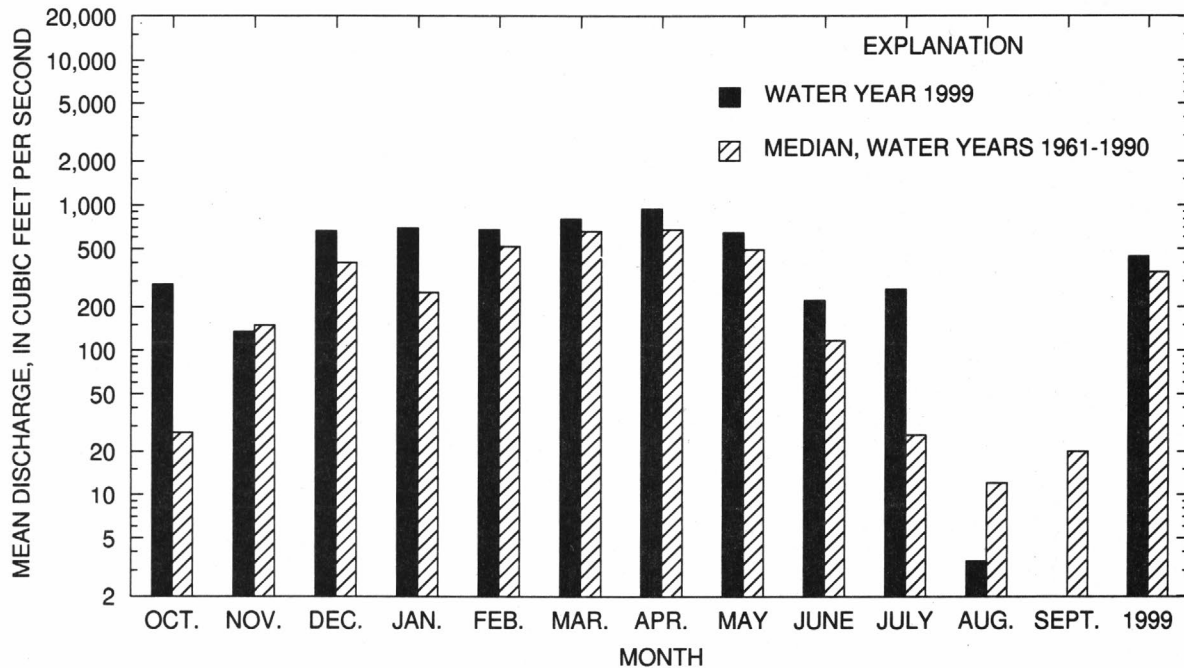


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 1999 water year with the median of the monthly and annual mean discharges for a 30-year base period.

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

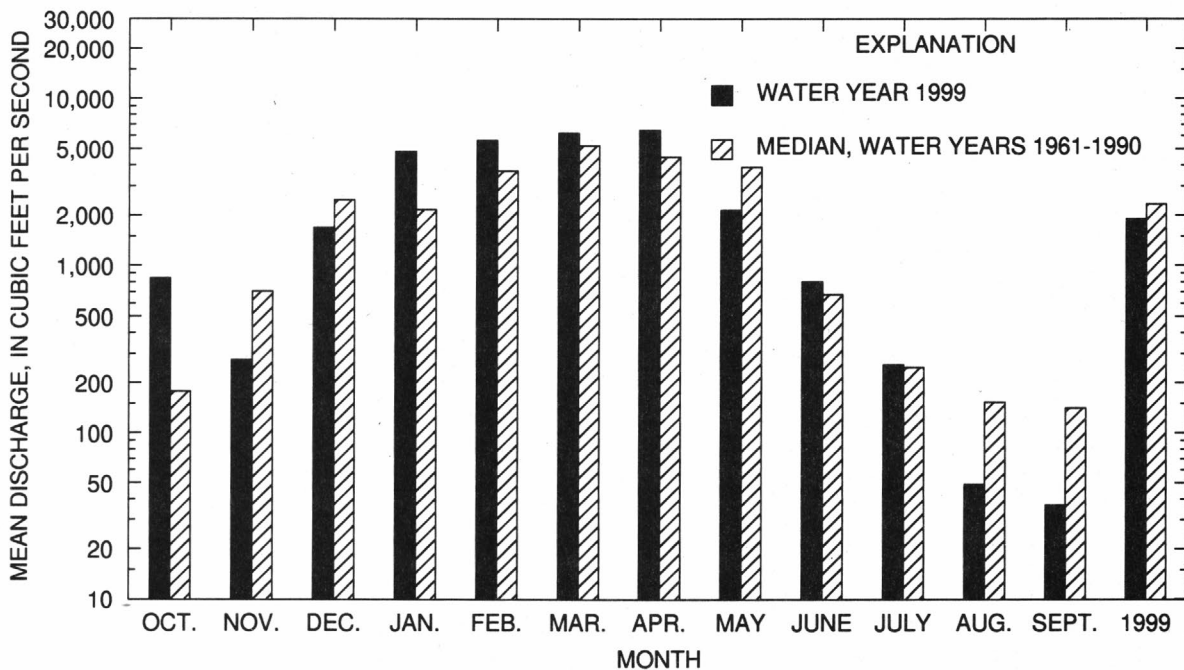


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 1999 water year with the median of the monthly and annual mean discharges for a 30-year base period-continued.

Ground-Water Levels

A majority of the ground-water consumption in Arkansas is from three major aquifers--the Mississippi River Valley alluvial aquifer (hereafter referred to as the alluvial aquifer), the Sparta aquifer, and the 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 and Memphis aquifers occur within the Sparta and Memphis Sands of the Claiborne Group of Eocene age and are the second and third most productive aquifers within the State. The Sparta and Memphis aquifers underlie 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; whereas the Sparta and Memphis aquifers provide 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 two 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; while the second cone has developed west of Crowleys Ridge in Craighead, Cross, and Poinsett Counties.

The regional potentiometric gradient of the Sparta and Memphis aquifers generally is southeastward except where affected by large withdrawals. Three cones of depression, centered in Columbia, Union, and Jefferson Counties, have developed because of relatively 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 and summer of 1999 was 476 feet below land surface, which occurred in Union County.

DEFINITION OF TERMS

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

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

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

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

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

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

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

Fecal coliform bacteria are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on m-FC medium (nutrient medium for fecal coliform bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria also are present in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. These bacteria are also defined as all the organisms that produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ on KF-streptococcus agar (nutrient medium

for fecal streptococcal bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Total coliform bacteria are used as indicators of possible sewage pollution. 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 $35^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ on m-Endo medium (nutrient medium for coliform bacterial growth). Their concentrations are expressed as a number of colonies per 100 mL of sample.

Base flow is the stream flow sustained by ground-water discharge.

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

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

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

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, and approximately equal to 1.98 acre-ft, 646,000 gallons, or 2,450 cubic meters.

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

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

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

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.

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

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

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

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

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

Daily mean discharge is the arithmetic mean of the individual increments of discharge in a day.

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

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

Annual 7-day minimum is 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. (The value should not be confused with the 7-day 10-year low-flow statistic.)

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

Dissolved oxygen (DO) The dissolved oxygen content of water in equilibrium with air is a function of atmospheric pressure and temperature and the dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant effect. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water of some streams.

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of a chemical element as the mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors presented below. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the weight of sediment per liter of water-sediment mixture.

Chemical constituents conversion factors from milligrams per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia (as NH_4^{-1})	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

Nanograms per liter (ng/L) is a unit expressing the concentration of a chemical element as the mass (nanograms) of solute per unit volume (liter) of water. One thousand nanograms per liter is equivalent to 1 microgram per liter.

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

Organism is any living entity, such as an insect, phytoplankton, or zooplankton.

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

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

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

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

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

Classification	Size (mm)	Method of analyses
Clay.....	0.00035 - 0.004	Sedimentation.
Silt004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

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

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

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants, respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 d/min (disintegrations per minute).

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

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

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

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

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

Zooplankton form 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.

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.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only 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.

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

Sample source denotes streams in overbank. Value of 67 equals main channel, value of 68 equals overbank.

Sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

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

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

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

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

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

Suspended-sediment load is the quantity of suspended sediment passing a section in a specific period.

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

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

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

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

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

Surface area of a lake is that area outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the

areas are computed from the best maps available at the time they are planimetered. All areas shown are those for the stage when the map was planimetered.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-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 would be required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

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

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

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

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

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

WRD is used as an abbreviation of "Water-Resources Data" in REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

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

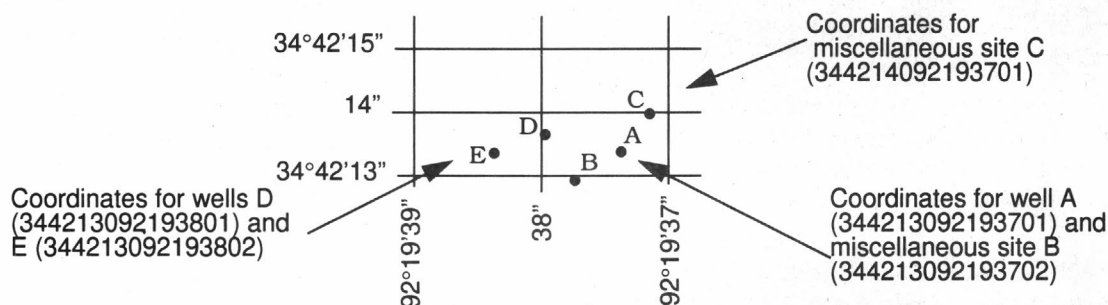
Since October 1, 1950, the order of listing hydrologic-station records in Geological Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between 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 hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. 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. Data from the network, as well as information about individual sites, are available through the world wide web at:

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

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites, (2) provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred, and (3) provide the scientific basis and nationwide evaluation mechanism for implementation

of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000. Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.sws.uiuc.edu>

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 53 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 are being 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 is providing 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 annually 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 is available through the world wide web at:

http://water.usgs.gov/nawqa/nawqa_home.html

In 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 1999 with two streams sampled with NAWQA support. Included in this report are approximately monthly water quality and daily mean discharge for two surface-water stations, Yocum Creek near Oak Grove and North Sylamore Creek near Fifty-Six.

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 72 stations in Arkansas in 1999. Locations of surface-water stations are shown in figure 2 (page 34).

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.)

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

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

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

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

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 ft³/s; to tenths, between 1.0 and 10 ft³/s; to whole numbers, between 10 and 1,000 ft³/s; and to three significant figures, above 1,000 ft³/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://www.ark.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. Sixty-two stations are included for 1999. The locations of these stations are shown in figure 3 (page 35).

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 detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. 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), samples for indicator bacteria, and daily samples for specific conductance 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 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 update.

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

WATER RESOURCES DATA FOR ARKANSAS, 1999
EXPLANATION OF GROUND-WATER LEVEL RECORDS

21

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 eight wells in Arkansas (fig. 4, page 303). Two wells are measured manually one or more times each year. Six 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 12).

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.

WATER RESOURCES DATA FOR ARKANSAS, 1999

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 1999, 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.

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://water.usgs.gov>

Some water-quality and ground-water data are also available 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 Division's District Offices (see address on the back of the title page).

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

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

- 1-D1. *Water temperature-influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficken, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. McCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W. E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathburn, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 90 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water problems, Part 3: Design philosophy and programming details*, by L. J. Torak: USGS--TWRI Book 6, Chapter A5, 1993. 243 pages.
- 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. 1995. 125 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.
- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, 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 Gibbs, 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 Gibbs, 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 Gibbs, 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 Gibbs, 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, Chapter A6. 1998. Variously paginated.
- 9-A7. *National field manual for the collection of water-quality data: Biological indicators*, by D. N. Myers and F. D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 pages.
- 9-A8. *National field manual for the collection of water-quality data: Bottom material samples*, by D.B. Radtke: USGS--TWRI Book 9, Chapter A8. 1998. 48 pages.
- 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, Chapter A9. 1998. 60 pages.

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 ²)	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
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
07194880	Osage Creek near Cave Springs	34.7	1991-93
07195400	Illinois River near Siloam Springs	509	1980-81, 1986
*07249500	Cove Creek near Lee Creek	35.3	1950-70
07250550	Arkansas River at James W. Trimble Lock and Dam nr Van Buren	150,547	1928-98
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

WATER RESOURCES DATA FOR ARKANSAS, 1999

DISCONTINUED GAGING STATIONS--CONTINUED

Station Number	Station name	Drainage area (mi ²)	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
*07257500	Illinois Bayou near Scottsville	241	1948-70
*07258000	Arkansas River at Dardanelle	153670	1937-94
*07258500	Petit Jean River near Booneville	241	1938-84
07259500	Petit Jean River near Waveland	516	1939-80
*07260000	Dutch Creek at Waltreak	81.4	1945-75
*07261500	Fourche LaFave River near Gravelly	410	1939-94
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
*07363000	Saline River at Benton	550	1950-79
*07363200	Saline River near Sheridan	1,123	1970-81
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

WATER RESOURCES DATA FOR ARKANSAS, 1999

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 Parker	Chem	1973-94
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
07048600	White River near Fayetteville	Chem.	1958, 1976-81
07049693	White River at Campground E near Busch	Temp., D.O.	1991-Dec 98
07049695	White River above Busch	Chem., Temp.	1969, 1972-82

WATER RESOURCES DATA FOR ARKANSAS, 1999
DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
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
07073000	Strawberry River near Evening Shade	Chem.	1946-57, 1979
07073500	Piney Fork at Evening Shade	Chem.	1959,1979

WATER RESOURCES DATA FOR ARKANSAS, 1999
DISCONTINUED WATER-QUALITY STATIONS--Continued

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Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
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 DeVew 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
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

WATER RESOURCES DATA FOR ARKANSAS, 1999
DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
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
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 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
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

WATER RESOURCES DATA FOR ARKANSAS, 1999
DISCONTINUED WATER-QUALITY STATIONS--Continued

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Station number	Station name	Type of record	Period of record
RED RIVER BASIN--CONTINUED			
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
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

WATER RESOURCES DATA FOR ARKANSAS, 1999**33****DISCONTINUED GAGING STATIONS--CONTINUED**

Station Number	Station name	Drainage area (mi ²)	Period of record
RED RIVER BASIN--CONTINUED			
07367666	Big Bayou near Jerome	Chem.	1974-81
07367695	LaFourche Bayou near Wilmot	Chem.	1973-74

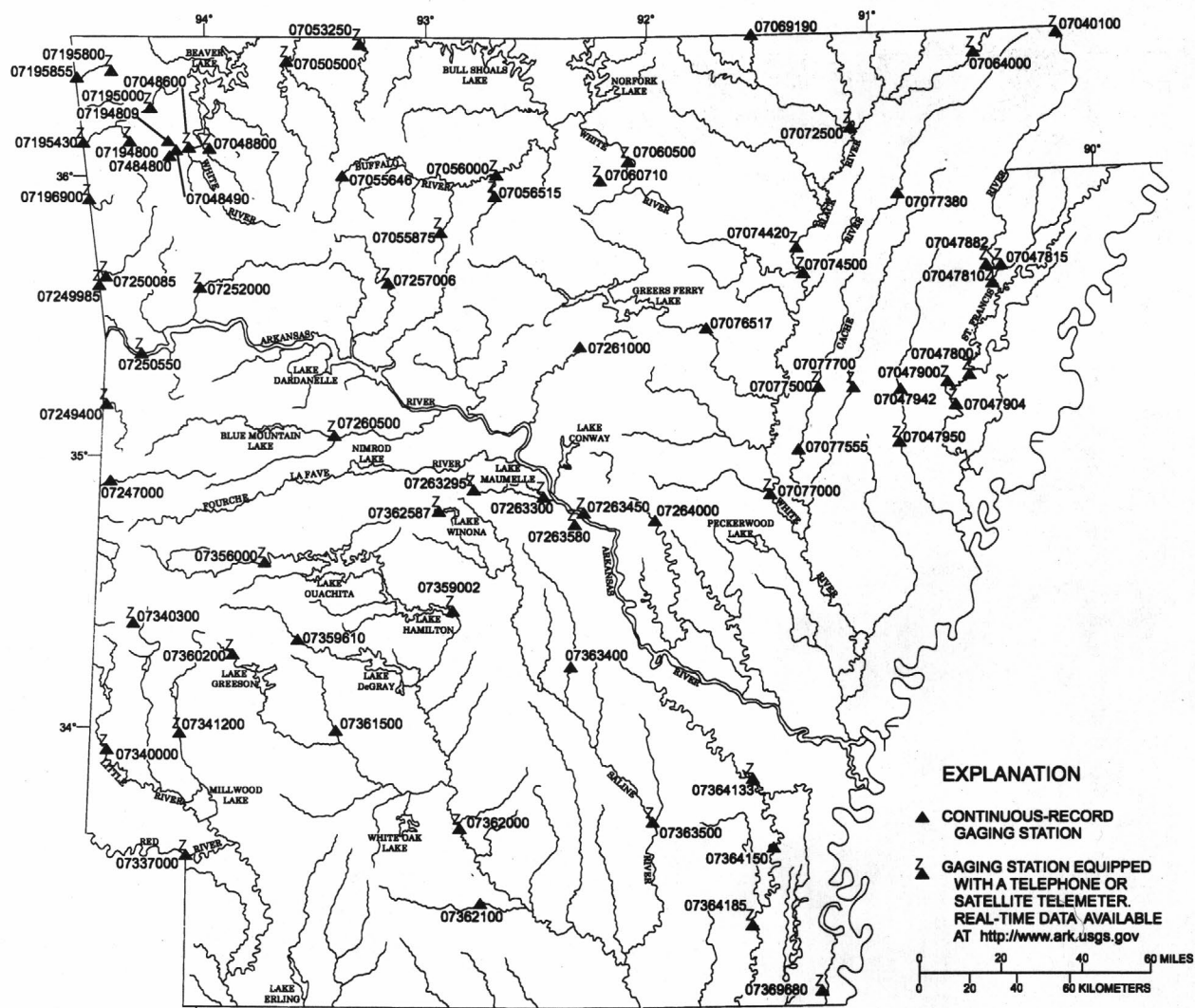


Figure 2.--Locations of continuous-record gaging stations in Arkansas.

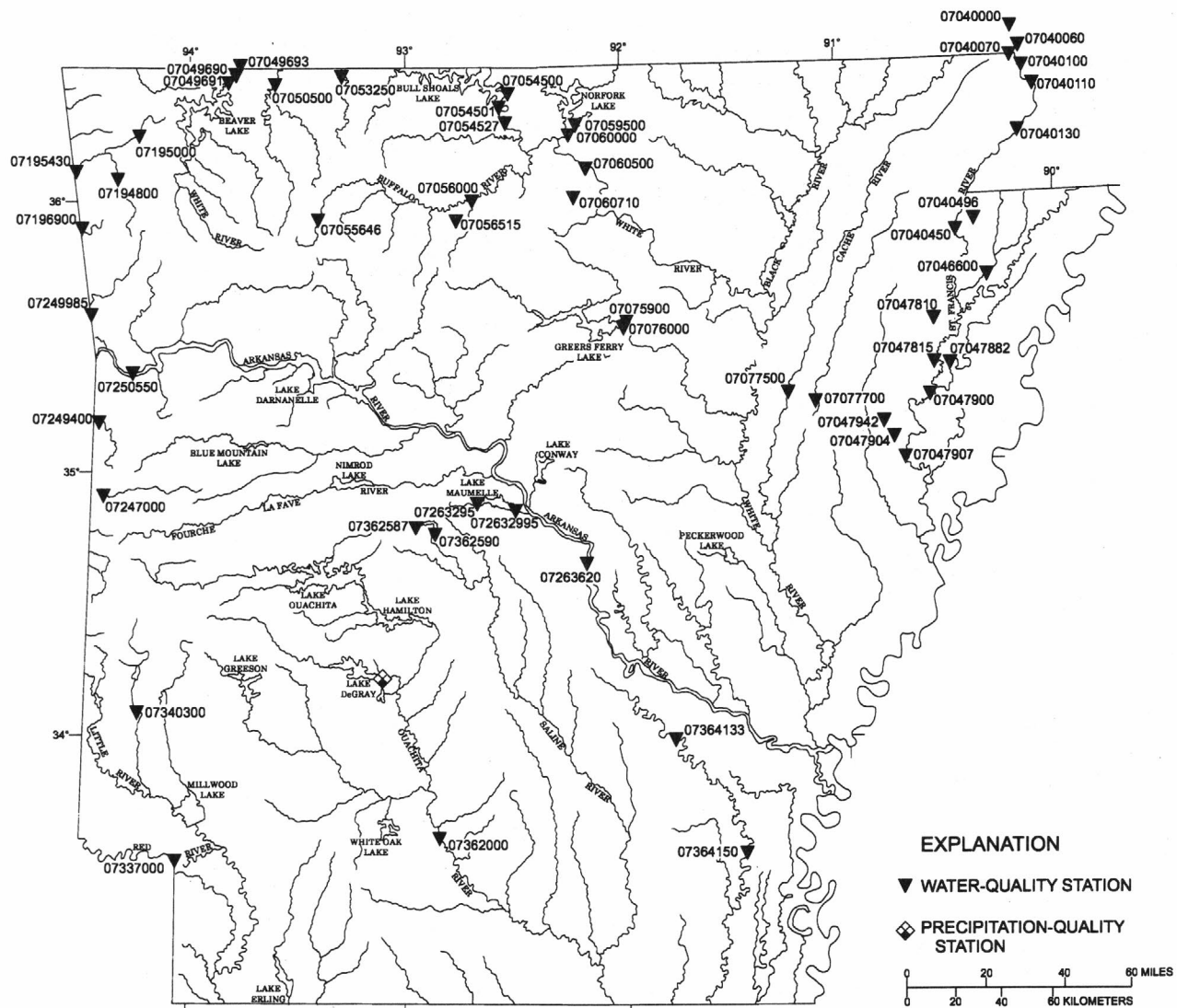


Figure 3.--Locations of water-quality stations in Arkansas.

ST. FRANCIS RIVER BASIN

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 U.S. Highway 60, at Fisk, Missouri.

DRAINAGE AREA.--1,370 ft².

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 sea level.

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.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	223	413	1140	4310	956	888	5900	723	440	321	e70
2	128	214	362	1210	4680	1080	836	5090	695	437	273	e78
3	112	219	355	1220	5120	1110	1070	4500	680	431	263	e79
4	96	284	358	1150	5180	1120	2700	4090	667	426	208	e75
5	80	269	364	1170	5050	1160	2470	4010	657	421	e173	e72
6	73	222	359	2050	4840	1180	3230	4010	644	417	e152	e70
7	67	160	357	1950	4880	1330	3780	3930	563	414	e136	e67
8	66	137	431	1920	5160	1430	3920	3960	437	408	e129	e64
9	66	135	477	1800	6110	1750	3940	3960	379	402	e129	e61
10	66	198	482	1740	6670	2570	3950	3940	366	340	256	e59
11	98	343	482	1720	6830	2870	3950	4000	359	290	444	e56
12	246	354	483	1640	6850	2920	3970	3990	356	280	497	e54
13	312	354	483	1610	6700	2910	4180	3940	360	229	437	e51
14	322	356	482	1640	6530	2810	4330	3880	402	e203	330	e48
15	325	356	495	2320	6370	2750	5310	3830	494	e191	271	e52
16	327	357	913	2600	6160	2690	6160	3770	523	e180	224	e56
17	329	358	1800	2630	5880	2560	6980	3680	450	e168	e191	e59
18	345	360	2180	2680	5540	3130	7290	3540	343	e162	e192	e60
19	353	364	2230	2950	5110	3520	7300	3400	287	e155	e196	e63
20	455	374	2060	3440	4650	3630	7280	3230	270	e152	e168	e61
21	516	444	2010	3560	4200	3710	7250	2990	253	e150	e144	e59
22	521	484	1970	5370	3800	3660	7180	e2740	230	e149	e120	e56
23	515	490	1870	5840	3410	3470	7120	e2480	218	e147	e103	e52
24	407	490	1760	5880	3070	3250	7050	e2260	288	e145	e88	e54
25	350	491	1590	5920	2760	2950	6990	e2110	449	e144	e81	e52
26	345	493	1540	5880	2350	2550	6990	1970	542	e140	e77	e51
27	342	495	1520	5510	1570	2080	6960	1830	487	e139	e74	e49
28	343	494	1500	5080	1100	1710	6880	1610	570	e137	e72	e47
29	342	494	1430	4750	---	1380	6780	1370	489	e147	e70	e45
30	341	492	1390	4470	---	1190	6490	1080	448	203	e68	e44
31	274	---	1270	4330	---	1010	---	852	---	366	e67	---
TOTAL	8352	10504	33416	95170	134880	70436	153224	101942	13629	8013	5954	1764
MEAN	269	350	1078	3070	4817	2272	5107	3288	454	258	192	58.8
MAX	521	495	2230	5920	6850	3710	7300	5900	723	440	497	79
MIN	66	135	355	1140	1100	956	836	852	218	137	67	44
AC-FT	16570	20830	66280	188800	267500	139700	303900	202200	27030	15890	11810	3500

ST. FRANCIS RIVER BASIN

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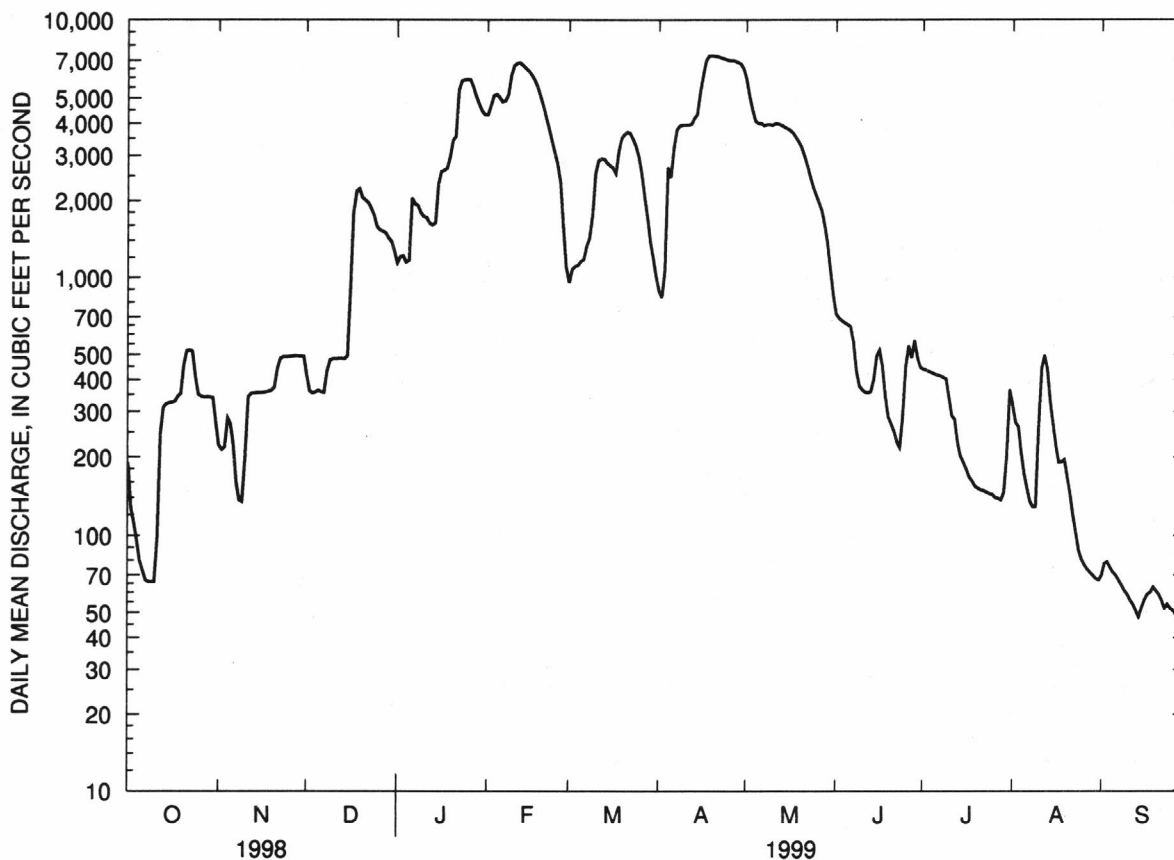
07040000 ST. FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1999, BY WATER YEAR (WY)

MEAN	353	610	1204	2589	1894	2325	2782	2096	1409	529	406	253
MAX	1115	1587	3751	7905	4817	5506	5107	7016	8572	1780	2204	668
(WY)	1937	1937	1928	1937	1999	1935	1999	1933	1928	1928	1998	1934
MIN	125	220	243	272	319	328	326	311	148	112	101	58.8
(WY)	1941	1941	1939	1931	1934	1941	1941	1930	1936	1941	1936	1999

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1928-41, 1998-99	
ANNUAL TOTAL	670129		637284			
ANNUAL MEAN	1836		1746		1368	
HIGHEST ANNUAL MEAN					2240	
LOWEST ANNUAL MEAN					437	
HIGHEST DAILY MEAN	7730	Mar 24	7300	Apr 19	36000	May 16 1933
LOWEST DAILY MEAN	66	Oct 8	44	Sep 30	8.0	Jul 25 1940
ANNUAL SEVEN-DAY MINIMUM	73	Oct 4	49	Sep 24	16	Jul 20 1940
INSTANTANEOUS PEAK FLOW			7330	Apr 18	49900	Mar 13 1935
INSTANTANEOUS PEAK STAGE			16.61	Apr 18	26.71	Mar 13 1935
INSTANTANEOUS LOW FLOW					5.0	Jul 26 1940
ANNUAL RUNOFF (AC-FT)	1329000		1264000		991200	
10 PERCENT EXCEEDS	3840		5110		3400	
50 PERCENT EXCEEDS	1390		495		528	
90 PERCENT EXCEEDS	272		74		147	

e 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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 05...	1230	80513	82913	81	205	7.3	754	21.0	.18	9.1	103
NOV 16...	1445	80513	82913	362	198	7.0	748	10.0	.18	12.6	114
DEC 07...	1330	80513	82913	351	220	7.0	755	11.5	.18	10.8	100
JAN 12...	1435	80513	82913	1710	203	6.9	749	4.0	.18	12.2	95
FEB 02...	0755	80513	82913	4680	138	6.4	750	5.0	.06	11.9	95
MAR 01...	1355	80513	82913	945	192	7.2	750	8.0	.12	9.2	79
APR 13...	1430	80513	82913	4370	82	6.3	757	15.5	.09	10.0	101
MAY 10...	1420	80513	82913	3610	117	6.7	751	17.5	.18	6.8	72
JUN 07...	1445	80513	82913	430	174	7.1	755	24.0	.15	10.4	125
JUL 12...	1130	80513	82913	265	208	7.7	756	25.0	.27	10.8	132
AUG 09...	1105	80513	82913	132	238	7.8	752	27.0	.21	6.8	87
SEP 14...	1115	80513	82913	48	250	7.4	757	22.0	.55	6.8	78

DATE	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	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)	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)
OCT 05...	51	11	98	98	100	--	76	88	98	100	--
NOV 16...	41	40	94	94	94	100	1	3	35	96	100
DEC 07...	32	30	100	--	--	--	56	76	98	99	100
JAN 12...	38	175	84	84	94	100	35	78	99	99	100
FEB 02...	72	910	93	93	97	100	35	71	99	100	--
MAR 01...	63	161	99	99	99	100	15	69	99	100	--
APR 13...	71	838	96	99	100	--	7	35	97	100	--
MAY 10...	44	429	91	91	100	--	13	52	98	100	--
JUN 07...	60	70	100	--	--	--	17	68	98	100	--
JUL 12...	57	41	94	94	100	--	5	23	91	98	100
AUG 09...	70	25	99	99	99	100	31	56	95	98	100
SEP 14...	48	6.3	99	99	100	--	10	46	96	98	100

ST. FRANCIS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
NOV 16...	1300	80513	82913	387	11.0	.27	44	46	100
DEC 07...	1235	80513	82913	440	12.0	.09	63	75	99
JAN 12...	1245	80513	82913	1850	4.0	.12	70	350	85
FEB 01...	1545	80513	82913	6040	5.0	.09	131	2140	95
MAR 01...	1300	80513	82913	1380	8.5	.12	--	--	87
APR 13...	1335	80513	82913	4690	16.0	.06	148	1870	87
MAY 10...	1255	80513	82913	4400	18.0	.12	99	1180	78
JUN 07...	1345	80513	82913	920	24.5	.12	125	310	99

DATE	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)	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 16...	--	--	--	2	31	94	100	--
DEC 07...	100	--	--	8	14	90	100	--
JAN 12...	88	90	100	52	82	99	100	--
FEB 01...	97	98	100	16	41	98	100	--
MAR 01...	97	100	--	30	68	97	99	100
APR 13...	98	100	--	12	42	99	100	--
MAY 10...	96	100	--	11	51	98	99	100
JUN 07...	99	100	--	6	29	89	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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	
NOV 16...	1205	80513	82913	402	11.0	.18	47	51	85	
DEC 07...	1150	80513	82913	496	12.0	.06	99	133	96	
JAN 12...	1145	80513	82913	1910	4.0	.09	78	402	82	
FEB 01...	1325	80513	82913	6320	5.0	.09	137	2340	97	
MAR 01...	1200	80513	82913	1550	8.5	.12	127	531	82	
APR 13...	1250	80513	82913	4440	16.0	.06	190	2280	76	
MAY 10...	1145	80513	82913	3970	18.0	.12	86	922	93	
JUN 04...	1255	80513	82913	760	24.5	.12	100	205	90	
DATE		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)	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 16...	85	91	100	--	8	23	84	95	100	
DEC 07...	96	98	100	--	8	16	92	100	--	
JAN 12...	89	95	100	--	5	15	85	99	100	
FEB 01...	97	99	100	--	7	25	87	99	100	
MAR 01...	89	100	--	--	16	36	80	97	100	
APR 13...	90	97	99	100	9	34	96	100	--	
MAY 10...	93	100	--	--	11	32	89	99	100	
JUN 04...	91	99	100	--	5	23	85	98	100	

ST. FRANCIS RIVER BASIN

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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 ft².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to September 1977 and October 1997 to current year in reports of 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 sea level. Prior to Aug. 1, 1946, nonrecording gage.

REMARKS.--Water-discharge records good. Some regulation by Wappapello Lake (Missouri), 80 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	363	585	1350	6700	1580	1260	6830	1190	828	432	142
2	272	317	504	3340	5880	1500	1130	6070	1190	814	394	159
3	172	307	453	4860	5480	1600	2580	5260	1010	716	338	158
4	e163	308	478	4830	5430	1580	6830	4710	863	637	329	142
5	e367	352	1110	3500	5410	1600	7310	4680	807	590	295	137
6	4970	352	775	2450	5300	2110	6060	4780	779	578	257	126
7	6060	309	555	2440	5760	1880	5590	4530	831	573	241	125
8	3390	272	488	2390	6320	1940	4890	4230	709	578	265	121
9	1090	229	536	2160	6060	2900	4670	4150	598	563	450	116
10	518	267	573	1970	6490	3130	4490	4110	555	529	360	115
11	339	759	574	1930	7140	3350	4400	4080	521	432	384	116
12	322	521	581	1970	7780	3480	4330	4080	636	382	498	122
13	411	464	583	2240	8110	3510	4320	4070	532	380	514	114
14	467	453	575	2230	7970	4000	4520	4040	1340	371	445	93
15	460	447	569	2130	7670	4110	7140	3980	1070	355	367	101
16	454	439	625	2670	7350	4360	8740	3970	756	323	316	112
17	450	448	1280	2940	6990	3850	8250	3910	672	284	277	113
18	463	445	2080	4070	6520	3510	8220	3910	568	267	262	116
19	479	454	2300	3810	5970	3770	8290	3790	475	260	266	109
20	484	572	2270	3590	5470	3970	8300	3590	442	267	228	100
21	595	757	2670	3920	5000	4050	8270	3410	474	279	183	106
22	626	607	4680	10500	4630	4080	8190	3190	419	283	162	102
23	623	608	3210	15100	4270	4010	8080	2930	410	279	150	89
24	607	601	2200	13800	3930	3860	7970	2710	1050	264	151	89
25	495	597	1930	11700	3620	3660	7820	2510	1170	256	144	87
26	442	596	1760	10100	3320	3380	7700	2330	883	257	145	85
27	431	590	1710	8870	2820	2980	7640	2170	886	253	152	84
28	429	590	1690	7620	2090	2500	7550	2030	1550	327	154	80
29	429	589	1670	6490	---	2110	7420	1780	1270	291	153	77
30	432	595	1590	5720	---	1750	7230	1560	925	275	148	74
31	421	---	1520	5820	---	1480	---	1940	---	298	137	---
TOTAL	27198	14208	42124	156510	159480	91590	189190	115330	24581	12789	8597	3310
MEAN	877	474	1359	5049	5696	2955	6306	3720	819	413	277	110
MAX	6060	759	4680	15100	8110	4360	8740	6830	1550	828	514	159
MIN	163	229	453	1350	2090	1480	1130	1560	410	253	137	74
AC-FT	53950	28180	83550	310400	316300	181700	375300	228800	48760	25370	17050	6570

ST. FRANCIS RIVER BASIN

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

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

MEAN	559	1088	1845	3099	3171	3854	4329	3451	1954	1114	609	507
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

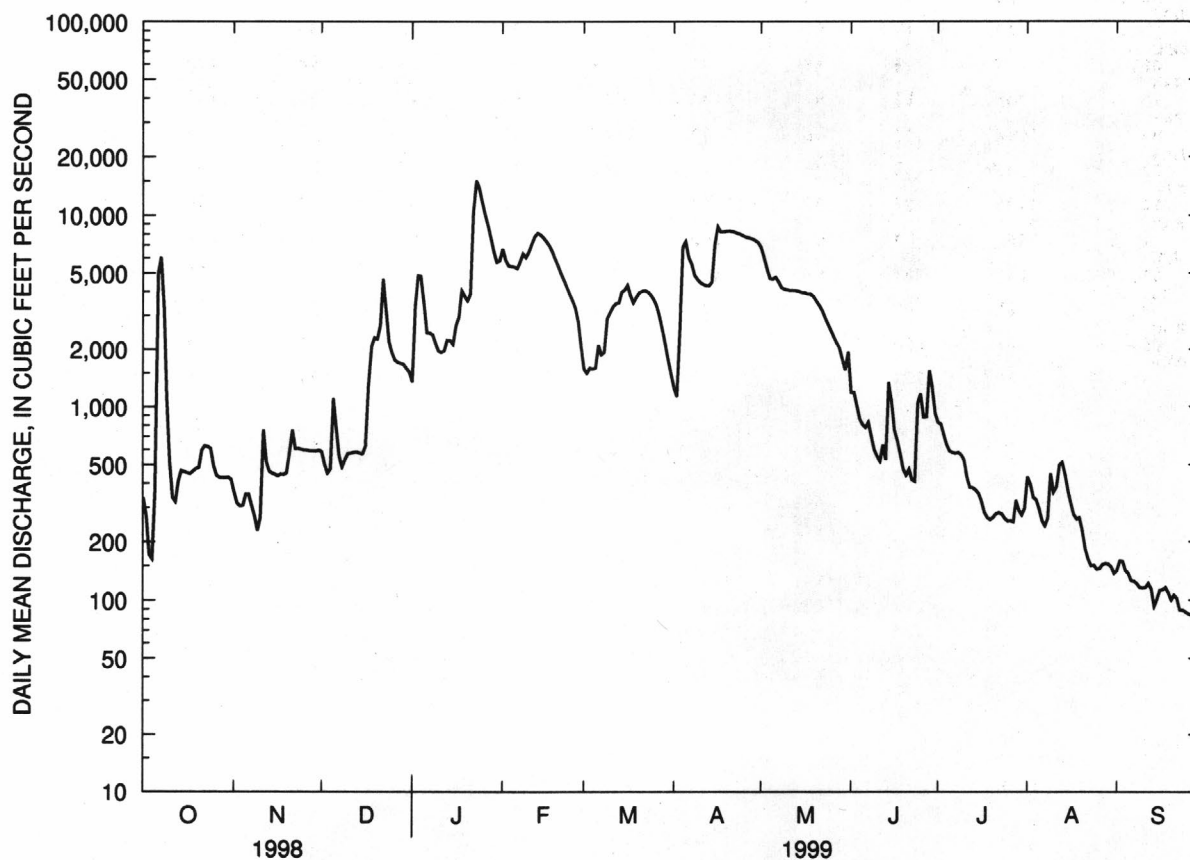
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1931-77, 1998-99

ANNUAL TOTAL	982467		844907									
ANNUAL MEAN	2692		2315							2111		
HIGHEST ANNUAL MEAN										4886		1973
LOWEST ANNUAL MEAN										548		1941
HIGHEST DAILY MEAN	11100	Mar 20	15100	Jan 23	37900	Mar 16	1935					
LOWEST DAILY MEAN	163	Oct 4	74	Sep 30	55	Sep 20	1954					
ANNUAL SEVEN-DAY MINIMUM	282	Sep 28	82	Sep 24	63	Nov 15	1953					
INSTANTANEOUS PEAK FLOW			15300	Jan 23	39200	Mar 15	1935					
INSTANTANEOUS PEAK STAGE			23.78	Jan 23	28.20	Mar 15	1935					
INSTANTANEOUS LOW FLOW			73	Sep 30	^a 55	Sep 20	1954					
ANNUAL RUNOFF (AC-FT)	1949000		1676000		1530000							
10 PERCENT EXCEEDS	6080		6490		5680							
50 PERCENT EXCEEDS	2150		883		902							
90 PERCENT EXCEEDS	427		154		183							

^aMinimum instantaneous low flow for the period 1978-96, 48 ft³/s Oct. 3, 1983^eEstimated

ST. FRANCIS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 05...	1120	80513	82913	152	250	7.2	754	20.0	.15	9.1	101	61
NOV 17...	0745	80513	82913	448	215	6.9	758	10.5	.18	11.7	105	52
DEC 08...	0730	80513	82913	475	232	6.8	760	10.0	.12	10.3	92	76
JAN 13...	0830	80513	82913	2330	206	6.8	752	4.0	.15	12.1	94	112
FEB 02...	1010	80513	82913	5540	122	6.5	752	5.0	.06	11.9	94	128
MAR 02...	0850	80513	82913	1360	215	7.3	748	8.5	.09	8.8	77	91
APR 14...	0730	80513	82913	4450	81	6.5	753	15.0	.09	9.8	98	160
MAY 11...	0705	80513	82913	3950	116	6.7	752	19.0	.15	7.9	86	99
JUN 07...	1150	80513	82913	898	186	7.2	757	24.5	.18	9.4	114	110
JUL 12...	1250	80513	82913	382	349	7.6	757	25.0	.21	10.5	128	78
AUG 09...	1315	80513	82913	462	502	7.6	752	28.5	.18	8.2	107	113
SEP 14...	1235	80513	82913	93	516	7.2	757	20.5	.27	7.2	81	72

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN (70342)	SED. SUSP. FALL DIAM. % FINER THAN (70343)	SED. SUSP. FALL DIAM. % FINER THAN (70344)	SED. SUSP. FALL DIAM. % FINER THAN (70345)	BED MAT. FALL DIAM. % FINER THAN (80158)	BED MAT. FALL DIAM. % FINER THAN (80159)	BED MAT. FALL DIAM. % FINER THAN (80160)	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)	BED MAT. FALL DIAM. % FINER THAN (80163)
OCT 05...	25	98	98	100	--	54	68	97	100	--	--
NOV 17...	63	99	99	99	100	31	52	94	100	--	--
DEC 08...	97	98	98	100	--	16	68	98	100	--	--
JAN 13...	705	93	97	99	100	69	93	99	100	--	--
FEB 02...	1910	95	96	98	100	10	43	90	99	100	--
MAR 02...	334	99	99	99	100	14	43	97	100	--	--
APR 14...	1920	87	97	100	--	22	63	97	98	99	100
MAY 11...	1060	89	99	100	--	12	66	99	100	--	--
JUN 07...	267	98	98	100	--	3	12	84	98	100	--
JUL 12...	80	97	97	97	100	9	30	93	97	100	--
AUG 09...	141	100	--	--	--	12	45	96	99	100	--
SEP 14...	18	100	--	--	--	5	28	91	98	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 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	SAMPLE SOURCE (72005)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
NOV 16...	1105	80513	82913	435	11.0	.27	--	52	61	99
DEC 07...	1105	80513	82913	552	12.0	.09	--	130	194	100
JAN 12...	1030	80513	82913	1810	4.0	.12	--	89	435	92
FEB 01...	1145	80513	82913	5540	5.5	.06	67	251	3750	95
FEB 01...	1225	80513	82913	1280	5.5	.09	68	276	954	95
MAR 01...	1100	80513	82913	1480	8.0	.09	--	153	611	98
APR 13...	1140	80513	82913	3930	16.0	.09	67	166	1760	87
APR 13...	1235	80513	82913	E200	16.0	.09	68	165	--	95
MAY 10...	1015	80513	82913	3890	18.0	.09	67	166	1740	79
MAY 10...	1055	80513	82913	211	18.5	.12	68	64	36	100
JUN 07...	1055	80513	82913	879	25.0	.15	--	93	221	100

DATE	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)	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 16...	99	100	--	6	30	89	97	100	--
DEC 07...	--	--	--	7	14	90	100	--	--
JAN 12...	94	97	100	4	16	85	99	100	--
FEB 01...	99	99	100	14	35	89	99	100	--
FEB 01...	99	100	--	24	35	89	99	100	--
MAR 01...	98	100	--	10	25	69	95	97	100
APR 13...	96	99	100	10	44	97	100	--	--
APR 13...	100	--	--	8	32	94	100	--	--
MAY 10...	94	100	--	13	35	90	99	100	--
MAY 10...	--	--	--	52	63	93	99	100	--
JUN 07...	--	--	--	2	9	83	99	100	--

ST. FRANCIS RIVER BASIN

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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 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (000028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (000010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (000078)	SAMPLE SOURCE (720005)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	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)
NOV												
17...	0845	80513	82913	478	10.5	.09	67	75	97	77	85	93
17...	0915	80513	82913	72	10.5	.09	68	107	21	69	80	94
DEC												
08...	0820	80513	82913	600	10.5	.09	--	128	207	99	99	100
JAN												
13...	0945	80513	82913	1040	4.0	.12	67	86	241	88	92	94
13...	1010	80513	82913	1330	4.0	.18	68	36	129	94	94	100
FEB												
02...	1130	80513	82913	1570	5.0	.06	67	123	521	98	98	98
02...	1205	80513	82913	5060	5.0	.09	68	71	970	99	99	100
MAR												
02...	0950	80513	82913	1100	8.5	.12	67	96	285	94	94	98
02...	1020	80513	82913	586	8.5	.09	68	67	106	98	98	98
APR												
14...	0825	80513	82913	1510	15.5	.09	67	68	277	99	99	99
14...	0900	80513	82913	4790	15.5	.12	68	80	1030	99	99	99
MAY												
11...	0800	80513	82913	--	19.0	.12	67	49	--	97	97	97
11...	0830	80513	82913	--	19.0	.15	68	64	--	98	98	98
JUN												
08...	0825	80513	82913	--	25.0	.12	67	87	--	98	99	100
08...	0850	80513	82913	--	25.5	.18	68	41	--	100	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	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)	BED MAT. FALL DIAM. % FINER THAN 16.0 MM (80172)
NOV											
17...	100	7	24	85	96	100	--	--	--	--	--
17...	100	7	27	88	100	--	--	--	--	--	--
DEC											
08...	--	20	71	99	100	--	--	--	--	--	--
JAN											
13...	100	18	30	77	91	95	--	95	97	100	--
13...	--	13	21	65	85	93	--	95	100	--	--
FEB											
02...	100	10	24	82	95	99	--	99	100	--	--
02...	--	16	30	84	96	98	--	98	100	--	--
MAR											
02...	100	17	33	84	98	98	100	--	--	--	--
02...	100	6	18	72	91	98	--	98	100	--	--
APR											
14...	100	9	22	77	93	94	--	96	99	100	--
14...	100	17	28	73	87	88	--	90	91	91	100
MAY											
11...	100	6	25	84	97	100	--	--	--	--	--
11...	100	6	21	56	69	71	--	72	74	76	100
JUN											
08...	--	4	11	72	96	100	--	--	--	--	--
08...	--	3	14	84	97	100	--	--	--	--	--

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 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	
OCT											
06...	1000	80513	82913	2030	87	7.2	755	21.0	.18	8.6	
06...	1230	80513	82913	1480	192	7.3	755	21.0	.09	8.8	
NOV											
17...	1115	80513	82913	701	251	6.9	760	10.0	.06	10.4	
DEC											
08...	0945	80513	82913	1060	201	6.6	763	11.0	.06	8.4	
JAN											
13...	1330	80513	82913	1530	470	6.5	755	4.0	.09	11.9	
13...	1420	80513	82913	1660	438	6.4	755	4.5	.18	9.6	
FEB											
02...	1430	80513	82913	2510	123	6.3	760	5.0	.09	11.2	
02...	1505	80513	82913	8150	124	6.3	760	5.0	.09	10.0	
MAR											
02...	1235	80513	82913	5610	180	7.2	760	8.5	.09	8.9	
02...	1315	80513	82913	202	183	7.2	760	8.5	.15	8.0	
APR											
14...	1135	80513	82913	7110	156	6.5	753	15.5	.09	9.2	
14...	1210	80513	82913	207	148	6.4	753	15.0	.12	8.9	
MAY											
11...	1145	80513	82913	1650	133	6.6	755	20.0	.09	8.7	
11...	1220	80513	82913	3680	122	6.6	755	20.0	.12	9.8	
JUN											
08...	1015	80513	82913	1120	311	7.1	757	26.0	.09	8.6	
JUL											
13...	0730	80513	82913	755	266	7.7	757	24.0	.18	6.0	
AUG											
10...	0715	80513	82913	575	377	7.6	751	28.0	.18	8.2	
SEP											
14...	1430	80513	82913	107	414	7.2	760	23.0	.27	6.6	
DATE		OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SAMPLE SOURCE (72005)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	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)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)
OCT											
06...	97	67	--	--	97	99	99	100	--	--	3
06...	100	68	130	519	82	82	82	87	91	--	6
NOV											
17...	92	--	66	125	95	95	100	--	--	--	30
DEC											
08...	76	--	89	255	97	97	100	--	--	--	15
JAN											
13...	92	67	39	161	93	93	96	100	--	--	4
13...	75	68	55	247	87	87	94	100	--	--	9
FEB											
02...	88	67	66	447	98	98	100	--	--	--	12
02...	79	68	59	1300	100	--	--	--	--	--	15
MAR											
02...	76	67	54	818	99	99	99	100	--	--	2
02...	69	68	53	29	97	97	100	--	--	--	30
APR											
14...	93	67	70	1340	96	96	97	100	--	--	13
14...	89	68	70	39	99	99	99	100	--	--	21
MAY											
11...	97	67	76	339	97	97	97	99	100	--	19
11...	109	68	79	785	96	96	96	100	--	--	15
JUN											
08...	107	--	97	293	99	99	100	--	--	--	8
JUL											
13...	72	--	76	155	99	99	100	--	--	--	9
AUG											
10...	107	--	88	137	100	--	--	--	--	--	4
SEP											
14...	77	--	78	23	99	100	--	--	--	--	5

ST. FRANCIS RIVER BASIN

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07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	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)	BED MAT. FALL DIAM. % FINER THAN 16.0 MM (80172)
OCT									
06...	12	86	100	--	--	--	--	--	--
06...	14	85	96	100	--	--	--	--	--
NOV									
17...	37	80	98	100	--	--	--	--	--
DEC									
08...	21	67	97	100	--	--	--	--	--
JAN									
13...	7	68	96	100	--	--	--	--	--
13...	28	69	93	100	--	--	--	--	--
FEB									
02...	47	90	99	100	--	--	--	--	--
02...	47	87	96	98	100	--	--	--	--
MAR									
02...	2	25	87	96	--	96	97	100	--
02...	48	73	82	84	--	84	84	84	100
APR									
14...	27	77	96	100	--	--	--	--	--
14...	30	63	92	96	--	98	98	100	--
MAY									
11...	29	66	92	98	--	98	98	100	--
11...	21	47	64	69	--	69	71	75	100
JUN									
08...	19	83	94	95	100	--	--	--	--
JUL									
13...	17	56	93	100	--	--	--	--	--
AUG									
10...	8	47	87	96	--	96	100	--	--
SEP									
14...	16	71	96	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 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 06...	0830	80513	82913	630	438	7.1	755	21.0	.45	8.8	100	67
NOV 17...	1215	80513	82913	834	352	6.8	760	11.0	.45	10.8	98	88
DEC 08...	1045	80513	82913	3890	249	6.6	763	12.0	.09	8.4	78	184
JAN 13...	1220	80513	82913	3300	234	6.6	752	5.0	.12	11.9	94	86
FEB 02...	1335	80513	82913	14500	107	6.2	750	5.0	.06	11.5	91	219
MAR 02...	1135	80513	82913	2560	165	7.2	749	8.5	.18	8.8	77	388
APR 14...	1300	80513	82913	2750	292	6.7	753	15.5	.06	8.6	87	152
MAY 11...	1030	80513	82913	2110	241	6.6	755	19.0	.09	8.6	94	235
JUN 08...	1105	80513	82913	1370	313	7.0	757	27.0	.18	9.8	124	77
JUL 13...	0900	80513	82913	816	405	7.6	759	26.0	.45	9.8	122	68
AUG 10...	0820	80513	82913	480	447	7.5	751	28.5	.45	7.4	97	75
SEP 15...	0745	80513	82913	148	483	7.1	760	20.5	.24	7.1	79	88

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN (70342)	SED. SUSP. FALL DIAM. % FINER THAN (70343)	SED. SUSP. FALL DIAM. % FINER THAN (70344)	SED. SUSP. FALL DIAM. % FINER THAN (70345)	BED MAT. FALL DIAM. % FINER THAN (80158)	BED MAT. FALL DIAM. % FINER THAN (80159)	BED MAT. FALL DIAM. % FINER THAN (80160)	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)	BED MAT. FALL DIAM. % FINER THAN (80163)
OCT 06...	114	99	99	100	--	2	11	84	100	--	--
NOV 17...	198	98	98	100	--	20	62	98	100	--	--
DEC 08...	1930	99	99	100	--	16	35	79	95	100	--
JAN 13...	766	99	99	99	100	7	17	62	91	99	100
FEB 02...	8570	100	--	--	--	16	38	80	97	99	100
MAR 02...	2680	100	--	--	--	13	23	85	99	100	--
APR 14...	1130	100	--	--	--	5	12	52	88	99	100
MAY 11...	1340	100	--	--	--	34	64	98	100	--	--
JUN 08...	285	100	--	--	--	23	49	95	99	100	--
JUL 13...	150	100	--	--	--	13	43	94	100	--	--
AUG 10...	97	100	--	--	--	59	80	98	100	--	--
SEP 15...	35	99	99	99	100	57	78	97	99	100	--

ST. FRANCIS RIVER BASIN

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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 Tyrone River, and at mile 102.0.

DRAINAGE AREA.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 ft³/s.

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 sea level. Prior to Sept. 10, 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. 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.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	1190	279	464	8140	1910	1600	2070	1940	2120	1170	700
2	1030	1190	272	1620	7270	1850	1600	1850	1750	1810	1160	640
3	1040	1180	268	4240	5500	1760	1610	1780	1650	1600	1120	413
4	1050	1170	274	4510	3510	1670	2970	1750	1620	1470	1090	248
5	1060	1170	334	3070	2340	1610	4060	2060	1590	1420	1080	194
6	1140	1180	1240	1700	2320	1610	3690	4490	1570	1380	1070	177
7	1520	1190	1880	1090	2440	2040	2840	6400	1560	1320	1080	158
8	2090	1210	2610	1430	2520	2180	2280	6540	1850	1290	1050	149
9	2160	1210	3410	4270	2440	1970	2040	5410	2090	1370	1050	337
10	1980	1220	3040	5440	2300	2040	1920	3780	1940	1510	1150	597
11	1830	1230	2120	4840	2180	2030	1840	2700	1930	2200	1190	572
12	1870	1290	1430	3340	2190	1870	1790	2200	1870	2640	1100	512
13	2150	1380	1500	2200	2230	3240	1760	1940	1690	2360	743	372
14	2310	1330	1720	1710	2170	6080	1740	1780	2040	1950	578	195
15	2270	1340	1410	1400	2060	7030	1840	1760	2530	1670	546	130
16	1990	1360	939	1030	1970	6650	2170	1770	2380	1550	521	104
17	1710	1350	667	769	1910	5000	2290	1740	1990	1530	509	87
18	1590	1330	564	1440	1870	3070	2080	1700	1680	1530	885	76
19	1570	1230	507	2240	1840	1890	1960	1730	1530	1520	917	74
20	1520	792	462	2180	1840	1470	1920	1840	1470	1430	855	72
21	1450	451	434	1970	1830	1890	1890	1760	1490	1370	826	70
22	1370	352	718	3730	1800	2100	1840	1700	1480	1330	826	67
23	1290	328	1570	7280	1760	2030	1790	1670	1460	1310	815	66
24	1240	318	1750	8610	1720	1920	1750	1620	1460	1310	782	63
25	1230	308	1170	8790	1650	1820	1760	1570	1350	1330	592	62
26	1210	295	769	8170	1250	1730	2210	1550	1350	1340	445	283
27	1220	288	671	6690	1010	1660	3920	1530	1930	1330	398	503
28	1230	284	635	5030	1770	1610	4710	1510	2840	1260	361	288
29	1220	280	618	4980	---	1590	3780	1500	2940	1210	312	154
30	1200	282	590	7320	---	1590	2670	1490	2540	1180	273	485
31	1190	---	522	8220	---	1590	---	1780	---	1170	578	---
TOTAL	46760	27728	34373	119773	71830	76500	70320	72970	55510	47810	25072	7848
MEAN	1508	924	1109	3864	2565	2468	2344	2354	1850	1542	809	262
MAX	2310	1380	3410	8790	8140	7030	4710	6540	2940	2640	1190	700
MIN	1030	280	268	464	1010	1470	1600	1490	1350	1170	273	62
AC-FT	92750	55000	68180	237600	142500	151700	139500	144700	110100	94830	49730	15570

ST. FRANCIS RIVER BASIN

07047800 ST. FRANCIS RIVER AT PARKIN--CONTINUED

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

MEAN	1159	1686	2315	3376	4140	3971	4073	3524	2732	2088	1548	1274
MAX	3898	6532	6635	14140	18100	9627	14360	12900	8172	4038	3998	3920
(WY)	1946	1958	1932	1932	1932	1932	1933	1933	1933	1945	1998	1950
MIN	155	270	201	294	382	928	1080	1054	685	879	376	212
(WY)	1988	1955	1990	1964	1964	1954	1954	1977	1977	1941	1990	1994

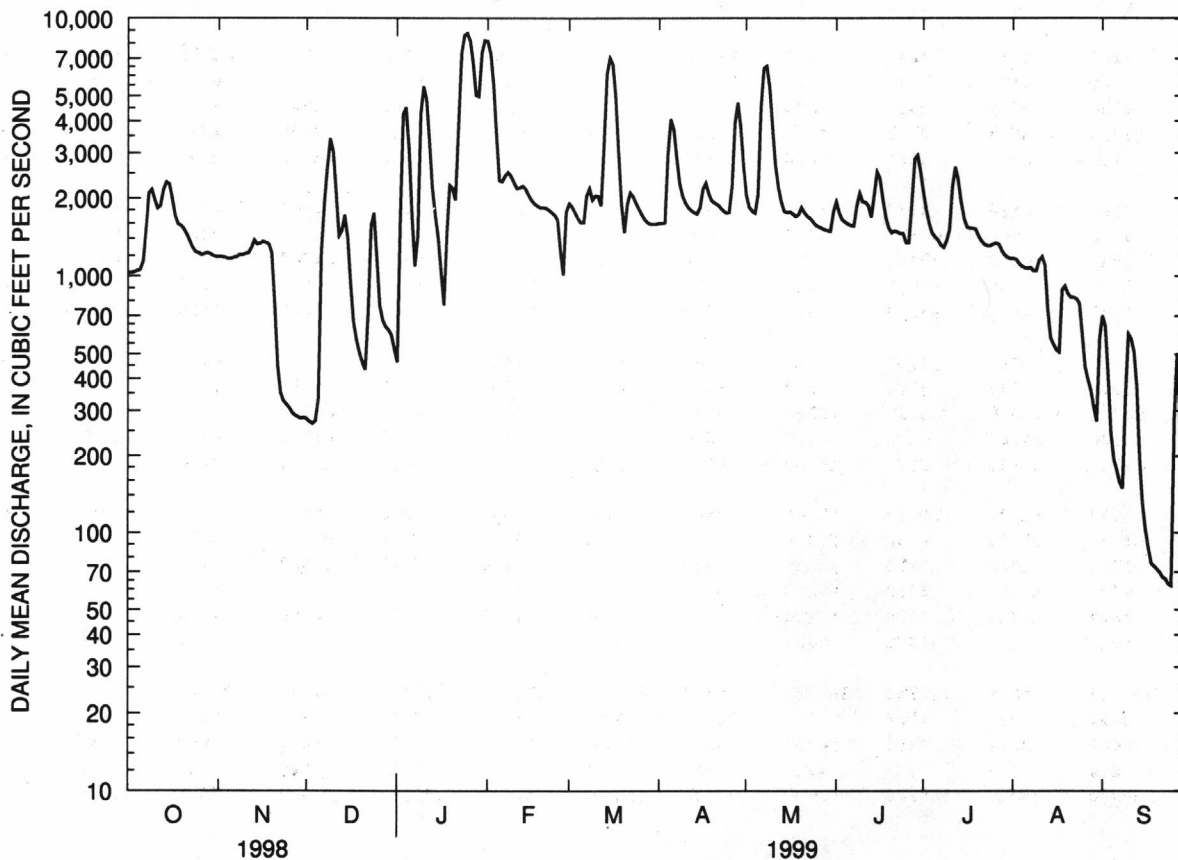
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1931-94, 1998-99

ANNUAL TOTAL	809864		656494									
ANNUAL MEAN	2219		1799							2658		
HIGHEST ANNUAL MEAN										6511		1933
LOWEST ANNUAL MEAN										1145		1977
HIGHEST DAILY MEAN	8450	Feb 19	8790	Jan 25						21600	Jan 31	1932
LOWEST DAILY MEAN	268	Dec 3	62	Sep 25						42	Nov 8	1987
ANNUAL SEVEN-DAY MINIMUM	277	Nov 28	68	Sep 19						55	Nov 3	1987
INSTANTANEOUS PEAK FLOW			8850	Jan 25						25300	Jan 31	1930
INSTANTANEOUS PEAK STAGE			19.64	Jan 25						34.20	Feb 4	1937
INSTANTANEOUS LOW FLOW			61	Sep 24,25						61	Sep 24,25	1999
ANNUAL RUNOFF (AC-FT)	1606000		1302000							1925000		
10 PERCENT EXCEEDS	4850		3140							5540		
50 PERCENT EXCEEDS	1720		1570							1920		
90 PERCENT EXCEEDS	846		346							509		



ST. FRANCIS RIVER BASIN

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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., Poincett County, Hydrologic Unit 08020203, at bridge on U.S. Highway 63 3.6 mi northwest 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 sea level. 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.--Water-discharge records good, except estimated daily discharges which are poor. 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.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e809	e624	e1250	5060	30200	8170	5110	9380	4090	5880	e139	e67
2	e809	e578	e1180	4820	29500	7980	5080	9170	4720	5050	e163	e65
3	e762	e578	e1240	6230	28500	7350	5010	8880	5030	3900	e139	e64
4	e762	e529	e1320	8370	27100	5780	5200	8490	4950	3240	e120	e63
5	e762	e486	e1800	10800	25500	5370	6880	8490	4090	3030	e120	e63
6	e857	e486	e2270	11200	23600	5130	8690	8990	4780	e1940	e120	e60
7	2410	e529	3450	11000	21500	5540	9020	9870	e3190	e1540	e139	e58
8	5610	e529	6990	10400	19000	6070	9380	10600	e2900	e1300	e120	e56
9	7700	e486	7830	9700	16800	6510	9670	10700	3390	e1480	e163	e55
10	10700	e400	5170	8930	15100	6730	9970	10200	e3320	e1480	e372	e54
11	13400	e1060	3230	7620	13900	6580	10300	9350	3130	e1190	e372	e53
12	14400	2610	3370	6640	12900	6610	10400	8390	3250	e877	e189	e52
13	14600	e672	2920	6480	11900	6510	10200	7160	e2990	e926	e306	e50
14	13800	e529	2930	7120	11200	6520	9640	5730	2860	e872	e646	e47
15	12100	e735	3580	7230	10600	7730	9340	5600	2820	e699	e562	e45
16	9940	e828	4130	7220	10200	9320	9770	5190	2640	e681	e444	e44
17	8100	e400	e1810	7040	9850	10400	10700	4960	2630	e498	e216	e43
18	6830	e400	e2110	6360	9630	11000	11500	5270	e1940	e521	e139	e42
19	5750	e529	e2030	6820	9490	10900	12000	5440	e1600	e586	e120	e41
20	4740	e293	e2270	7000	9390	9910	12000	5470	e1420	e529	e118	e40
21	3800	e882	e2030	6960	9280	8370	11400	5340	e1250	e513	e115	e40
22	2380	e946	2700	8600	9130	6880	10700	5120	e1190	e430	e110	e39
23	e2000	e1060	5450	11300	8950	6560	10200	4910	e1140	e386	e105	e38
24	e1720	e1120	8370	14400	8650	6220	9790	4550	e1250	e274	e100	e37
25	e1250	e1180	9930	18600	8550	5930	9450	4160	e1800	e244	e95	e36
26	e1010	e1320	10100	22400	8660	5730	9340	4090	e2820	e216	e88	e35
27	e1060	e1320	8440	25300	8150	5460	9450	3960	e2930	e189	e85	e35
28	e1370	e1320	7380	27000	7980	5270	9450	3650	e3050	e163	e80	e34
29	e781	e1370	6080	29200	---	5140	9500	3340	e3410	e139	e75	e42
30	e877	e1320	5180	30500	---	5040	9470	3220	4900	e120	e72	e40
31	e624	---	5370	30800	---	5110	---	3110	---	e139	e69	---
TOTAL	151713	25119	131910	381100	415210	215820	278610	202780	89480	39032	5701	1438
MEAN	4894	837	4255	12290	14830	6962	9287	6541	2983	1259	184	47.9
MAX	14600	2610	10100	30800	30200	11000	12000	10700	5030	5880	646	67
MIN	624	293	1180	4820	7980	5040	5010	3110	1140	120	69	34
AC-FT	300900	49820	261600	755900	823600	428100	552600	402200	177500	77420	11310	2850

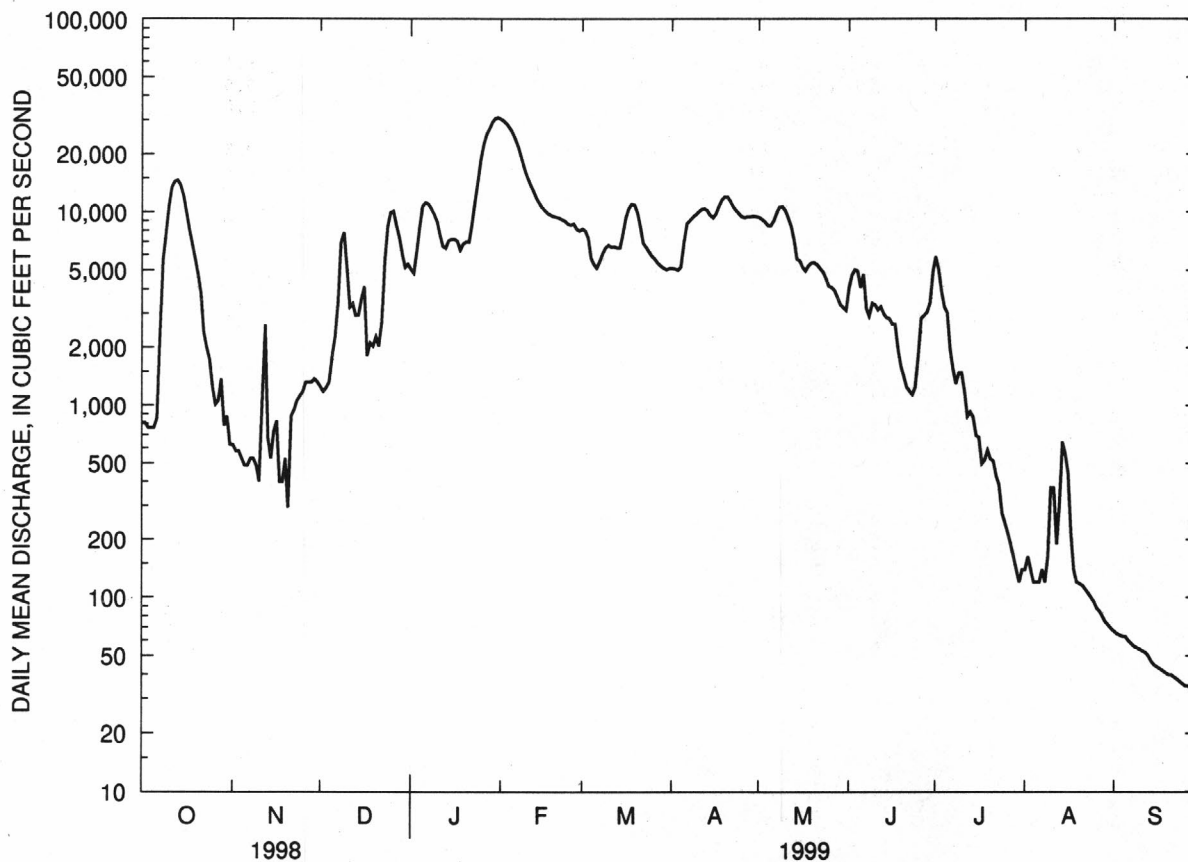
ST. FRANCIS RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1999, BY WATER YEAR (WY)

MEAN	853	1848	4088	6884	8050	8376	9010	6890	4343	2142	1080	615
MAX	5933	19780	17470	31060	30990	22970	30180	20530	23550	12630	12880	3970
(WY)	1950	1958	1952	1950	1950	1997	1945	1945	1957	1957	1998	1965
MIN	.000	.000	.000	39.1	190	225	441	.39	.000	.000	.000	.000
(WY)	1935	1944	1944	1944	1936	1941	1941	1941	1941	1941	1936	1935

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1935-70, 1991-99	
ANNUAL TOTAL	2357075		1937913			
ANNUAL MEAN	6458		5309		4494	
HIGHEST ANNUAL MEAN					10390	1950
LOWEST ANNUAL MEAN					258	1941
HIGHEST DAILY MEAN	22300	Aug 8	30800	Jan 31	48300	Jan 27 1937
LOWEST DAILY MEAN	293	Nov 20	34	Sep 28	^a .00	Oct 1 1934
ANNUAL SEVEN-DAY MINIMUM	492	Nov 4	36	Sep 22	.00	Oct 1 1934
INSTANTANEOUS PEAK FLOW			31100	Jan 31	^b 48300	Jan 26-28 1937
INSTANTANEOUS PEAK STAGE			24.94	Jan 31	^c 31.10	Jan 26-28 1937
ANNUAL RUNOFF (AC-FT)	4675000		3844000		3256000	
10 PERCENT EXCEEDS	13800		10800		12200	
50 PERCENT EXCEEDS	5270		3900		2030	
90 PERCENT EXCEEDS	956		92		.00	

^aNo flow at times in most years prior to 1965^bMaximum discharge during period 1971-90 67,000 ft³/s Apr. 7, 1979^cAt former site and datum^eEstimated

ST. FRANCIS RIVER BASIN

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

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1990 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,340 mg/L, March 7, 1997; minimum daily mean, 16 mg/L, December 14-18, 1995.

SEDIMENT DISCHARGE: Maximum daily, 229,000 tons, March 7, 1997; minimum daily, 6.6 tons, September 5, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 834 mg/L, October 8; minimum daily mean, 27 mg/L, October 1-4.

SEDIMENT DISCHARGE: Maximum daily, 20,000 tons, January 23; minimum daily, 9.3 tons, September 26-27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE OF WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
NOV									
17...	1315	80513	82913	362	301	6.8	760	10.5	.09
DEC									
08...	1130	80513	82913	5850	268	6.7	760	10.5	.09
08...	1200	80513	82913	1130	--	--	--	10.5	.09
08...	1225	80513	82913	42	--	--	--	10.5	.09
08...	1245	80513	82913	200	--	--	--	10.5	.06
JAN									
14...	0810	80513	82913	5740	217	6.5	763	4.5	.12
14...	0850	80513	82913	1270	--	--	--	3.5	.15
FEB									
03...	0730	80513	82913	13600	121	6.4	755	5.5	.09
03...	0800	80513	82913	4350	128	6.3	755	5.5	.09
03...	0825	80513	82913	5500	--	--	--	5.0	.09
03...	0850	80513	82913	3640	--	--	--	5.0	.06
03...	0915	80513	82913	804	--	--	--	5.0	.06
MAR									
02...	1405	80513	82913	6680	183	7.1	760	8.5	.09
02...	1435	80513	82913	1500	--	--	--	8.5	.12
APR									
14...	1405	80513	82913	7420	172	6.5	753	15.5	.09
14...	1435	80513	82913	1820	--	--	--	16.0	.12
MAY									
11...	1345	80513	82913	7240	159	6.5	755	20.0	.09
11...	1415	80513	82913	1680	--	--	--	20.0	.09
11...	1440	80513	82913	4.0	--	--	--	20.0	.06
JUN									
08...	1215	80513	82913	2470	213	6.9	757	27.0	.09
08...	1245	80513	82913	265	--	--	--	27.0	.09

ST. FRANCIS RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SAMPLE SOURCE (72005)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	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									
17...	10.4	94	--	42	41	97	97	97	100
DEC									
08...	8.0	72	67	146	2310	98	99	99	100
08...	--	--	68	163	497	96	98	99	100
08...	--	--	68	72	8.2	99	99	100	--
08...	--	--	68	137	74	100	--	--	--
JAN									
14...	11.1	86	67	84	1300	84	87	96	100
14...	--	--	68	74	254	87	90	96	100
FEB									
03...	10.8	86	67	107	3930	94	97	100	--
03...	9.8	78	68	104	1220	97	97	99	100
03...	--	--	68	162	2410	99	100	--	--
03...	--	--	68	200	1970	100	--	--	--
03...	--	--	68	232	504	99	99	100	--
MAR									
02...	8.9	76	67	143	2580	95	97	98	100
02...	--	--	68	163	660	95	96	99	100
APR									
14...	9.1	92	67	122	2440	92	95	98	100
14...	--	--	68	143	703	88	96	99	100
MAY									
11...	8.8	98	67	89	1740	99	99	100	--
11...	--	--	68	92	417	93	93	93	95
11...	--	--	68	222	2.4	99	99	99	100
JUN									
08...	9.5	120	67	72	480	95	95	97	100
08...	--	--	68	78	56	97	97	97	100

DATE	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	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)
NOV								
17...	--	5	31	92	97	100	--	--
DEC								
08...	--	7	43	97	100	--	--	--
08...	--	9	44	95	100	--	--	--
08...	--	66	88	98	99	100	--	--
08...	--	53	82	98	98	99	99	100
JAN								
14...	--	16	60	99	100	--	--	--
14...	--	8	60	99	100	--	--	--
FEB								
03...	--	12	45	98	100	--	--	--
03...	--	55	67	90	99	100	--	--
03...	--	7	26	87	99	100	--	--
03...	--	64	72	91	99	100	--	--
03...	--	61	68	89	99	100	--	--
MAR								
02...	--	5	15	94	99	100	--	--
02...	--	2	12	93	100	--	--	--
APR								
14...	--	2	8	91	100	--	--	--
14...	--	2	8	87	100	--	--	--
MAY								
11...	--	2	15	88	99	100	--	--
11...	100	2	17	89	99	100	--	--
11...	--	67	77	94	100	--	--	--
JUN								
08...	--	2	23	94	98	100	--	--
08...	--	0	3	70	94	98	99	100

ST. FRANCIS RIVER BASIN

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	e809	27	59	e624	39	66	e1250	38	128
2	e809	27	59	e578	35	54	e1180	38	121
3	e762	27	56	e578	34	53	e1240	38	127
4	e762	27	56	e529	34	49	e1320	47	168
5	e762	29	60	e486	34	44	e1800	137	668
6	e857	55	127	e486	33	43	e2270	208	1280
7	2410	252	1640	e529	33	47	3450	176	1640
8	5610	834	12600	e529	33	47	6990	180	3390
9	7700	536	11100	e486	34	44	7830	168	3550
10	10700	343	9910	e400	40	43	5170	149	2080
11	13400	234	8480	e1060	95	272	3230	138	1200
12	14400	179	6950	2610	120	842	3370	128	1160
13	14600	140	5530	e672	60	108	2920	118	927
14	13800	112	4170	e529	52	75	2930	107	844
15	12100	82	2680	e735	49	96	3580	97	933
16	9940	63	1690	e828	47	106	4130	91	1010
17	8100	63	1390	e400	43	46	e1810	86	420
18	6830	59	1080	e400	42	45	e2110	81	460
19	5750	57	891	e529	42	60	e2030	73	399
20	4740	59	759	e293	42	33	e2270	58	354
21	3800	61	628	e882	42	100	e2030	58	316
22	2380	55	356	e946	43	110	2700	99	722
23	e2000	53	288	e1060	43	123	5450	426	6260
24	e1720	49	226	e1120	43	130	8370	450	10200
25	e1250	48	162	e1180	42	135	9930	312	8360
26	e1010	47	128	e1320	39	137	10100	240	6530
27	e1060	46	132	e1320	38	135	8440	191	4350
28	e1370	42	154	e1320	38	135	7380	165	3290
29	e781	41	86	e1370	38	141	6080	131	2150
30	e877	41	97	e1320	38	135	5180	120	1680
31	e624	40	68	---	---	---	5370	111	1600
TOTAL	151713	---	71612	25119	---	3454	131910	---	66317
JANUARY			FEBRUARY			MARCH			
1	5060	96	1300	30200	186	15200	8170	84	1860
2	4820	126	1640	29500	173	13800	7980	136	2940
3	6230	464	7800	28500	129	9920	7350	89	1770
4	8370	519	11700	27100	107	7810	5780	62	966
5	10800	188	5490	25500	86	5940	5370	51	742
6	11200	91	2740	23600	76	4850	5130	58	801
7	11000	78	2300	21500	66	3820	5540	86	1290
8	10400	73	2060	19000	63	3220	6070	176	2880
9	9700	81	2120	16800	73	3300	6510	201	3530
10	8930	84	2020	15100	91	3720	6730	180	3260
11	7620	79	1630	13900	89	3360	6580	135	2400
12	6640	79	1420	12900	81	2810	6610	125	2230
13	6480	78	1360	11900	67	2150	6510	119	2090
14	7120	80	1530	11200	56	1690	6520	123	2170
15	7230	82	1610	10600	52	1500	7730	298	6220
16	7220	81	1580	10200	52	1420	9320	447	11200
17	7040	81	1540	9850	50	1340	10400	272	7640
18	6360	103	1780	9630	52	1360	11000	175	5200
19	6820	303	5590	9490	60	1530	10900	136	4010
20	7000	307	5800	9390	51	1300	9910	97	2600
21	6960	253	4750	9280	45	1120	8370	81	1820
22	8600	347	8060	9130	43	1070	6880	72	1340
23	11300	657	20000	8950	35	849	6560	63	1120
24	14400	349	13600	8650	35	818	6220	63	1050
25	18600	256	12900	8550	41	950	5930	61	976
26	22400	237	14300	8660	43	1000	5730	59	906
27	25300	233	15900	8150	46	1020	5460	54	798
28	27000	227	16600	7980	69	1490	5270	51	725
29	29200	214	16900	---	---	---	5140	48	666
30	30500	204	16800	---	---	---	5040	53	718
31	30800	193	16100	---	---	---	5110	59	820
TOTAL	381100	---	218920	415210	---	98357	215820	---	76738

e Estimated

ST. FRANCIS RIVER BASIN

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	5110	55	761	9380	67	1700	4090	165	1830
2	5080	57	784	9170	69	1710	4720	284	3610
3	5010	61	826	8880	71	1700	5030	198	2680
4	5200	74	1040	8490	71	1620	4950	134	1790
5	6880	218	4050	8490	71	1630	4090	110	1220
6	8690	506	11900	8990	84	2030	4780	125	1610
7	9020	399	9720	9870	163	4350	e3190	94	869
8	9380	392	9930	10600	410	11700	e2900	75	588
9	9670	348	9090	10700	170	4920	3390	76	695
10	9970	271	7300	10200	116	3200	e3320	90	915
11	10300	237	6580	9350	96	2420	3130	81	685
12	10400	208	5850	8390	102	2300	3250	83	726
13	10200	151	4160	7160	98	1900	e2990	79	637
14	9640	128	3320	5730	85	1310	2860	75	608
15	9340	114	2870	5600	77	1160	2820	73	557
16	9770	123	3250	5190	75	1050	2640	69	490
17	10700	247	7140	4960	76	1020	2630	69	489
18	11500	260	8090	5270	76	1080	e1940	68	357
19	12000	203	6570	5440	79	1160	e1600	64	276
20	12000	166	5360	5470	92	1360	e1420	64	245
21	11400	136	4170	5340	72	1040	e1250	64	216
22	10700	108	3120	5120	69	954	e1190	63	203
23	10200	98	2710	4910	69	913	e1140	59	181
24	9790	98	2600	4550	68	837	e1250	67	226
25	9450	96	2450	4160	68	764	e1800	145	706
26	9340	93	2340	4090	68	748	e2820	209	1590
27	9450	83	2120	3960	66	708	e2930	184	1450
28	9450	77	1970	3650	65	642	e3050	142	1170
29	9500	77	1980	3340	61	548	e3410	126	1160
30	9470	73	1880	3220	61	529	4900	205	2710
31	---	---	---	3110	61	512	---	---	---
TOTAL	278610	---	133931	202780	---	57515	89480	---	30489
JULY			AUGUST			SEPTEMBER			
1	5880	353	5600	e139	48	18	e67	98	18
2	5050	221	3010	e163	47	21	e65	98	17
3	3900	156	1640	e139	43	16	e64	98	17
4	3240	113	989	e120	42	14	e63	98	17
5	3030	103	841	e120	42	14	e63	98	17
6	e1940	97	507	e120	42	14	e60	98	16
7	e1540	92	382	e139	42	16	e58	98	15
8	e1300	91	320	e120	43	14	e56	98	15
9	e1480	86	343	e163	47	21	e55	98	15
10	e1480	80	319	e372	74	75	e54	98	14
11	e1190	74	237	e372	83	83	e53	98	14
12	e877	68	160	e189	72	37	e52	98	14
13	e926	63	156	e306	112	93	e50	98	13
14	e872	62	146	e646	330	576	e47	98	12
15	e699	63	119	e562	269	408	e45	98	12
16	e681	62	114	e444	189	227	e44	98	12
17	e498	58	78	e216	152	89	e43	98	11
18	e521	57	80	e139	135	50	e42	98	11
19	e586	57	90	e120	118	38	e41	98	11
20	e529	53	75	e118	117	37	e40	98	11
21	e513	52	72	e115	116	36	e40	98	11
22	e430	52	61	e110	114	34	e39	98	10
23	e386	52	54	e105	110	31	e38	98	10
24	e274	47	35	e100	105	28	e37	98	9.8
25	e244	46	30	e95	98	25	e36	98	9.5
26	e216	47	27	e88	96	23	e35	98	9.3
27	e189	47	24	e85	98	22	e35	98	9.3
28	e163	47	21	e80	98	21	e34	102	9.4
29	e139	47	18	e75	98	20	e42	125	14
30	e120	48	16	e72	98	19	e40	116	13
31	e139	48	18	e69	98	18	---	---	---
TOTAL	39032	---	15582	5701	---	2138	1438	---	387.3
YEAR	1937913		775440.3						

e Estimated

ST. FRANCIS RIVER BASIN

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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

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year. October 1, 1977 to September 30, 1995, monthly discharge measurements and sediment samples.

GAGE.--Water-stage recorder. Datum of gage is 166.02 ft above sea level. Prior to October 1995 non-recording gage at same site and datum.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	333	1050	1470	5630	25600	8350	5360	9150	3570	5530	261	e82
2	337	788	1410	5890	25700	8340	5340	8970	4390	5320	384	e80
3	324	868	1440	7050	25600	7870	5300	8680	4740	4300	246	e79
4	284	604	1470	7950	25400	6830	5430	8320	4770	3600	205	e75
5	368	586	1720	10300	25000	6010	6120	8210	3770	3200	196	e75
6	1030	573	2060	11000	24400	5530	8370	8820	4880	2370	197	e71
7	3180	580	2890	11100	23600	5780	8790	9240	3590	1980	204	e70
8	5150	616	6370	10900	22400	6350	9200	9730	2760	1250	202	e70
9	6280	458	7830	10300	20400	6670	9550	9930	3050	1270	214	e69
10	8540	438	7110	9590	17900	7140	9830	9660	3170	1470	341	e69
11	11300	551	4050	8290	15900	6950	10100	9000	2980	1220	837	e68
12	12500	2510	4420	7220	14400	6920	10300	8130	3160	1030	272	e67
13	12800	583	3800	6550	13000	7380	10200	7280	3220	1170	270	e65
14	12600	467	3740	7280	12000	7490	9880	5820	2840	988	874	e64
15	11500	794	4080	7410	11300	7750	9620	5560	2920	739	525	e63
16	9670	1060	4760	7450	10700	8900	9650	5270	2730	938	474	e62
17	7780	611	3780	7350	10300	10000	10300	4890	2500	519	177	e60
18	6460	540	2930	7060	10000	10700	11100	5120	2450	626	e105	e58
19	5520	697	2830	6850	9800	10800	11700	5280	1980	736	e95	e57
20	4670	985	3180	7120	9670	10200	11800	5310	1810	652	e95	e54
21	3860	1120	2910	7140	9540	9120	11500	5240	1520	685	e82	e53
22	3140	1200	3270	8730	9430	7310	10900	5050	1370	604	e92	e51
23	2100	1290	4990	12600	9250	6870	10300	4860	1350	543	e91	e47
24	1980	1370	7930	14600	9030	6560	9820	4650	1450	428	e90	e47
25	1620	1480	9590	16800	8690	6270	9510	4230	1880	477	e90	e45
26	1190	1480	10200	18300	8920	6050	9420	4130	2680	354	e88	e43
27	1390	1530	9470	19100	8540	5830	9580	4040	3260	339	e87	e42
28	1730	1480	7600	20100	8230	5540	9370	3800	2840	377	e85	e41
29	1030	1690	7080	22100	---	5540	9290	3500	3330	279	e84	e40
30	1210	1560	5790	24100	---	5280	9250	3200	4080	285	e83	e40
31	760	---	5760	25100	---	5330	---	3030	---	320	e82	---
TOTAL	140636	29559	145930	350960	424700	225660	276880	198100	89040	43599	7128	1807
MEAN	4537	985	4707	11320	15170	7279	9229	6390	2968	1406	230	60.2
MAX	12800	2510	10200	25100	25700	10800	11800	9930	4880	5530	874	82
MIN	284	438	1410	5630	8230	5280	5300	3030	1350	279	82	40
MED	3140	831	4050	8730	11600	6920	9600	5310	2950	739	196	62
AC-FT	279000	58630	289500	696100	842400	447600	549200	392900	176600	86480	14140	3580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

	1996	1997	1998	1999
MEAN	1534	2272	5078	7928
MAX	4537	6289	12320	11320
(WY)	1999	1997	1997	1999
MIN	137	524	1624	4950
(WY)	1998	1998	1996	1996

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

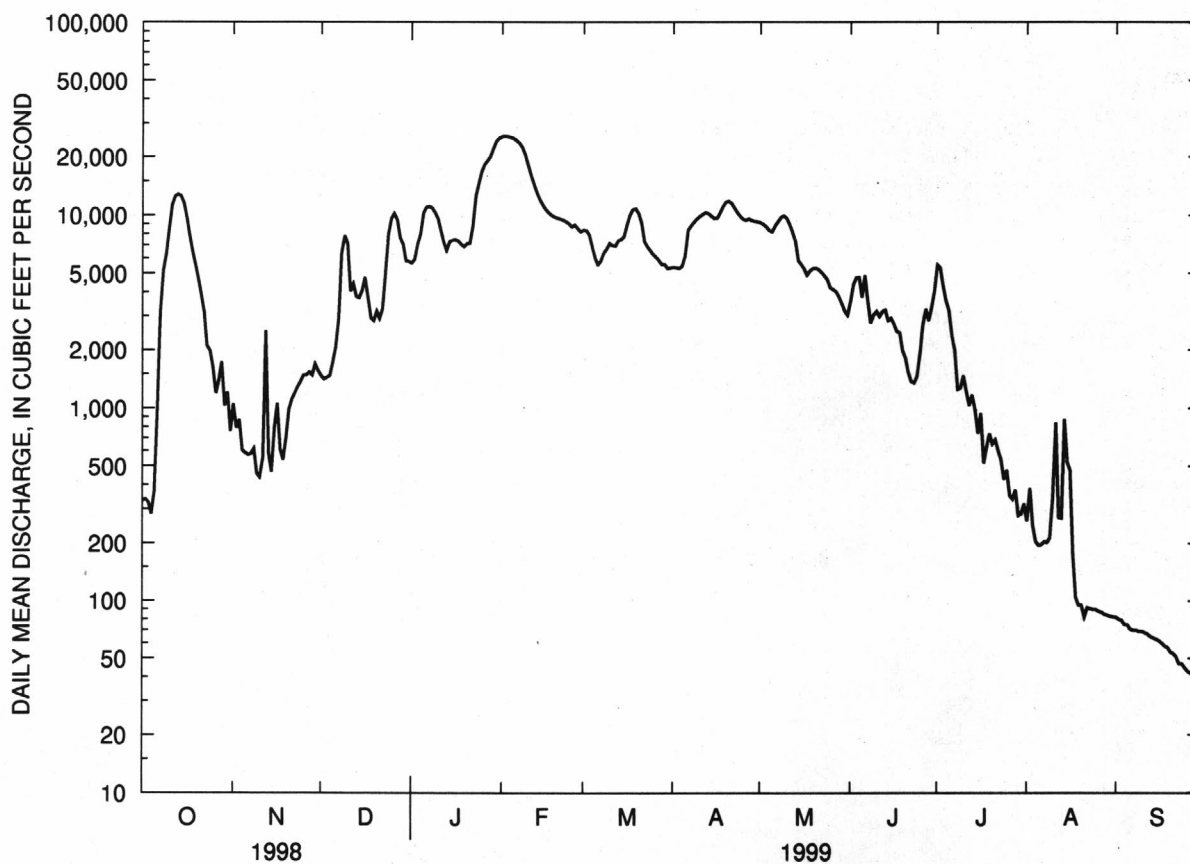
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1996 - 1999

ANNUAL TOTAL	2343686		1933999			
ANNUAL MEAN	6421		5299		5566	
HIGHEST ANNUAL MEAN					8309	1997
LOWEST ANNUAL MEAN					2914	1996
HIGHEST DAILY MEAN	20400	Aug 10	25700	Feb 2	34400	Mar 11 1997
LOWEST DAILY MEAN	284	Oct 4	40	Sep 29	40	Sep 29 1999
ANNUAL SEVEN-DAY MINIMUM	324	Sep 28	43	Sep 24	43	Sep 24 1999
INSTANTANEOUS PEAK FLOW			25800	Feb 2	34600	Mar 11 1997
INSTANTANEOUS PEAK STAGE			39.23	Feb 2	41.13	Mar 11 1997
INSTANTANEOUS LOW FLOW					90	Sep 4 1996
ANNUAL RUNOFF (AC-FT)	4649000		3836000		4033000	
10 PERCENT EXCEEDS	13200		10900		12800	
50 PERCENT EXCEEDS	5520		4050		3770	
90 PERCENT EXCEEDS	1030		88		270	

^eEstimated

ST. FRANCIS RIVER BASIN

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07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1996 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 838 mg/L, September 24, 1996; minimum daily mean, 13 mg/L, September 30, 1998.

SEDIMENT DISCHARGE: Maximum daily, 37,600 tons, March 8, 1997; minimum daily, 5.0 tons, September 24, 1999.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 704 mg/L, July 2; minimum daily mean, 27 mg/L, May 31.

SEDIMENT DISCHARGE: Maximum daily, 19,800 tons, January 24; minimum daily, 5.0 tons, September 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, ANA- INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	SAMPLE SOURCE (72005)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	
DATE	TIME										
NOV 18...	1035	80513	82913	477	10.0	.45	--	34	44	100	
DEC 09...	0815	80513	82913	7560	10.5	.09	--	163	3330	90	
JAN 14...	1040	80513	82913	7440	4.5	.09	--	77	1550	91	
FEB 03...	1110	80513	82913	20900	5.5	.09	67	166	9370	98	
03...	1150	80513	82913	6130	5.5	.09	68	220	3640	100	
MAR 03...	0805	80513	82913	7950	8.5	.09	--	115	2470	97	
APR 15...	0825	80513	82913	9730	15.5	.09	--	155	4070	98	
MAY 12...	0820	80513	82913	8150	20.0	.09	--	88	1940	97	
JUN 09...	0900	80513	82913	2840	27.0	.09	--	101	774	96	
		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)	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)
NOV 18...	--	--	--	--	1	1	6	93	100	--	--
DEC 09...	96	99	100	18	65	95	100	--	--	--	--
JAN 14...	91	96	100	10	63	98	99	100	--	--	--
FEB 03...	99	100	--	5	19	83	99	100	--	--	--
03...	--	--	--	81	88	94	96	98	98	100	100
MAR 03...	98	99	100	6	24	92	97	100	--	--	--
APR 15...	98	99	100	19	54	98	98	100	--	--	--
MAY 12...	99	100	--	16	59	94	98	100	--	--	--
JUN 09...	96	100	--	16	62	98	99	100	--	--	--

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	333	30	27	1050	67	189	1470	37	146
2	337	29	27	788	77	164	1410	40	150
3	324	31	27	868	59	138	1440	41	160
4	284	33	25	604	39	64	1470	48	191
5	368	53	53	586	59	94	1720	57	266
6	1030	275	766	573	53	82	2060	62	345
7	3180	339	2910	580	59	92	2890	101	785
8	5150	386	5370	616	58	96	6370	142	2440
9	6280	318	5400	458	62	77	7830	177	3750
10	8540	312	7200	438	64	75	7110	156	3000
11	11300	259	7910	551	103	154	4050	105	1150
12	12500	242	8180	2510	76	518	4420	77	923
13	12800	178	6160	583	72	114	3800	67	691
14	12600	145	4920	467	54	68	3740	69	696
15	11500	131	4060	794	37	80	4080	74	818
16	9670	125	3250	1060	39	113	4760	65	832
17	7780	111	2330	611	42	69	3780	54	556
18	6460	102	1780	540	39	57	2930	49	391
19	5520	99	1480	697	59	112	2830	47	361
20	4670	87	1100	985	56	149	3180	43	372
21	3860	92	958	1120	48	144	2910	47	373
22	3140	106	899	1200	45	144	3270	73	642
23	2100	122	691	1290	41	142	4990	276	3710
24	1980	162	868	1370	39	144	7930	309	6620
25	1620	202	886	1480	42	169	9590	256	6620
26	1190	168	540	1480	41	164	10200	212	5830
27	1390	81	305	1530	40	164	9470	178	4540
28	1730	68	318	1480	38	154	7600	199	4080
29	1030	72	200	1690	41	186	7080	190	3620
30	1210	66	216	1560	44	186	5790	167	2610
31	760	63	130	---	---	---	5760	166	2580
TOTAL	140636	---	68986	29559	---	4102	145930	---	59248
JANUARY			FEBRUARY			MARCH			
1	5630	200	3040	25600	191	13200	8350	99	2220
2	5890	126	2010	25700	171	11800	8340	148	3340
3	7050	117	2230	25600	177	12200	7870	123	2610
4	7950	128	2760	25400	174	11900	6830	132	2440
5	10300	189	5250	25000	174	11800	6010	104	1690
6	11000	160	4740	24400	184	12200	5530	88	1320
7	11100	132	3950	23600	130	8300	5780	87	1360
8	10900	126	3710	22400	117	7050	6350	130	2230
9	10300	123	3420	20400	114	6250	6670	157	2820
10	9590	117	3040	17900	108	5200	7140	172	3310
11	8290	105	2340	15900	96	4110	6950	149	2790
12	7220	99	1930	14400	90	3480	6920	155	2900
13	6550	80	1410	13000	87	3040	7380	187	3720
14	7280	80	1560	12000	78	2530	7490	155	3140
15	7410	92	1840	11300	75	2280	7750	162	3380
16	7450	93	1870	10700	68	1950	8900	343	8250
17	7350	105	2090	10300	65	1800	10000	420	11300
18	7060	179	3400	10000	68	1840	10700	383	11100
19	6850	230	4250	9800	77	2030	10800	343	10000
20	7120	351	6750	9670	84	2180	10200	213	5870
21	7140	389	7500	9540	100	2580	9120	168	4140
22	8730	401	9450	9430	91	2320	7310	150	2950
23	12600	444	15100	9250	74	1840	6870	138	2560
24	14600	502	19800	9030	74	1810	6560	124	2190
25	16800	386	17500	8690	73	1710	6270	116	1960
26	18300	341	16800	8920	75	1800	6050	111	1810
27	19100	308	15900	8540	78	1810	5830	113	1780
28	20100	263	14300	8230	88	1960	5540	106	1580
29	22100	247	14700	---	---	---	5540	105	1570
30	24100	218	14200	---	---	---	5280	108	1540
31	25100	201	13600	---	---	---	5330	138	1990
TOTAL	350960	---	220440	424700	---	140970	225660	---	109860

ST. FRANCIS RIVER BASIN

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07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	5360	118	1710	9150	174	4310	3570	31	300
2	5340	79	1150	8970	176	4270	4390	68	807
3	5300	73	1050	8680	170	3970	4740	288	3680
4	5430	70	1030	8320	147	3300	4770	223	2880
5	6120	91	1510	8210	157	3480	3770	145	1480
6	8370	158	3580	8820	158	3750	4880	154	2040
7	8790	206	4900	9240	169	4210	3590	96	934
8	9200	230	5700	9730	200	5260	2760	82	609
9	9550	240	6180	9930	175	4690	3050	90	745
10	9830	253	6720	9660	141	3670	3170	73	624
11	10100	272	7430	9000	131	3190	2980	52	421
12	10300	240	6680	8130	136	2990	3160	52	445
13	10200	224	6160	7280	133	2610	3220	43	374
14	9880	199	5300	5820	120	1890	2840	44	336
15	9620	167	4330	5560	106	1590	2920	40	318
16	9650	207	5400	5270	98	1390	2730	37	275
17	10300	261	7250	4890	103	1360	2500	34	232
18	11100	267	8010	5120	89	1220	2450	45	301
19	11700	258	8160	5280	78	1110	1980	53	286
20	11800	212	6760	5310	92	1320	1810	47	231
21	11500	190	5920	5240	88	1240	1520	43	178
22	10900	139	4100	5050	88	1200	1370	46	170
23	10300	132	3660	4860	80	1050	1350	36	132
24	9820	136	3600	4650	72	901	1450	40	156
25	9510	146	3740	4230	58	661	1880	43	220
26	9420	140	3560	4130	45	498	2680	40	290
27	9580	167	4320	4040	48	522	3260	46	405
28	9370	185	4680	3800	41	418	2840	51	393
29	9290	190	4770	3500	30	287	3330	99	894
30	9250	175	4380	3200	34	290	4080	123	1350
31	---	---	---	3030	27	224	---	---	---
TOTAL	276880	---	141740	198100	---	66871	89040	---	21506
JULY			AUGUST			SEPTEMBER			
1	5530	605	9040	261	86	60	e82	66	15
2	5320	704	10100	384	71	73	e80	54	12
3	4300	519	6020	246	75	50	e79	49	10
4	3600	224	2170	205	67	37	e75	45	9.0
5	3200	137	1180	196	63	33	e75	39	7.9
6	2370	115	736	197	52	28	e71	36	6.9
7	1980	91	485	204	49	27	e70	51	9.6
8	1250	82	276	202	48	26	e70	134	25
9	1270	63	215	214	48	28	e69	216	40
10	1470	52	207	341	51	47	e69	131	24
11	1220	56	184	837	69	155	e68	100	18
12	1030	56	154	272	74	55	e67	61	11
13	1170	53	168	270	71	52	e65	56	9.9
14	988	57	152	874	76	179	e64	54	9.4
15	739	47	93	525	62	87	e63	54	9.2
16	938	37	95	474	55	71	e62	51	8.6
17	519	42	59	177	68	32	e60	51	8.3
18	626	34	58	e105	70	20	e58	51	7.9
19	736	33	66	e95	66	17	e57	48	7.4
20	652	33	58	e95	56	14	e54	45	6.6
21	685	30	56	e82	49	11	e53	51	7.3
22	604	40	65	e92	45	11	e51	58	8.0
23	543	46	67	e91	44	11	e47	42	5.3
24	428	46	53	e90	47	11	e47	39	5.0
25	477	58	75	e90	50	12	e45	51	6.2
26	354	79	76	e88	55	13	e43	57	6.6
27	339	80	73	e87	51	12	e42	57	6.4
28	377	77	78	e85	52	12	e41	65	7.2
29	279	87	65	e84	54	12	e40	66	7.1
30	285	90	69	e83	54	12	e40	77	8.3
31	320	85	73	e82	57	13	---	---	---
TOTAL	43599	---	32266	7128	---	1221	1807	---	323.1
YEAR	1933999		867533.1						

e Estimated

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE

LOCATION.--Lat 35°21'45", long 90°39'26", in NE1/4SW1/4 sec.34, T.9 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on State Highway 42 1.78 mi east of Birdeye.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year. October 1, 1977 to September 30, 1989, monthly discharge measurements and sediment samples.

GAGE.--Water-stage recorder. Datum of gage is 172.75 ft above sea level. Prior to October 1995 non-recording gage at same site and datum.

REMARKS.--Water-discharge records poor due to varying backwater at times. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	106	89	e550	e50	e12	e520	e520	e270	e600	140	51
2	63	103	92	e2800	e10	e40	e510	e490	e390	e550	124	45
3	64	102	87	e2000	e.00	e310	e510	e470	e440	e500	107	52
4	63	101	93	e1100	e.00	e400	e650	e460	e420	399	111	50
5	465	99	768	e1500	e.00	e410	e630	e600	463	291	123	47
6	6040	96	672	e1100	e.00	e380	e1000	e1500	702	197	151	41
7	7790	95	e400	e660	e.00	e330	e900	e860	550	174	141	34
8	e3600	96	e1400	e1400	e.00	e300	e500	e500	466	171	143	32
9	e1800	93	e1100	e1600	e.00	e280	e400	e400	351	161	196	31
10	e1100	106	e500	e1000	e.00	e290	e350	e320	319	350	185	34
11	e900	222	e150	e660	e.00	e320	e340	e280	485	495	172	34
12	e700	200	e400	e550	e.00	e410	e340	e260	438	267	158	30
13	e600	109	e700	e450	e.00	e1100	e375	e250	724	232	146	30
14	e450	93	e300	e410	e.00	e1200	e500	e240	626	193	137	30
15	e400	88	344	e420	e.00	e700	e780	e230	429	177	116	33
16	e357	85	e270	e420	e.00	e600	e600	e220	252	176	96	28
17	e318	83	e210	e430	e.00	e440	e450	e220	213	186	102	23
18	e284	80	151	e520	e.00	e430	e400	e230	188	190	100	23
19	e229	78	139	e470	e.00	e430	e400	e240	166	177	104	23
20	e199	95	164	e430	e.00	e420	e400	e250	154	164	109	23
21	e190	104	184	e400	e.00	e410	e410	e240	160	154	107	21
22	e190	94	e1500	e6500	e.00	e460	e420	e240	157	161	105	19
23	184	89	e800	e4500	e.00	e540	e430	e230	154	167	96	19
24	154	89	e550	e4000	e.00	e680	e440	e220	368	165	88	19
25	142	86	e450	e2000	e.00	e740	e500	e210	383	160	79	19
26	132	85	e430	e950	e.00	e750	e560	e200	e590	160	75	19
27	125	83	e410	e400	e.00	e740	e1300	e190	e1100	146	72	19
28	125	83	e400	e210	e.00	e710	e750	e180	e400	170	80	19
29	119	83	e500	e200	---	e700	e590	e170	e250	186	58	44
30	115	85	e750	e160	---	e600	e560	e170	e270	184	59	34
31	109	---	e550	e100	---	e550	---	e190	---	160	57	---
TOTAL	27074	3011	14553	37890	60.00	15682	16515	10780	11878	7463	3537	926
MEAN	873	100	469	1222	2.14	506	550	348	396	241	114	30.9
MAX	7790	222	1500	6500	50	1200	1300	1500	1100	600	196	52
MIN	63	78	87	100	.00	12	340	170	154	146	57	19
AC-FT	53700	5970	28870	75150	119	31110	32760	21380	23560	14800	7020	1840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	418	487	781	733	895	846	518	331	317	216	508	106
MAX	1086	1322	2030	1086	1423	2061	656	468	450	276	1332	159
(WY)	1999	1997	1997	1998	1997	1997	1999	1996	1999	1999	1998	1997
MIN	61.1	100	146	423	2.14	273	258	250	231	138	114	30.9
(WY)	1996	1999	1996	1996	1999	1996	1998	1997	1996	1996	1999	1999

ST. FRANCIS RIVER BASIN

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07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

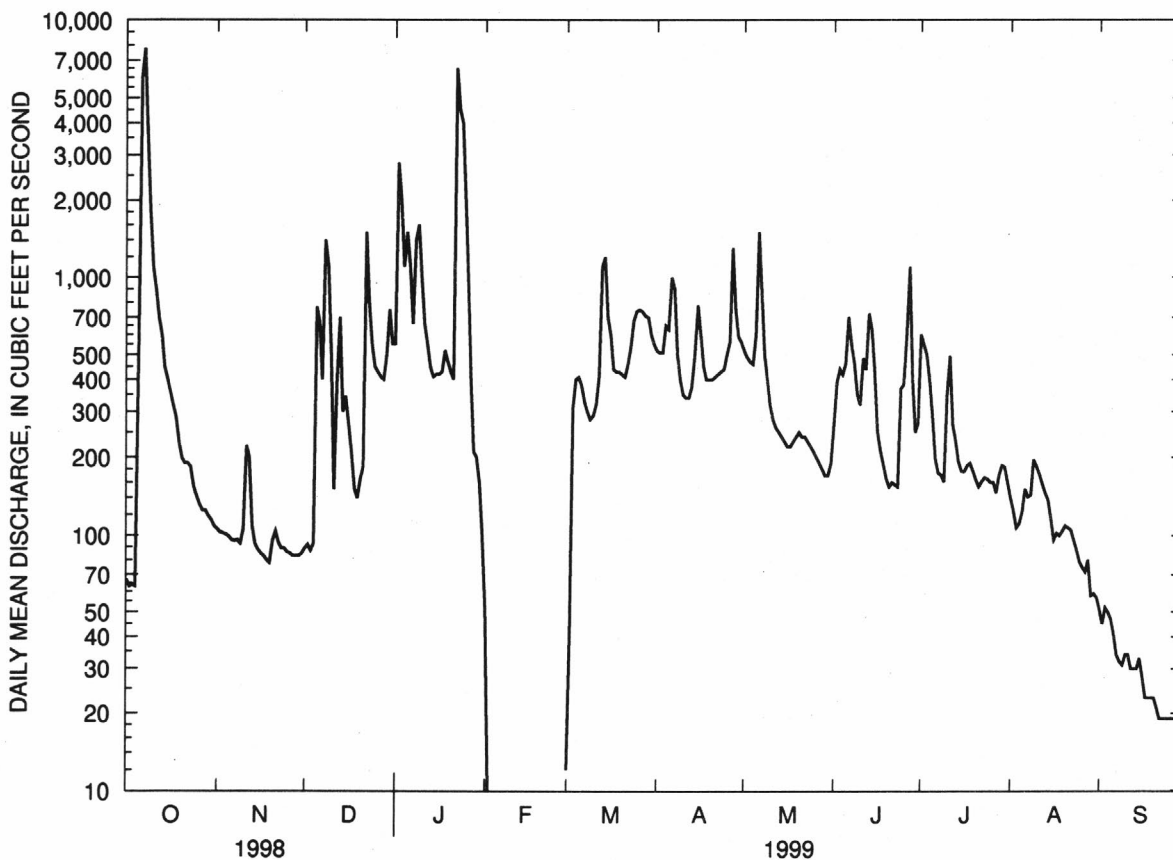
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1996 - 1999

ANNUAL TOTAL	209418		149369.00			
ANNUAL MEAN	574		409		512	
HIGHEST ANNUAL MEAN					841	1997
LOWEST ANNUAL MEAN					323	1996
HIGHEST DAILY MEAN	7790	Oct 7	7790	Oct 7	7790	Oct 7 1998
LOWEST DAILY MEAN	40	May 5	.00	Feb 3	.00	Feb 3 1999
ANNUAL SEVEN-DAY MINIMUM	64	Sep 28	.00	Feb 3	.00	Feb 3 1999
INSTANTANEOUS PEAK FLOW			8000	Oct 7	8000	Oct 7 1998
INSTANTANEOUS PEAK STAGE			^a 29.85	Feb 8	^a 33.14	Mar 13,14 1997
INSTANTANEOUS LOW FLOW			^a .00	Feb 3-28	^a .00	Feb. 3-28 1999
ANNUAL RUNOFF (AC-FT)	415400		296300		370900	
10 PERCENT EXCEEDS	1340		744		1100	
50 PERCENT EXCEEDS	280		210		230	
90 PERCENT EXCEEDS	90		22		60	

^aBackwater^eEstimated

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to September 1984, September 1996 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1996 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,280 mg/L, January 21, 1999; minimum daily mean, 14 mg/L, September 30, 1997.

SEDIMENT DISCHARGE: Maximum daily, 17,400 tons, January 22, 1999; minimum daily, 0 tons, February 3-28, 1999.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,280 mg/L, January 21; minimum daily mean, 16 mg/L, March 31 to April 2.

SEDIMENT DISCHARGE: Maximum daily, 17,400 tons, January 22; minimum daily, 0 tons, February 3-28.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	67	118	21	106	124	35	89	55	13
2	63	117	20	103	119	33	92	55	14
3	64	116	20	102	115	32	87	55	13
4	63	117	20	101	110	30	93	286	72
5	465	271	340	99	106	28	768	324	672
6	6040	686	11200	96	101	26	672	270	490
7	7790	237	4990	95	97	25	e400	240	259
8	e3600	176	1720	96	92	24	e1400	214	811
9	e1800	54	261	93	88	22	e1100	194	575
10	e1100	78	231	106	88	25	e500	180	243
11	e900	289	702	222	111	67	e150	168	68
12	e700	304	575	200	136	74	e400	155	167
13	e600	182	294	109	111	33	e700	144	271
14	e450	197	239	93	90	23	e300	132	107
15	e400	221	239	88	70	17	344	120	112
16	e357	229	220	85	64	15	e270	109	79
17	e318	250	215	83	53	12	e210	98	55
18	e284	253	194	80	53	11	151	89	36
19	e229	256	158	78	55	12	139	86	32
20	e199	245	132	95	55	14	164	84	37
21	e190	218	112	104	55	15	184	95	47
22	e190	199	102	94	55	14	e1500	280	1130
23	184	190	94	89	55	13	e800	132	285
24	154	175	73	89	55	13	e550	95	141
25	142	165	63	86	55	13	e450	122	148
26	132	156	55	85	55	13	e430	92	107
27	125	146	49	83	55	12	e410	79	88
28	125	141	48	83	55	12	e400	199	214
29	119	137	44	83	55	12	e500	405	547
30	115	134	41	85	55	13	e750	894	1810
31	109	128	38	---	---	---	e550	627	930
TOTAL	27074	---	22510	3011	---	688	14553	---	9573

e Estimated

ST. FRANCIS RIVER BASIN

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07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	e550	651	967	e50	93	13	e12	35	1.1
2	e2800	616	4660	e10	79	2.1	e40	30	3.3
3	e2000	683	3690	e.00	62	.00	e310	28	24
4	e1100	342	1020	e.00	63	.00	e400	29	31
5	e1500	262	1060	e.00	66	.00	e410	36	40
6	e1100	82	245	e.00	61	.00	e380	46	47
7	e660	82	146	e.00	66	.00	e330	43	39
8	e1400	117	442	e.00	63	.00	e300	42	34
9	e1600	113	487	e.00	68	.00	e280	81	61
10	e1000	106	285	e.00	70	.00	e290	73	57
11	e660	104	186	e.00	76	.00	e320	49	42
12	e550	170	253	e.00	81	.00	e410	37	40
13	e450	153	186	e.00	79	.00	e1100	277	822
14	e410	88	98	e.00	73	.00	e1200	352	1140
15	e420	62	70	e.00	65	.00	e700	171	322
16	e420	89	101	e.00	64	.00	e600	78	126
17	e430	858	997	e.00	68	.00	e440	57	68
18	e520	886	1240	e.00	65	.00	e430	48	55
19	e470	467	592	e.00	62	.00	e430	39	45
20	e430	343	398	e.00	56	.00	e420	38	43
21	e400	1280	1380	e.00	58	.00	e410	42	46
22	e6500	994	17400	e.00	41	.00	e460	89	110
23	e4500	524	6360	e.00	30	.00	e540	97	142
24	e4000	488	5270	e.00	28	.00	e680	65	120
25	e2000	254	1370	e.00	38	.00	e740	55	109
26	e950	190	487	e.00	33	.00	e750	47	95
27	e400	131	142	e.00	49	.00	e740	39	77
28	e210	97	55	e.00	48	.00	e710	31	59
29	e200	113	61	---	---	---	e700	23	44
30	e160	230	99	---	---	---	e600	18	29
31	e100	146	40	---	---	---	e550	16	24
TOTAL	37890	---	49787	60.00	---	15.10	15682	---	3895.4
APRIL			MAY			JUNE			
1	e520	16	22	e520	97	136	e270	199	145
2	e510	16	22	e490	74	97	e390	64	68
3	e510	19	26	e470	70	88	e440	35	42
4	e650	146	257	e460	76	95	e420	32	36
5	e630	120	203	e600	253	409	e463	31	39
6	e1000	239	645	e1500	1110	4510	702	29	55
7	e900	266	647	e860	590	1370	550	56	83
8	e500	122	164	e500	364	492	466	190	239
9	e400	82	88	e400	224	242	351	90	86
10	e350	66	63	e320	113	97	319	54	46
11	e340	67	62	e280	80	60	485	128	167
12	e340	67	62	e260	67	47	438	114	135
13	e375	53	53	e250	71	48	724	149	292
14	e500	65	88	e240	261	169	626	169	286
15	e780	246	519	e230	305	190	429	153	177
16	e600	261	422	e220	302	179	252	112	76
17	e450	160	194	e220	351	209	213	73	42
18	e400	126	136	e230	914	567	188	44	22
19	e400	107	116	e240	1160	750	166	28	12
20	e400	85	92	e250	636	429	154	45	19
21	e410	57	63	e240	358	232	160	52	23
22	e420	55	62	e240	190	123	157	457	194
23	e430	64	74	e230	108	67	154	442	184
24	e440	72	86	e220	83	49	368	227	225
25	e500	84	114	e210	79	45	383	158	164
26	e560	139	210	e200	81	44	e590	134	213
27	e1300	540	1890	e190	76	39	e1100	134	398
28	e750	414	837	e180	79	38	e400	128	138
29	e590	196	313	e170	86	39	e250	57	38
30	e560	130	196	e170	85	39	e270	48	35
31	---	---	---	e190	185	95	---	---	---
TOTAL	16515	---	7726	10780	---	10994	11878	---	3679

e Estimated

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	e600	50	81	140	147	56	51	115	16
2	e550	25	37	124	150	50	45	122	15
3	e500	24	33	107	149	43	52	127	18
4	399	18	20	111	149	45	50	133	18
5	291	36	28	123	142	47	47	138	18
6	197	173	92	151	139	57	41	142	16
7	174	282	132	141	133	50	34	145	13
8	171	171	79	143	120	46	32	154	13
9	161	133	58	196	112	59	31	158	13
10	350	95	90	185	110	55	34	160	15
11	495	61	82	172	106	49	34	159	15
12	267	87	62	158	108	46	30	158	13
13	232	74	47	146	127	50	30	158	13
14	193	63	33	137	126	47	30	158	13
15	177	62	30	116	101	32	33	157	14
16	176	62	29	96	100	26	28	156	12
17	186	61	31	102	106	29	23	150	9.3
18	190	59	30	100	107	29	23	143	8.9
19	177	58	28	104	114	32	23	136	8.4
20	164	63	28	109	175	51	23	129	8.0
21	154	67	28	107	180	52	21	123	7.0
22	161	66	29	105	110	31	19	121	6.2
23	167	63	28	96	85	22	19	115	5.9
24	165	63	28	88	80	19	19	114	5.8
25	160	71	31	79	77	16	19	113	5.8
26	160	59	26	75	76	15	19	108	5.5
27	146	74	29	72	82	16	19	107	5.5
28	170	91	42	80	86	19	19	125	6.4
29	186	109	55	58	92	14	44	232	28
30	184	126	63	59	96	15	34	174	16
31	160	142	61	57	107	17	---	---	---
TOTAL	7463	---	1470	3537	---	1135	926	---	361.7
YEAR	149369.00		111834.20						

ST. FRANCIS RIVER BASIN

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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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 171.25 ft above sea level. 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 sea level used as auxiliary gage for this station since October 1, 1997.

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.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	1080	1580	5390	30000	8920	4550	9560	e2800	5450	732	219
2	243	878	1500	6990	29300	8730	e4500	9380	e4200	5850	760	176
3	265	927	1520	9480	29000	7590	e4500	8920	e5400	5250	799	173
4	225	735	1560	8670	28900	7080	4730	8900	e5000	e4100	677	176
5	516	641	2330	9420	27700	6140	6370	9080	e4400	e3500	661	176
6	4960	654	2880	11100	25900	5910	8290	11500	e5400	e2900	572	156
7	8690	646	3340	11500	24900	5740	8800	12000	e3900	e2300	561	e187
8	10300	685	6830	e11500	23800	6140	9010	11800	e3100	e1800	516	e190
9	9820	582	8050	e11000	21100	7850	9340	9950	e2600	1320	561	e173
10	10100	521	7440	e10000	22700	6960	9620	10000	e3200	1640	771	e152
11	12000	667	4000	e8700	18200	6700	9980	9340	e3100	1400	782	140
12	13400	2590	4110	e7600	13000	6700	10200	8190	e3000	1210	726	133
13	14000	959	3910	e7100	12300	7910	10100	7500	e3200	1330	556	109
14	14000	536	3720	e7300	11100	9950	10100	6000	e3000	1080	1060	109
15	13100	824	3660	e7600	10100	10700	10700	5770	e2900	1010	1030	106
16	11300	1110	4250	e7500	9260	8860	9980	5460	e2800	1170	777	e103
17	9120	777	3730	7350	9320	9550	10200	5050	e2700	699	618	e100
18	7490	621	2600	7790	9150	9950	11000	4730	e2500	946	402	e107
19	6440	744	2500	7120	9110	10100	11600	6290	e2200	1140	315	e116
20	5470	1010	2780	7070	9750	10000	11700	5810	e1900	1090	278	e123
21	4580	1180	2600	7070	9830	8200	11800	5600	e1600	1080	274	e130
22	3750	1260	3770	10500	8980	6190	11200	5360	e1500	1060	270	e135
23	2570	1350	5150	17500	9180	5940	10500	4970	e1400	971	266	e137
24	2250	1450	7110	17300	9170	5870	9980	e4600	e1600	928	262	e140
25	1960	1520	8970	e19000	8930	5710	9490	e4400	e2000	794	258	e133
26	1350	1580	10000	e20000	8920	5510	10200	e4200	e2700	782	258	e110
27	1360	1620	9720	e21000	8920	5940	11000	e4000	e3300	782	254	e96
28	1970	1590	7700	e22000	8920	5940	9880	e3800	e2900	782	250	e90
29	1120	1780	7130	23900	---	5710	9330	e3600	e3600	782	246	e105
30	1300	1700	5720	28600	---	4840	9560	e3400	e4600	782	242	e140
31	900	---	5410	29600	---	4570	---	e3100	---	777	242	---
TOTAL	174809	32217	145570	386650	447440	225900	278210	212260	92500	54705	15976	4140
MEAN	5639	1074	4696	12470	15980	7287	9274	6847	3083	1765	515	138
MAX	14000	2590	10000	29600	30000	10700	11800	12000	5400	5850	1060	219
MIN	225	521	1500	5390	8920	4570	4500	3100	1400	699	242	90
AC-FT	346700	63900	288700	766900	887500	448100	551800	421000	183500	108500	31690	8210

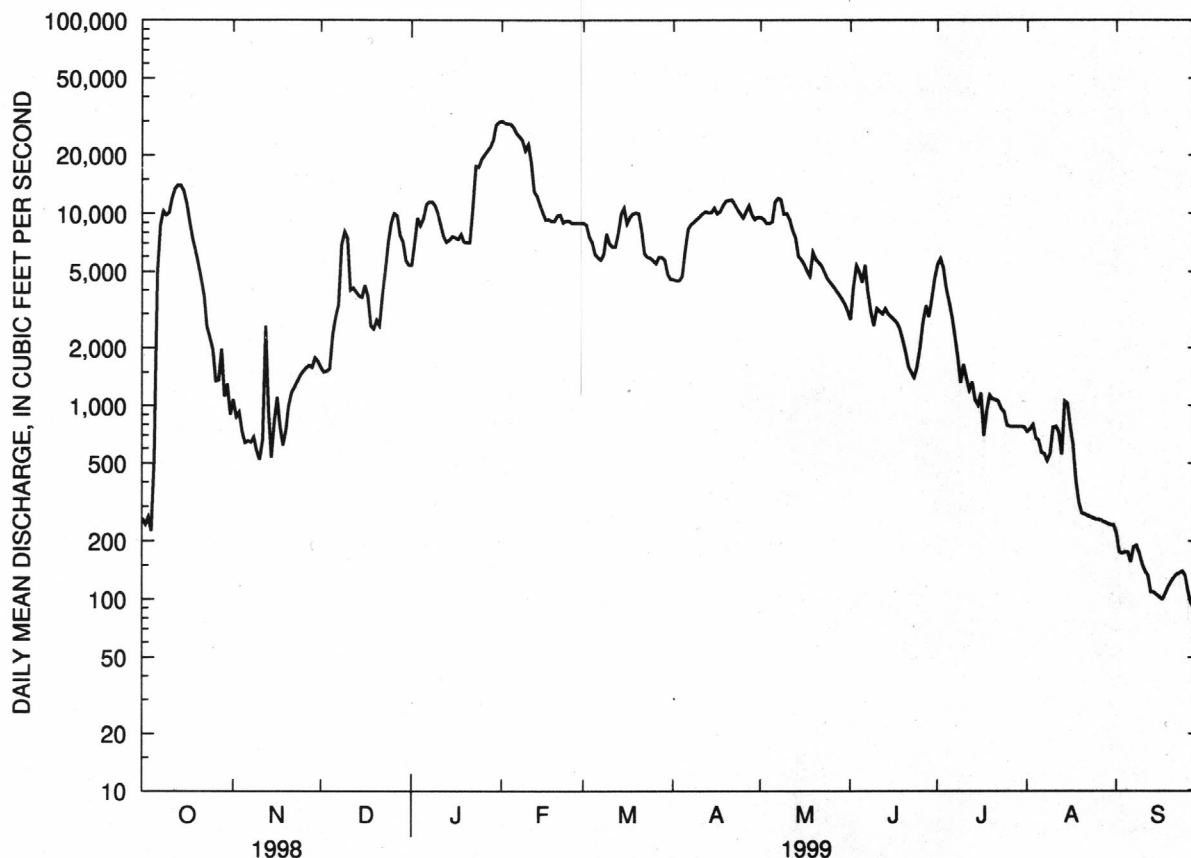
ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1999, BY WATER YEAR (WY)

MEAN	1210	2276	5262	7886	9507	10200	10540	8513	5059	2633	1556	1073
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 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1936 - 1999	
ANNUAL TOTAL	2352364		2070377			
ANNUAL MEAN	6445		5672		5510	
HIGHEST ANNUAL MEAN					13580	1973
LOWEST ANNUAL MEAN					344	1941
HIGHEST DAILY MEAN	24000	Aug 12	30000	Feb 1	53000	Apr 8 1979
LOWEST DAILY MEAN	225	Oct 4	90	Sep 28	.00	Nov 17 1941
ANNUAL SEVEN-DAY MINIMUM	258	Sep 28	107	Sep 13	.00	Nov 17 1941
INSTANTANEOUS PEAK FLOW			30000	Feb 1	54700	Apr 8 1979
INSTANTANEOUS PEAK STAGE			^a 30.27	Feb 1	^b 39.03	May 3 1973
INSTANTANEOUS LOW FLOW					.00	Nov 17 1941
ANNUAL RUNOFF (AC-FT)	4666000		4107000		3992000	
10 PERCENT EXCEEDS	12300		11200		14700	
50 PERCENT EXCEEDS	5350		4200		2700	
90 PERCENT EXCEEDS	1060		252		240	

^aFrom graph based on once daily gage readings^bBackwater from Mississippi River^cEstimated

ST. FRANCIS RIVER BASIN

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07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT												
08...	0945	80513	82913	11000	206	6.4	762	20.0	.06	8.2	90	230
NOV												
18...	1240	80513	82913	559	332	6.9	760	10.0	.60	12.5	111	42
DEC												
09...	0915	80513	82913	7910	233	6.5	760	10.5	.09	9.2	83	206
JAN												
14...	1250	80513	82913	7020	207	6.4	763	4.5	.12	11.5	89	83
FEB												
03...	1340	80513	82913	28700	130	6.4	760	6.0	.09	12.2	98	149
MAR												
03...	1105	80513	82913	7770	191	7.1	760	8.5	.09	8.9	76	135
APR												
15...	1045	80513	82913	9750	213	6.6	747	16.0	.09	9.8	101	132
MAY												
12...	1100	80513	82913	8690	147	6.5	754	21.5	.09	9.8	112	100
JUN												
08...	1420	80513	82913	3010	230	6.8	757	27.0	.09	8.9	113	124
JUL												
14...	0740	80513	82913	1100	321	7.6	758	25.0	.24	8.6	105	108
AUG												
11...	0830	80513	82913	770	480	7.4	752	29.5	.18	6.2	83	117
SEP												
15...	1245	80513	82913	112	475	7.2	760	22.0	.37	7.6	87	80

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	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)	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)
OCT												
08...	6830	79	84	98	100	13	38	96	98	100	--	--
NOV												
18...	63	97	97	98	100	1	1	6	80	95	95	100
DEC												
09...	4400	80	87	99	100	18	52	92	98	100	--	--
JAN												
14...	1570	88	91	96	100	21	59	95	98	100	--	--
FEB												
03...	11500	98	98	100	--	8	38	88	98	100	--	--
MAR												
03...	2830	97	98	99	100	5	22	93	98	100	--	--
APR												
15...	3470	98	99	100	--	15	52	98	99	100	--	--
MAY												
12...	2350	98	99	100	--	41	75	97	98	99	99	100
JUN												
08...	1010	100	--	--	--	16	50	91	96	99	99	100
JUL												
14...	321	85	88	94	100	1	1	36	98	100	--	--
AUG												
11...	243	99	99	100	--	23	46	79	95	100	--	--
SEP												
15...	24	98	98	98	100	42	48	72	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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year. October 1, 1977 to September 30, 1995, monthly discharge measurements and sediment samples.

GAGE.--Water-stage recorder. Datum of gage is 154.87 ft above sea level. Prior to October 1995 non-recording gage at same site and datum. Water-stage recorder from St. Francis Bay at Riverfront (07047900) 9.1 mi upstream used as auxiliary gage for this station at datum 171.25 ft above sea level.

REMARKS.--Water-discharge records fair. Satellite telemeter at station.

COOPERATION.--Gage-height record for the auxiliary gage provided by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	507	1030	1460	5370	34700	6540	3880	11000	2040	6020	498	219
2	495	937	1390	6840	33800	7170	3750	11000	4640	6800	441	201
3	519	926	1400	10400	31900	7190	3660	10800	6330	5490	530	185
4	483	812	1430	9890	30100	6300	4300	10600	7700	4250	342	183
5	534	691	1860	10500	29700	4700	4760	11000	e11500	3550	316	184
6	4050	714	2580	13100	28700	4210	6600	14500	e12300	2860	320	199
7	8050	698	2800	14300	27300	4330	8150	15700	8070	2250	332	206
8	10700	725	5810	14700	25600	4810	8480	14100	4180	1650	315	210
9	10800	674	8330	15100	23500	5480	9040	13300	3500	1360	409	205
10	10700	596	7860	13400	20200	6440	9500	12600	4060	1520	477	183
11	13500	672	3780	10800	16900	6460	9950	11400	3640	2090	814	166
12	16800	1900	3780	8590	14500	6490	10400	9840	3700	1300	765	163
13	18600	1150	3600	7260	12600	10000	10500	8800	4260	1330	359	162
14	18500	603	3420	7480	11000	12900	10200	7290	3840	1180	738	160
15	16500	784	3300	7850	9900	12800	10300	6230	3520	1030	879	151
16	13400	1020	3860	8050	8990	12700	10500	5880	3070	1030	715	148
17	10300	849	3470	8100	8130	14100	10400	5180	2920	895	551	139
18	8190	672	2260	8600	7510	15400	11400	5330	2680	809	307	143
19	6800	733	2140	8270	7040	15800	12500	5610	2350	896	265	156
20	5550	932	2320	7910	6710	15500	13300	5090	1900	885	257	164
21	4530	1100	2230	7860	6420	14100	13400	4980	1790	870	255	171
22	3630	1170	2970	11600	6250	11200	12700	4890	1550	802	245	177
23	2450	1250	4790	22300	6250	9160	11800	4790	1450	817	241	181
24	2100	1330	6640	25900	6120	8170	11000	4700	1610	690	351	185
25	1870	1390	9250	27100	5890	7310	10600	4460	2050	722	272	182
26	1340	1460	11300	26400	6100	6480	11400	4330	2780	653	243	166
27	1280	1480	11400	24900	6420	5750	13000	4200	5040	535	234	139
28	1770	1460	8310	24500	6260	5030	12500	3700	4030	646	245	124
29	1160	1590	7650	26800	---	4690	11500	2950	3700	540	255	157
30	1230	1580	5770	31600	---	4240	11100	2050	4030	511	252	184
31	979	---	5370	34000	---	3980	---	1700	---	536	242	---
TOTAL	197317	30928	142530	459470	438490	259430	290570	238000	124230	54517	12465	5193
MEAN	6365	1031	4598	14820	15660	8369	9686	7677	4141	1759	402	173
MAX	18600	1900	11400	34000	34700	15800	13400	15700	12300	6800	879	219
MIN	483	596	1390	5370	5890	3980	3660	1700	1450	511	234	124
AC-FT	391400	61350	282700	911400	869700	514600	576300	472100	246400	108100	24720	10300

ST. FRANCIS RIVER BASIN

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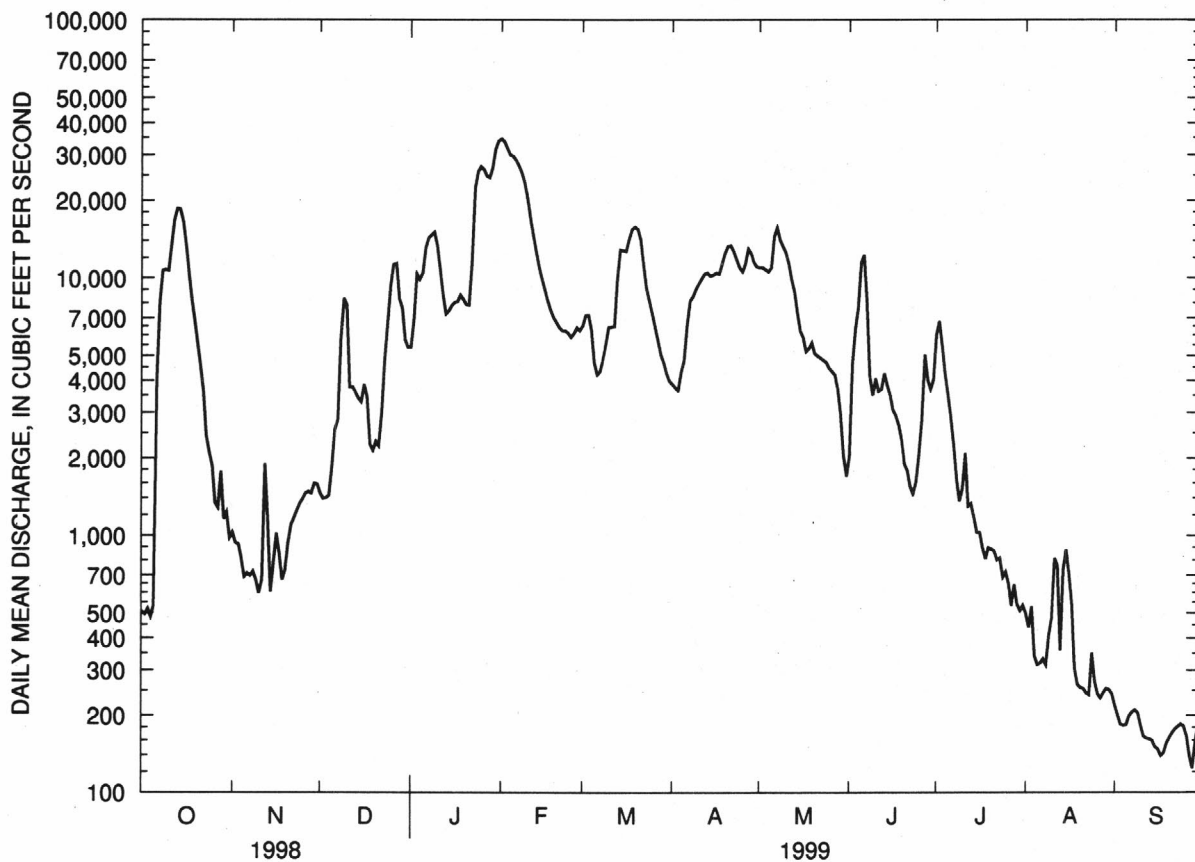
07047904 CLARK CORNER CUT-OFF NEAR COLT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	2259	3184	4825	9698	9670	10540	10020	8820	6226	2705	5422	844
MAX	6365	9381	11000	14820	15660	22320	18450	13850	7873	4303	17420	1452
(WY)	1999	1997	1997	1999	1999	1997	1997	1998	1998	1998	1998	1998
MIN	330	728	1761	5099	3563	2078	4339	5489	4141	1133	402	173
(WY)	1998	1998	1998	1996	1996	1996	1996	1997	1999	1996	1999	1999

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	2749262		2253140			
ANNUAL MEAN	7532		6173		6170	
HIGHEST ANNUAL MEAN					8574	
LOWEST ANNUAL MEAN					3188	
HIGHEST DAILY MEAN	33000	Aug 9	34700	Feb 1	37700	Apr 13 1997
LOWEST DAILY MEAN	483	Oct 4	124	Sep 28	124	Sep 28 1999
ANNUAL SEVEN-DAY MINIMUM	511	Sep 29	151	Sep 13	151	Sep 13 1999
INSTANTANEOUS PEAK FLOW			34800	Feb 1	40800	Apr 12 1997
INSTANTANEOUS PEAK STAGE			42.92	Feb 1	47.57	Mar 14 1997
INSTANTANEOUS LOW FLOW			120	Sep 28	120	Sep 28 1999
ANNUAL RUNOFF (AC-FT)	5453000		4469000		4470000	
10 PERCENT EXCEEDS	15400		13700		13800	
50 PERCENT EXCEEDS	6230		4180		3960	
90 PERCENT EXCEEDS	1160		249		509	

^eEstimated



ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUTOFF NEAR COLT--CONTINUED

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1990 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,690 mg/L, December 6, 1991; minimum daily mean, 13 mg/L, January 1, 1993.

SEDIMENT LOADS: Maximum daily, 96,600 tons, December 6, 1991; minimum daily, 2.2 tons, Nov. 12, 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 738 mg/L, January 23; minimum daily mean, 28 mg/L, October 27.

SEDIMENT LOADS: Maximum daily, 53,000 tons, January 30; minimum daily, 40 tons, September 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN (70342)	SED. SUSP. FALL DIAM. % FINER THAN (70343)	
NOV 18...	0915	80513	82913	684	10.0	.09	55	102	99	99	
DEC 09...	1020	80513	82913	8910	10.5	.09	188	4520	94	94	
JAN 14...	1410	80513	82913	7190	4.5	.12	69	1340	93	96	
FEB 04...	0850	80513	82913	27700	5.5	.09	141	10500	99	99	
MAR 03...	1310	80513	82913	7700	8.5	.09	137	2850	99	99	
APR 15...	1350	80513	82913	10200	16.0	.09	121	3330	98	99	
MAY 12...	1250	80513	82913	9270	21.0	.09	100	2500	99	99	
JUN 09...	1115	80513	82913	3330	27.0	.09	105	944	96	98	
DATE		SED. SUSP. FALL DIAM. % FINER THAN (70344)	SED. SUSP. FALL DIAM. % FINER THAN (70345)	BED MAT. FALL DIAM. % FINER THAN (80158)	BED MAT. FALL DIAM. % FINER THAN (80159)	BED MAT. FALL DIAM. % FINER THAN (80160)	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)	BED MAT. FALL DIAM. % FINER THAN (80169)	BED MAT. FALL DIAM. % FINER THAN (80170)	BED MAT. FALL DIAM. % FINER THAN (80171)
NOV 18...	100	--	2	2	51	96	100	--	--	--	--
DEC 09...	97	100	16	62	99	100	--	--	--	--	--
JAN 14...	99	100	15	50	95	100	--	--	--	--	--
FEB 04...	100	--	10	25	51	79	92	94	97	100	
MAR 03...	99	100	7	30	97	99	100	--	--	--	--
APR 15...	100	--	2	7	90	99	100	--	--	--	--
MAY 12...	99	100	22	70	98	100	--	--	--	--	--
JUN 09...	100	--	7	16	83	99	100	--	--	--	--

ST. FRANCIS RIVER BASIN

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07047904 CLARK CORNER CUTOFF NEAR COLT--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	507	54	74	1030	29	81	1460	61	239
2	495	55	74	937	29	73	1390	50	186
3	519	56	78	926	29	73	1400	44	166
4	483	56	73	812	29	64	1430	39	149
5	534	75	108	691	29	54	1860	37	186
6	4050	397	4340	714	29	56	2580	149	1040
7	8050	300	6520	698	29	55	2800	129	976
8	10700	189	5460	725	29	57	5810	331	5200
9	10800	170	4940	674	29	53	8330	202	4540
10	10700	154	4450	596	29	47	7860	149	3150
11	13500	142	5190	672	44	80	3780	136	1390
12	16800	109	4960	1900	138	707	3780	162	1660
13	18600	77	3850	1150	110	342	3600	109	1060
14	18500	81	4040	603	98	159	3420	92	853
15	16500	74	3290	784	91	193	3300	115	1020
16	13400	72	2600	1020	90	249	3860	129	1350
17	10300	78	2160	849	98	224	3470	117	1100
18	8190	92	2030	672	61	110	2260	93	569
19	6800	103	1900	733	68	134	2140	95	546
20	5550	122	1830	932	68	171	2320	89	559
21	4530	108	1320	1100	77	228	2230	98	587
22	3630	84	824	1170	76	240	2970	110	885
23	2450	76	504	1250	82	277	4790	326	4220
24	2100	65	370	1330	81	290	6640	361	6460
25	1870	48	245	1390	85	320	9250	239	5960
26	1340	37	135	1460	81	319	11300	170	5200
27	1280	28	98	1480	76	304	11400	129	3960
28	1770	29	138	1460	78	306	8310	105	2350
29	1160	29	91	1590	73	313	7650	77	1600
30	1230	29	96	1580	67	286	5770	80	1240
31	979	29	77	---	---	---	5370	131	1890
TOTAL	197317	---	61865	30928	---	5865	142530	---	60291
JANUARY			FEBRUARY			MARCH			
1	5370	169	2460	34700	367	34400	6540	209	3690
2	6840	173	3200	33800	243	22200	7170	170	3300
3	10400	181	5090	31900	148	12800	7190	140	2710
4	9890	173	4620	30100	139	11300	6300	128	2170
5	10500	182	5170	29700	132	10600	4700	116	1470
6	13100	181	6390	28700	126	9750	4210	128	1460
7	14300	121	4660	27300	120	8830	4330	154	1790
8	14700	104	4120	25600	114	7870	4810	219	2840
9	15100	99	4050	23500	108	6840	5480	339	5020
10	13400	98	3540	20200	102	5560	6440	212	3690
11	10800	95	2770	16900	96	4370	6460	199	3460
12	8590	87	2020	14500	90	3530	6490	284	4990
13	7260	79	1550	12600	86	2930	10000	541	14600
14	7480	71	1430	11000	83	2460	12900	595	20700
15	7850	72	1530	9900	78	2080	12800	486	16800
16	8050	71	1540	8990	72	1750	12700	510	17500
17	8100	84	1840	8130	67	1460	14100	575	21900
18	8600	217	5030	7510	61	1240	15400	365	15200
19	8270	269	6010	7040	57	1090	15800	274	11700
20	7910	238	5080	6710	57	1030	15500	202	8460
21	7860	223	4730	6420	56	970	14100	164	6250
22	11600	601	18800	6250	55	930	11200	134	4050
23	22300	738	44400	6250	55	926	9160	110	2720
24	25900	527	36800	6120	54	887	8170	91	2020
25	27100	475	34800	5890	51	810	7310	79	1560
26	26400	469	33400	6100	50	828	6480	91	1580
27	24900	436	29300	6420	66	1150	5750	80	1250
28	24500	387	25600	6260	111	1870	5030	67	911
29	26800	369	26700	---	---	---	4690	57	722
30	31600	621	53000	---	---	---	4240	49	565
31	34000	540	49600	---	---	---	3980	42	456
TOTAL	459470	---	429230	438490	---	160461	259430	---	185534

ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUTOFF NEAR COLT--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	3880	39	406	11000	87	2570	2040	149	818
2	3750	43	432	11000	83	2460	4640	382	4790
3	3660	117	1150	10800	80	2330	6330	322	5500
4	4300	224	2600	10600	78	2220	7700	262	5440
5	4760	300	3850	11000	93	2760	e11500	225	6980
6	6600	376	6700	14500	236	9240	e12300	190	6310
7	8150	222	4880	15700	233	9880	8070	157	3410
8	8480	206	4700	14100	161	6120	4180	129	1460
9	9040	302	7360	13300	136	4880	3500	110	1040
10	9500	305	7820	12600	116	3940	4060	103	1130
11	9950	212	5680	11400	107	3290	3640	120	1180
12	10400	179	5020	9840	88	2330	3700	140	1400
13	10500	130	3690	8800	85	2030	4260	160	1840
14	10200	95	2620	7290	88	1720	3840	178	1850
15	10300	104	2880	6230	88	1480	3520	196	1860
16	10500	56	1580	5880	90	1420	3070	198	1640
17	10400	83	2320	5180	91	1270	2920	191	1500
18	11400	109	3360	5330	105	1510	2680	171	1240
19	12500	134	4520	5610	187	2830	2350	144	911
20	13300	160	5750	5090	222	3060	1900	112	576
21	13400	134	4840	4980	206	2770	1790	86	416
22	12700	123	4230	4890	156	2050	1550	116	486
23	11800	131	4190	4790	149	1930	1450	108	421
24	11000	146	4330	4700	186	2360	1610	76	328
25	10600	143	4080	4460	218	2630	2050	73	402
26	11400	270	8320	4330	224	2620	2780	208	1560
27	13000	170	5980	4200	198	2250	5040	523	7120
28	12500	128	4300	3700	167	1670	4030	488	5310
29	11500	97	3020	2950	137	1090	3700	384	3830
30	11100	94	2800	2050	110	607	4030	325	3530
31	---	---	---	1700	89	410	---	---	---
TOTAL	290570	---	123408	238000	---	87727	124230	---	74278
JULY			AUGUST			SEPTEMBER			
1	6020	401	6520	498	95	128	219	98	58
2	6800	502	9210	441	96	114	201	98	53
3	5490	438	6490	530	96	138	185	98	49
4	4250	358	4100	342	97	90	183	98	48
5	3550	287	2750	316	98	84	184	99	49
6	2860	229	1770	320	98	85	199	106	57
7	2250	190	1150	332	99	89	206	107	60
8	1650	161	719	315	100	85	210	107	61
9	1360	146	534	409	103	114	205	107	59
10	1520	126	519	477	124	159	183	107	53
11	2090	113	635	814	115	253	166	107	48
12	1300	100	352	765	113	233	163	107	47
13	1330	92	331	359	118	114	162	107	47
14	1180	91	291	738	158	315	160	107	46
15	1030	89	246	879	158	375	151	107	44
16	1030	88	246	715	150	291	148	107	43
17	895	86	207	551	147	219	139	107	40
18	809	86	188	307	140	116	143	107	41
19	896	86	208	265	136	97	156	107	45
20	885	87	208	257	133	92	164	107	47
21	870	88	206	255	129	89	171	107	49
22	802	88	191	245	124	82	177	107	51
23	817	89	196	241	119	77	181	107	52
24	690	90	168	351	113	107	185	107	53
25	722	90	176	272	106	78	182	107	53
26	653	91	160	243	97	64	166	107	48
27	535	92	133	234	98	62	139	107	40
28	646	92	161	245	98	65	124	120	40
29	540	93	136	255	98	67	157	197	83
30	511	94	130	252	98	67	184	183	91
31	536	95	137	242	98	64	---	---	---
TOTAL	54517	---	38468	12465	---	4013	5193	---	1555
YEAR	2253140		1232695						

e Estimated

ST. FRANCIS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	BARO-	TEMPER-	TRANS-	OXYGEN,	OXYGEN,	DIS-	SEDI-
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	METRIC PRES- SURE (MM OF HG) (00025)		PAR- ENCY (SECCHI DISK) (M) (00078)		DIS- SOLVED (MG/L) (00300)	(PER- CENT SATUR- ATION) (00301)	
OCT 07...	1500	80513	82913	7810	134	6.5	758	25.0	.09	8.2	100	320	
NOV 18...	0755	80513	82913	833	322	6.6	760	10.0	.18	12.2	108	51	
DEC 09...	1140	80513	82913	7720	251	6.5	760	10.5	.09	9.8	88	164	
JAN 15...	0905	80513	82913	7190	213	6.5	762	4.5	.09	11.8	91	219	
FEB 04...	1050	80513	82913	27600	121	6.3	760	5.5	.06	10.9	87	150	
MAR 04...	0840	80513	82913	7490	202	7.1	762	8.5	.09	8.1	69	135	
APR 16...	0800	80513	82913	10400	188	6.7	755	15.5	.09	9.6	97	136	
MAY 12...	1425	80513	82913	9370	180	6.8	754	21.5	.09	9.2	105	106	
JUN 09...	1235	80513	82913	3190	310	6.9	757	27.0	.09	8.9	113	122	
JUL 14...	1400	80513	82913	1300	298	7.7	759	27.5	.18	11.6	148	93	
AUG 11...	1220	80513	82913	717	479	7.3	753	29.0	.24	7.2	95	82	
SEP 16...	0845	80513	82913	137	490	7.0	760	22.0	.18	6.6	76	69	
DATE		SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	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)	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)
OCT 07...	6750	96	97	99	100	4	13	80	96	100	--	--	--
NOV 18...	115	83	83	88	100	42	75	98	100	--	--	--	--
DEC 09...	3420	98	99	100	--	18	65	99	100	--	--	--	--
JAN 15...	4250	72	99	100	--	64	95	100	--	--	--	--	--
FEB 04...	11200	98	98	99	100	13	35	62	85	98	99	100	100
MAR 04...	2730	97	97	99	100	7	43	98	100	--	--	--	--
APR 16...	3820	99	99	99	100	18	53	98	100	--	--	--	--
MAY 12...	2680	98	98	100	--	15	62	98	100	--	--	--	--
JUN 09...	1050	99	100	--	--	24	60	95	99	100	--	--	--
JUL 14...	326	99	99	100	--	2	2	31	75	100	--	--	--
AUG 11...	159	93	95	98	100	34	63	96	97	100	--	--	--
SEP 16...	26	98	99	100	--	45	73	98	99	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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 192.52 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	11	17	336	4660	246	369	666	45	851	116	154
2	2.4	8.5	19	670	4080	258	296	585	51	779	109	136
3	2.0	7.0	22	860	3470	244	239	512	70	692	93	123
4	1.9	5.6	24	978	2970	221	484	442	125	609	78	111
5	32	3.9	50	1400	2590	200	512	391	168	536	65	109
6	393	3.5	68	1580	2290	187	701	386	167	468	60	104
7	468	3.6	112	1410	2100	164	743	394	178	394	55	106
8	422	3.6	277	1380	1900	154	729	563	94	312	55	102
9	434	3.7	360	1740	1710	171	694	642	46	210	128	98
10	521	5.4	496	1500	1540	183	649	634	32	135	154	96
11	560	11	612	1320	1380	198	603	598	36	129	144	79
12	566	11	633	1190	1250	219	554	562	59	168	133	73
13	559	9.8	650	1080	1090	779	507	526	111	187	108	77
14	542	9.4	638	993	978	1250	465	490	408	181	94	83
15	515	8.5	634	930	892	1850	514	452	428	165	93	84
16	476	8.1	628	872	838	2200	501	407	468	144	90	82
17	424	8.9	606	832	790	2010	493	356	492	123	97	71
18	376	9.3	573	785	736	1650	492	349	465	110	102	62
19	334	9.4	538	739	678	1350	469	314	417	91	103	55
20	272	12	499	711	622	1240	433	301	355	73	102	51
21	210	13	458	692	567	1160	387	304	271	58	102	44
22	153	14	461	999	514	968	341	293	171	53	102	33
23	109	14	428	2110	462	872	293	258	93	49	97	17
24	76	14	432	3110	409	821	241	210	116	53	170	9.6
25	52	15	450	3840	352	765	215	158	199	58	240	8.0
26	39	15	443	3980	296	703	490	117	310	68	218	8.4
27	31	15	423	3910	260	639	872	83	571	65	205	9.5
28	25	14	405	3750	246	578	810	49	686	80	195	9.6
29	21	14	388	3780	---	533	784	35	793	78	191	29
30	18	16	370	4290	---	484	744	28	870	103	183	42
31	14	---	352	5000	---	430	---	33	---	114	170	---
TOTAL	7651.6	297.2	12066	56767	39670	22727	15624	11138	8295	7136	3852	2066.1
MEAN	247	9.91	389	1831	1417	733	521	359	276	230	124	68.9
MAX	566	16	650	5000	4660	2200	872	666	870	851	240	154
MIN	1.9	3.5	17	336	246	154	215	28	32	49	55	8.0
AC-FT	15180	589	23930	112600	78690	45080	30990	22090	16450	14150	7640	4100
CFSM	.46	.02	.73	3.42	2.65	1.37	.97	.67	.52	.43	.23	.13
IN.	.53	.02	.84	3.95	2.76	1.58	1.09	.77	.58	.50	.27	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

	306	679	1176	1036	1121	1131	1125	753	503	259	265	445
MEAN	306	679	1176	1036	1121	1131	1125	753	503	259	265	445
MAX	1509	2807	3145	2857	4091	2977	3428	3033	2617	1507	800	2784
(WY)	1991	1989	1979	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

ST. FRANCIS RIVER BASIN
07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

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SUMMARY STATISTICS

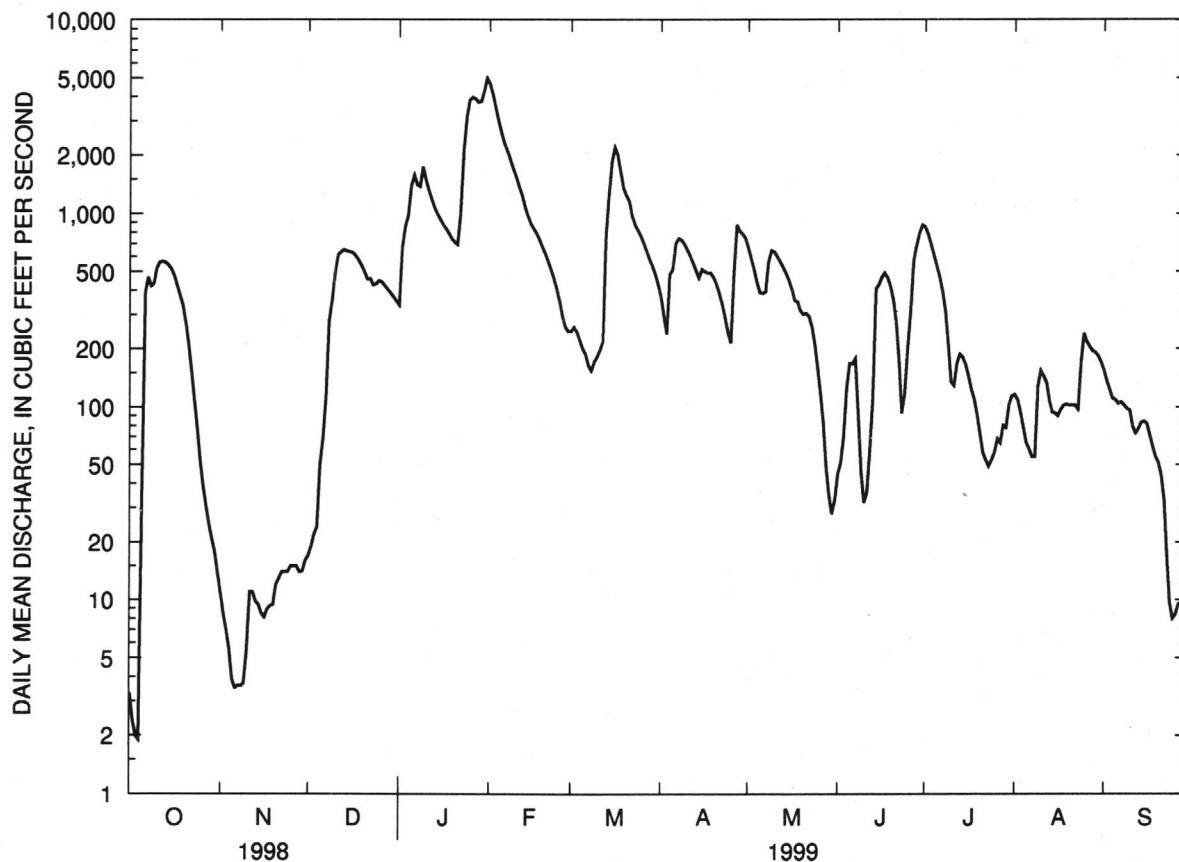
FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1971 - 1999

ANNUAL TOTAL	188603.9		187289.9			
ANNUAL MEAN	517		513		731	
HIGHEST ANNUAL MEAN					1321	1989
LOWEST ANNUAL MEAN					271	1972
HIGHEST DAILY MEAN	3650	Mar 8	5000	Jan 31	15000	Dec 29 1987
LOWEST DAILY MEAN	1.9	Oct 4	1.9	Oct 4	1.0	Oct 27 1971
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 28	4.2	Nov 4	1.0	Oct 9 1992
INSTANTANEOUS PEAK FLOW			5160	Jan 31	16600	Apr 29 1991
INSTANTANEOUS PEAK STAGE			14.15	Jan 31	^a 17.34	Dec 30 1987
INSTANTANEOUS LOW FLOW			1.9	Oct 3,4	.99	Jul 20 1980
ANNUAL RUNOFF (AC-FT)	374100		371500		529400	
ANNUAL RUNOFF (CFSM)	.97		.96		1.37	
ANNUAL RUNOFF (INCHES)	13.11		13.02		18.56	
10 PERCENT EXCEEDS	1360		1170		1900	
50 PERCENT EXCEEDS	277		277		364	
90 PERCENT EXCEEDS	14		15		32	

^aFrom floodmark



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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	
OCT 07...	1405	80513	82913	479	220	6.6	760	21.0	.06	9.1	102	--	
14...	1135	80513	81213	546	225	6.7	758	15.5	--	7.8	79	170	
NOV 18...	1335	80513	82913	5.0	302	6.7	760	10.5	.09	4.2	38	--	
DEC 02...	1255	80513	81213	18	483	7.7	769	13.1	--	2.4	23	210	
08...	1435	80513	82913	324	179	6.0	763	10.0	.09	9.6	85	--	
JAN 15...	0745	80513	82913	633	159	6.1	762	4.5	.06	10.9	84	--	
FEB 04...	0720	80513	82913	2410	120	6.2	762	5.5	.06	10.2	81	--	
04...	0745	80513	82913	700	118	6.3	762	5.5	.12	9.5	75	--	
MAR 02...	1245	80513	81213	260	192	7.2	758	13.7	--	7.1	69	80	
03...	1445	80513	82913	246	179	7.2	758	8.5	.06	7.6	65	--	
APR 16...	0645	80513	82913	491	142	7.0	755	15.5	.06	9.8	99	--	
28...	1415	80513	81213	757	96	7.0	764	20.2	--	3.9	43	530	
MAY 13...	0725	80513	82913	556	197	6.6	755	20.5	.06	6.8	76	--	
JUN 09...	1345	80513	82913	57	301	7.0	757	28.0	.06	7.1	91	--	
23...	1420	80513	81213	79	310	7.6	764	26.5	--	4.0	50	190	
JUL 15...	0800	80513	82913	158	440	6.8	759	25.0	.09	6.0	73	--	
AUG 10...	0915	80513	81213	144	559	8.1	764	26.9	--	3.8	48	280	
11...	1340	80513	82913	142	597	7.2	753	30.0	.09	7.4	99	--	
SEP 16...	0730	80513	82913	84	690	7.0	760	20.0	.09	6.3	70	--	
DATE		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD CACO3 (MG/L AS) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	
OCT 14...	--	--	390	76	19	7.0	9.1	18	.5	10	56	13	
DEC 02...	--	--	500	140	36	13	37	34	1	8.6	131	49	
MAR 02...	--	--	88	69	18	5.9	8.7	20	.5	5.4	56	9.7	
APR 28...	--	--	390	31	7.9	2.7	3.4	17	.3	3.6	28	4.0	
JUN 23...	K150	--	860	120	28	11	14	20	.6	5.2	10	16	
AUG 10...	K700	--	410	230	56	23	26	19	.7	5.8	210	27	
DATE		FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 14...	.12	15	154	127	.21	227	.088	.39	.012	.04	.100	.048	
DEC 02...	.31	13	277	254	.38	13.5	--	--	<.010	--	.080	<.010	
MAR 02...	.17	10	125	104	.17	87.8	.460	2.0	.020	.07	.480	.230	
APR 28...	.14	5.6	69	51	.09	141	.300	1.3	.020	.07	.320	.100	
JUN 23...	--	--	187	104	.25	39.9	.430	1.9	.020	.07	.450	.070	
AUG 10...	--	--	355	287	.48	138	.430	1.9	.020	.07	.450	.090	

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07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00660)
OCT 14...	.06	--	.57	--	.62	--	.72	--	--	.080	.25
DEC 02...	--	--	--	--	.73	--	.81	--	--	.060	.18
MAR 02...	.30	--	.63	--	.86	--	1.3	--	--	.030	.09
APR 28...	.13	--	--	--	E.57	--	--	--	--	.100	.31
JUN 23...	.09	1.1	--	1.2	--	1.6	--	.170	E.040	.050	.15
AUG 10...	.12	.72	--	.81	--	1.3	--	.280	.190	.170	.52

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	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)
OCT 14...	32	64	<.50	<.50	<1.0	<1.0	2.8	88	<1.0	<4	160
DEC 02...	96	80	<.50	<.50	<1.0	<1.0	2.2	15	<1.0	<4	420
MAR 02...	26	53	<.50	<.50	<1.0	<1.0	1.4	31	<1.0	<4	69
APR 28...	21	33	<.50	<.50	<1.0	<1.0	4.2	77	<1.0	<1	51

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)	SEDI- MENT, DIS- SOLVED (MG/L) (80154)	SEDI- MENT, DIS- SOLVED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN (T/DAY) (70331)	SED. SUSP. FALL DIAM. % FINER THAN (70342)	SED. SUSP. FALL DIAM. % FINER THAN (70343)
OCT 07...	--	--	--	--	--	--	215	278	--	99	100
DEC 14...	<2.0	2.0	<1.0	63	2	3.1	81	119	98	--	--
DEC 02...	10	2.6	<1.0	120	<1	3.7	52	2.5	96	--	--
DEC 08...	--	--	--	--	--	--	162	142	--	100	--
JAN 15...	--	--	--	--	--	--	434	742	--	61	69
FEB 04...	--	--	--	--	--	--	60	390	--	99	99
FEB 04...	--	--	--	--	--	--	59	112	--	98	98
MAR 02...	<2.0	1.7	<1.0	57	<1	1.4	145	102	99	--	--
MAR 03...	--	--	--	--	--	--	158	105	--	99	99
APR 16...	--	--	--	--	--	--	177	235	--	100	--
APR 28...	<2.0	1.2	<1.0	34	1	1.9	161	329	100	--	--
MAY 13...	--	--	--	--	--	--	247	371	--	100	--
JUN 09...	--	--	--	--	--	--	121	19	--	100	--
JUN 23...	--	--	--	--	--	--	130	28	99	--	--
JUL 15...	--	--	--	--	--	--	197	84	--	100	--
AUG 10...	--	--	--	--	--	--	145	56	99	--	--
AUG 11...	--	--	--	--	--	--	150	58	--	99	99
SEP 16...	--	--	--	--	--	--	123	28	--	98	100

ST. FRANCIS RIVER BASIN

07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	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)	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)	BED MAT. FALL SIEVE DIAM. % FINER THAN 8.00 MM (80171)
OCT 07...	--	--	--	91	92	93	94	96	96	100	--
DEC 08...	--	--	--	96	98	98	99	100	--	--	--
JAN 15...	86	98	100	36	40	49	67	84	85	93	100
FEB 04...	99	100	--	87	90	91	94	99	99	100	--
MAR 04...	98	99	100	92	95	97	98	100	--	--	--
APR 03...	99	100	--	97	97	98	98	99	99	100	--
MAY 16...	--	--	--	82	91	94	98	100	--	--	--
JUN 13...	--	--	--	73	74	76	80	86	86	89	100
JUL 09...	--	--	--	97	97	97	97	100	--	--	--
AUG 15...	--	--	--	94	94	94	96	100	--	--	--
SEP 11...	99	100	--	97	98	99	100	--	--	--	--
SEP 16...	--	--	--	95	97	98	99	99	99	100	--

ST. FRANCIS RIVER BASIN

81

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 mi².

PERIOD OF RECORD.--October 1965 to September 1977 and October 1997 to current year in reports of Geological Survey. January 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 sea level. Prior to Nov. 1, 1949, nonrecording gage. Prior to Jan. 1, 1952, datum of gage was 0.32 ft below sea level.

REMARKS.--Records fair, except those below 50 ft³/s which are poor. The stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	26	5.4	447	5520	445	780	1290	13	1210	177	247
2	1.6	23	5.9	731	5580	467	623	1190	155	1190	187	225
3	1.3	19	6.0	1010	5230	486	467	1050	463	1160	170	193
4	.78	14	6.9	1110	4670	463	651	899	437	1100	145	169
5	10	11	9.9	1170	4050	395	841	810	383	1010	116	168
6	175	8.1	21	1220	3480	328	1040	804	288	919	98	162
7	549	6.4	109	1250	3140	271	1140	790	363	826	85	147
8	652	e6.0	286	1280	2820	227	1170	800	490	692	74	142
9	680	e6.0	439	1310	2490	261	1150	847	462	509	90	140
10	705	5.6	581	1360	2190	254	1100	855	305	321	158	127
11	714	5.4	738	1420	2010	276	998	793	150	250	206	112
12	704	4.3	817	1450	1870	269	894	728	104	207	214	100
13	696	3.9	877	1440	1740	931	808	687	222	251	204	95
14	687	4.2	902	1400	1640	1540	725	646	294	302	180	95
15	678	4.7	907	1340	1560	1870	673	600	563	296	162	101
16	661	4.7	896	1280	1480	2090	691	550	680	255	158	105
17	630	5.0	865	1230	1390	2190	770	493	705	209	161	99
18	588	5.1	824	1180	1290	2330	804	436	667	198	170	83
19	542	5.0	786	1120	1210	2320	755	425	580	180	187	65
20	467	5.3	741	1070	1140	2180	618	447	503	161	193	54
21	378	5.2	693	1030	1090	2020	507	436	414	125	193	46
22	292	4.8	686	1150	1020	1870	420	368	297	97	185	38
23	222	4.4	655	1360	920	1720	345	315	178	80	190	32
24	166	4.4	661	1590	812	1590	281	255	120	77	259	22
25	126	5.3	633	1900	680	1450	235	197	322	74	366	11
26	98	5.5	596	2590	566	1310	429	151	543	78	443	5.0
27	72	4.3	570	3450	520	1180	891	107	989	100	455	2.3
28	56	3.8	548	3980	463	1090	1140	70	1120	102	432	1.2
29	46	3.6	527	4340	---	1020	1280	38	1160	103	386	28
30	38	4.3	503	4710	---	978	1330	22	1200	122	333	13
31	32	---	476	5160	---	901	---	15	---	162	281	---
TOTAL	10669.88	218.3	16371.1	55078	60571	34722	23556	17114	14170	12366	6658	2827.5
MEAN	344	7.28	528	1777	2163	1120	785	552	472	399	215	94.2
MAX	714	26	907	5160	5580	2330	1330	1290	1200	1210	455	247
MIN	.78	3.6	5.4	447	463	227	235	15	13	74	74	1.2
AC-FT	21160	433	32470	109200	120100	68870	46720	33950	28110	24530	13210	5610
CFSM	.44	.01	.67	2.26	2.75	1.43	1.00	.70	.60	.51	.27	.12
IN.	.50	.01	.77	2.61	2.87	1.64	1.11	.81	.67	.59	.32	.13

ST. FRANCIS RIVER BASIN

07047950 L'ANGUILLE RIVER AT PALESTINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1999, BY WATER YEAR (WY)

MEAN	324	680	1172	1641	2398	2133	1730	1527	578	425	432	616
MAX	1670	5578	4736	6531	7854	5720	4938	6587	3919	1636	1713	2130
(WY)	1950	1958	1962	1950	1950	1975	1973	1953	1974	1967	1966	1950
MIN	1.97	.000	3.71	34.5	136	631	200	44.9	26.0	.065	19.0	66.7
(WY)	1964	1955	1966	1963	1963	1972	1967	1959	1952	1954	1954	1954

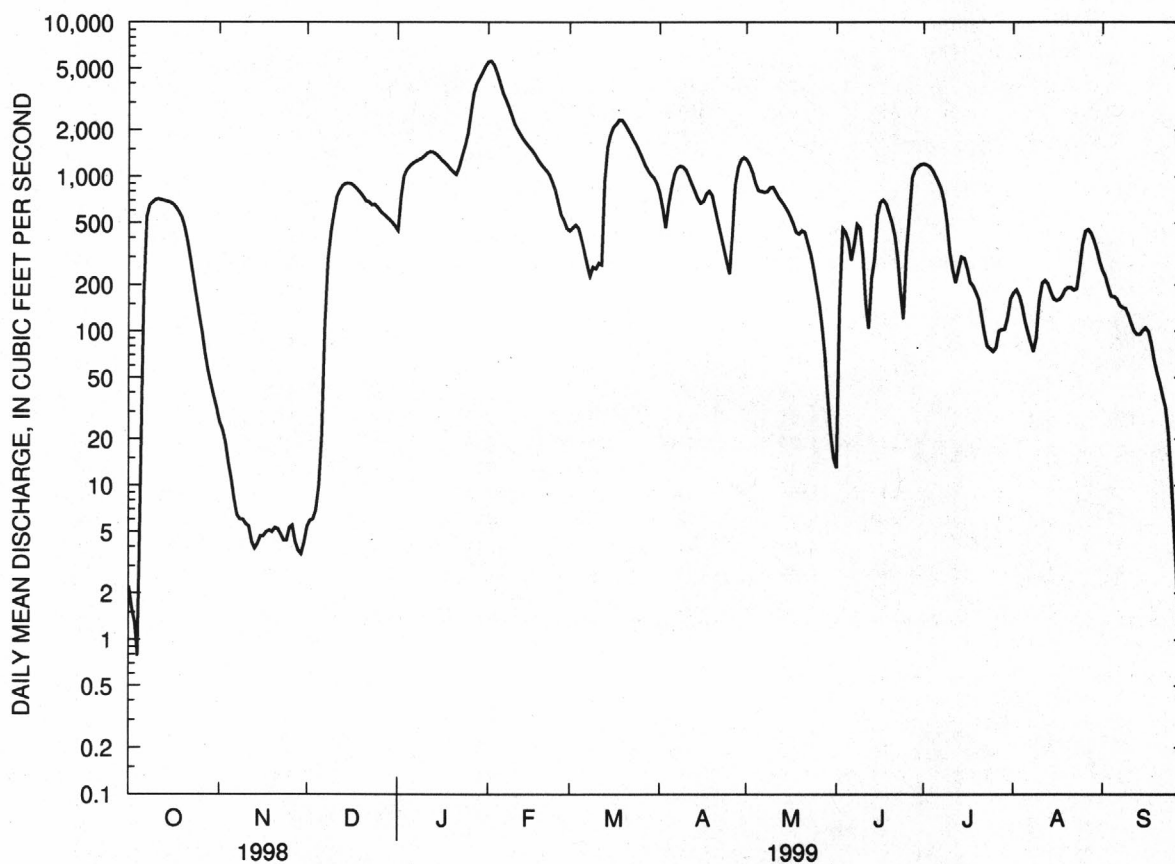
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1950-77, 1998-99

ANNUAL TOTAL	258461.28		254321.78									
ANNUAL MEAN	708		697							1131		
HIGHEST ANNUAL MEAN										2592		1950
LOWEST ANNUAL MEAN										455		1963
HIGHEST DAILY MEAN	4420	Mar 10	5580	Feb 2						15500	May 19	1953
LOWEST DAILY MEAN	.78	Oct 4	.78	Oct 4						.00	Jun 27	1952
ANNUAL SEVEN-DAY MINIMUM	2.7	Sep 28	4.5	Nov 24						.00	Jul 21	1952
INSTANTANEOUS PEAK FLOW			5360	Feb 1						15600	May 20	1953
INSTANTANEOUS PEAK STAGE			24.39	Feb 1						^a 30.92	Feb 3	1950
INSTANTANEOUS LOW FLOW			.46	Oct 5						.00	at times	
ANNUAL RUNOFF (AC-FT)	512700		504400							819400		
ANNUAL RUNOFF (CFPM)	.90		.89							1.44		
ANNUAL RUNOFF (INCHES)	12.23		12.04							19.55		
10 PERCENT EXCEEDS	1770		1450							2920		
50 PERCENT EXCEEDS	467		447							474		
90 PERCENT EXCEEDS	6.1		9.2							35		

^aBackwater from Mississippi River^eEstimated

WHITE RIVER BASIN

83

07048480 TOWN BRANCH AT B.R. 62 AT FAYETTEVILLE

LOCATION.--Lat 36°03'24", long 94°10'32", in SW1/4SW1/4 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 mi².

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

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	6.5	.74	3.9	1.0	.79	.86	.40	.91	1.7	.76	.16
2	.32	1.0	.63	1.7	.75	.75	.88	.33	.68	.81	.55	.16
3	.23	.64	.35	.85	.51	.65	19	.29	.63	.54	.52	.16
4	.13	.72	3.6	.85	.37	.65	4.5	20	.61	.40	.68	.16
5	40	.50	.50	.75	.32	.65	4.2	1.5	.62	.40	.65	5.4
6	3.3	.31	.95	.65	22	.65	1.8	.74	.39	.48	.66	.24
7	.83	5.3	.55	.65	4.5	.65	1.3	.53	.29	.40	.66	.25
8	.74	.78	.25	.65	1.5	15	2.0	.40	.28	.40	.69	4.0
9	.74	.46	.16	.65	1.1	1.4	1.2	.40	.43	.40	.65	.25
10	.58	6.6	.19	.52	.90	.90	.97	19	2.4	2.2	.65	.20
11	.45	.68	.19	.48	2.8	.80	.87	1.5	.67	.35	.65	.92
12	.59	.46	14	.65	.85	23	.79	14	.47	.25	.65	5.8
13	.39	.40	1.4	.73	.74	7.8	.85	1.3	.40	.25	.65	.31
14	.37	.60	.57	.74	.70	7.5	6.1	.83	.29	.25	.70	.37
15	.23	.71	.31	.70	.65	3.3	1.2	.75	.33	.24	.73	.25
16	.34	.70	.25	.84	.65	1.8	1.8	.69	4.7	.20	.78	.20
17	3.4	.71	.28	1.4	.65	1.3	1.4	5.1	.37	.16	.74	.10
18	.81	.67	.85	2.6	.65	1.1	.65	.81	.25	.16	.76	.10
19	.31	4.0	.81	.53	.65	5.4	.65	.56	3.1	.16	.73	.13
20	.28	1.0	.54	.40	.65	4.9	.63	.44	1.5	.19	.74	.74
21	.38	.79	.60	.39	.65	1.6	.64	2.9	1.8	.21	.74	.20
22	.40	.74	.40	.49	.55	1.2	1.1	1.6	.60	.26	.74	.13
23	.40	.75	.40	1.4	.47	1.1	.66	9.1	1.8	.28	.93	.11
24	.16	.74	.33	.72	.40	1.1	.59	.97	3.7	.25	.25	.10
25	.18	.75	.25	.65	.55	1.0	4.8	8.9	.83	.37	.25	.10
26	.26	.81	.25	.36	.65	.97	5.6	1.7	.62	.40	.87	.12
27	.31	.80	.35	.25	.65	.98	.85	.92	.40	.45	1.9	.16
28	.30	.84	.40	.35	.65	2.1	.53	.80	4.5	.61	.18	.16
29	.26	.90	.40	14	---	1.4	.40	.68	6.5	.60	.14	.24
30	.53	14	.40	7.9	---	1.0	.40	3.3	55	1.4	.15	.16
31	.30	---	.40	2.1	---	.97	---	4.3	---	.86	.16	---
TOTAL	57.75	53.86	31.30	48.85	46.51	92.41	67.22	104.74	95.07	15.63	19.91	21.38
MEAN	1.86	1.80	1.01	1.58	1.66	2.98	2.24	3.38	3.17	.50	.64	.71
MAX	40	14	14	14	22	23	19	20	55	2.2	1.9	5.8
MIN	.13	.31	.16	.25	.32	.65	.40	.29	.25	.16	.14	.10
AC-FT	115	107	62	97	92	183	133	208	189	31	39	42
CFSM	2.17	2.09	1.17	1.83	1.93	3.47	2.61	3.93	3.68	.59	.75	.83
IN.	2.50	2.33	1.35	2.11	2.01	4.00	2.91	4.53	4.11	.68	.86	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	1.69	2.78	1.14	2.20	2.13	2.83	1.34	1.65	1.89	.65	.76	.86
MAX	1.85	5.90	1.33	4.84	3.24	3.99	2.24	2.99	2.86	.75	1.37	1.08
(WY)	1999	1997	1997	1998	1997	1998	1999	1999	1999	1997	1997	1997
MIN	1.53	.64	1.01	.18	1.49	1.53	.79	.90	.86	.50	.28	.71
(WY)	1997	1998	1999	1997	1998	1997	1998	1997	1998	1999	1998	1999

WHITE RIVER BASIN

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

SUMMARY STATISTICS

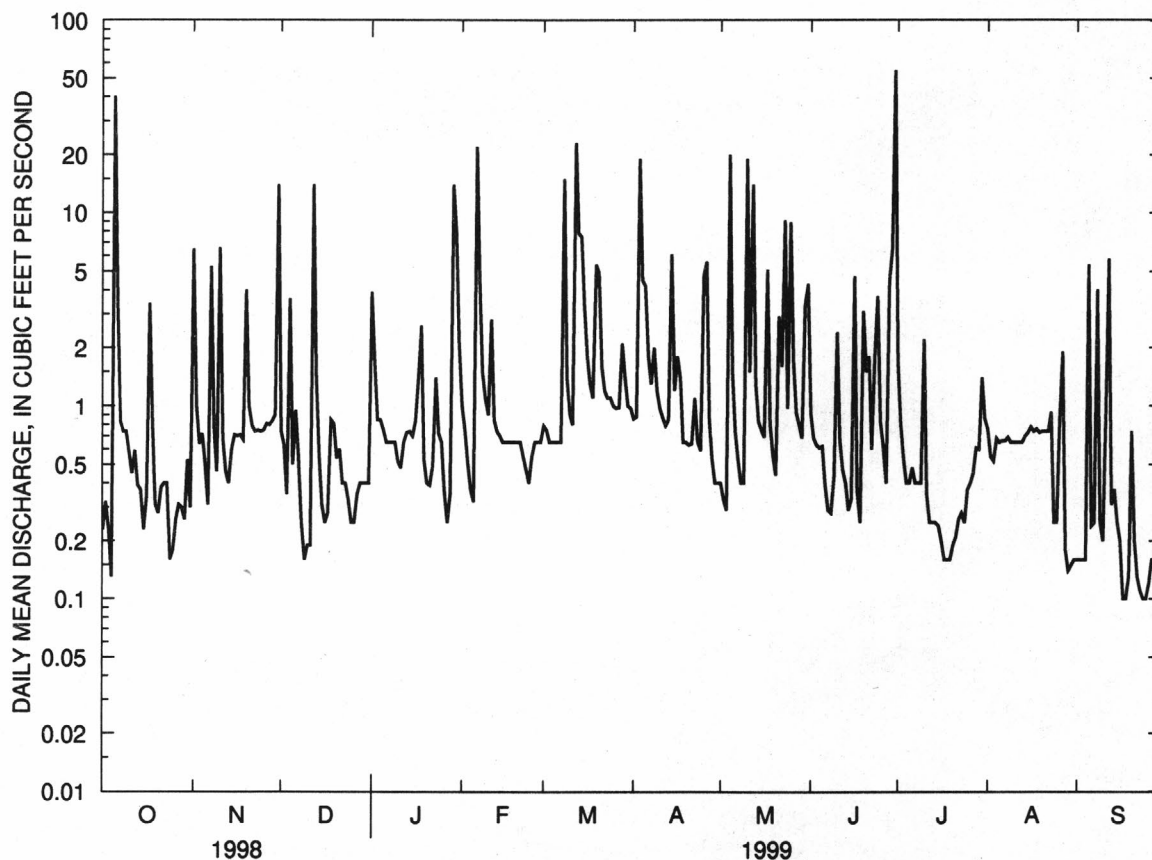
FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1996 - 1999

ANNUAL TOTAL	594.50	654.63		
ANNUAL MEAN	1.63	1.79	1.66	
HIGHEST ANNUAL MEAN			1.73	1999
LOWEST ANNUAL MEAN			1.53	1998
HIGHEST DAILY MEAN	76 Jan 4	55 Jun 30	77 Sep 26 1996	
LOWEST DAILY MEAN	.05 Jul 14	.10 Sep 17	.00 Jan 10 1997	
ANNUAL SEVEN-DAY MINIMUM	.07 Sep 23	.13 Sep 22	.00 Jan 10 1997	
INSTANTANEOUS PEAK FLOW		^a 1440 Jun 30	^a 1440 Jun 30 1999	
INSTANTANEOUS PEAK STAGE		9.11 Jun 30	9.11 Jun 30 1999	
INSTANTANEOUS LOW FLOW		.10 at times	.00 at times	
ANNUAL RUNOFF (AC-FT)	1180	1300	1200	
ANNUAL RUNOFF (CFSM)	1.89	2.09	1.93	
ANNUAL RUNOFF (INCHES)	25.72	28.32	26.16	
10 PERCENT EXCEEDS	3.5	4.0	3.6	
50 PERCENT EXCEEDS	.40	.65	.50	
90 PERCENT EXCEEDS	.11	.23	.10	

^aFrom rating extended above 100 ft³/s on basis of culvert Type IV flow computations



WHITE RIVER BASIN

85

07048490 TOWN BRANCH TRIBUTARY AT HWY 16 AT FAYETTEVILLE

LOCATION.--Lat 36°02'54", long 94°09'42", in SE1/4NE1/4 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 mi².

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

GAGE.--Water-stage recorder.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	8.9	.97	6.0	2.0	.37	.54	.84	e1.9	e32	.55	.92
2	.43	1.1	.84	3.1	1.4	.36	.49	.84	e.75	e2.2	.64	1.0
3	.39	.60	.90	1.3	1.2	.36	14	.79	e.70	e1.4	.69	1.1
4	.31	.69	3.5	1.7	1.1	.36	5.4	17	e.61	e.80	.77	1.8
5	45	.59	.82	2.3	.96	.32	3.1	3.9	e.61	e.70	.66	8.2
6	4.3	.51	1.7	1.9	24	.32	1.2	3.5	e.50	e.70	.63	.62
7	.88	5.2	.90	2.1	7.5	.34	1.4	2.1	e.52	.80	.61	.54
8	.62	.79	.75	1.7	2.1	9.8	3.2	1.3	e.48	.77	.72	e5.7
9	.53	.64	.86	1.7	1.7	.75	2.7	1.1	e.98	.75	.93	e.53
10	.47	5.5	.79	1.7	2.1	.61	1.6	30	e2.2	2.9	.66	e.45
11	.40	.67	.80	1.1	4.4	.54	1.0	4.6	e1.3	.75	.71	e1.8
12	.36	.64	15	.96	2.1	15	.93	16	e.61	.67	.71	e8.1
13	.35	.60	3.5	.89	1.8	5.9	.85	4.2	e.51	.61	.76	.71
14	.34	.57	2.1	.98	1.4	5.2	5.6	4.2	e.50	.60	.84	.44
15	.30	.56	1.1	.87	.98	2.4	1.2	3.2	e.49	.56	.99	.39
16	.39	.55	1.2	.92	.75	1.3	1.1	2.1	e5.1	.55	1.1	.36
17	3.5	.51	.90	1.6	.69	.95	1.1	e5.8	.73	.50	1.1	.35
18	.83	.51	1.7	.77	.65	.74	.89	e3.0	.71	.50	1.2	.36
19	.46	4.0	1.2	.73	.55	3.0	.79	e.75	3.9	.51	1.2	.36
20	.41	.68	1.2	.71	.52	3.1	.81	e1.2	1.8	.53	1.4	1.2
21	.38	.63	1.1	.71	.51	1.4	.76	e3.3	2.2	.48	1.4	.38
22	.46	.64	1.0	1.5	.51	1.1	.75	e4.8	.84	.45	1.5	.35
23	.41	.58	1.0	3.3	.47	.92	1.0	e11	2.5	.48	2.3	.35
24	.39	.53	1.2	1.1	.43	1.6	.90	e4.9	4.9	.48	.75	.35
25	.37	.51	1.1	.96	.40	1.2	4.2	e10	3.1	.47	.71	.35
26	.35	.51	1.1	.90	.38	.63	4.6	e5.3	1.6	.44	2.6	.34
27	.33	.53	.98	.85	.36	.64	.86	e1.5	1.3	.46	4.4	.33
28	.32	.53	.98	.90	.36	1.3	.87	e.98	6.8	.53	.94	.36
29	.32	.53	1.1	14	---	.71	.88	e1.5	7.5	.56	.95	.46
30	.46	14	1.0	11	---	.50	.84	e3.5	e72	.54	.91	.36
31	.45	---	.96	3.9	---	.54	---	e4.6	---	.49	.90	---
TOTAL	64.95	52.80	52.25	72.15	61.32	62.26	63.56	157.80	127.64	54.18	34.23	38.56
MEAN	2.10	1.76	1.69	2.33	2.19	2.01	2.12	5.09	4.25	1.75	1.10	1.29
MAX	45	14	15	14	24	15	14	30	72	32	4.4	8.2
MIN	.30	.51	.75	.71	.36	.32	.49	.75	.48	.44	.55	.33
AC-FT	129	105	104	143	122	123	126	313	253	107	68	76
CFSM	1.54	1.29	1.24	1.71	1.61	1.48	1.56	3.74	3.13	1.29	.81	.95
IN.	1.78	1.44	1.43	1.97	1.68	1.70	1.74	4.32	3.49	1.48	.94	1.05

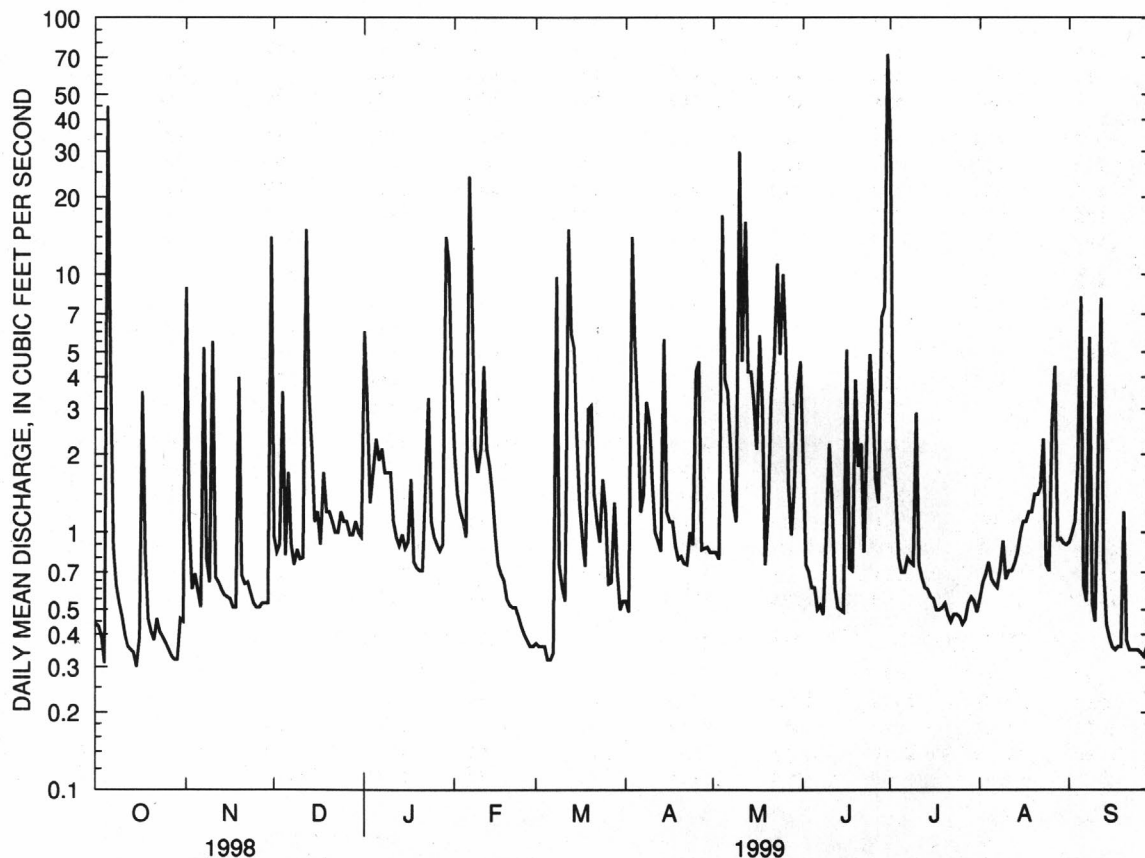
WHITE RIVER BASIN

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

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

MEAN	2.13	3.87	1.49	3.56	3.60	3.38	1.85	2.63	2.71	1.31	1.29	1.59
MAX	2.50	7.69	1.69	7.60	4.73	5.97	2.12	5.09	4.28	1.89	2.34	2.50
(WY)	1998	1997	1999	1998	1997	1998	1999	1999	1999	1999	1997	1997
MIN	1.78	1.76	1.37	.75	2.19	2.01	1.52	1.05	.75	.69	.49	1.02
(WY)	1997	1999	1998	1997	1999	1999	1998	1997	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1997 - 1999	
ANNUAL TOTAL	888.56		841.70			
ANNUAL MEAN	2.43		2.31		2.44	
HIGHEST ANNUAL MEAN					2.54	1997
LOWEST ANNUAL MEAN					2.31	1999
HIGHEST DAILY MEAN	79	Jan 4	72	Jun 30	79	Jan 4 1998
LOWEST DAILY MEAN	.21	Sep 3	.30	Oct 15	.08	Oct 18 1996
ANNUAL SEVEN-DAY MINIMUM	.22	Sep 3	.35	Sep 22	.15	Oct 14 1996
INSTANTANEOUS PEAK FLOW			^a 1070	Jun 30	^a 1070	Jun 30 1999
INSTANTANEOUS PEAK STAGE			7.58	Jun 30	7.58	Jun 30 1999
INSTANTANEOUS LOW FLOW			.28	Oct 4,5,15,16	.08	Oct 18 1996
ANNUAL RUNOFF (AC-FT)	1760		1670		1770	
ANNUAL RUNOFF (CFSM)	1.79		1.70		1.79	
ANNUAL RUNOFF (INCHES)	24.30		23.02		24.39	
10 PERCENT EXCEEDS	4.9		4.7		4.8	
50 PERCENT EXCEEDS	.82		.87		.90	
90 PERCENT EXCEEDS	.27		.39		.35	

^aFrom rating extended above 100 ft³/s on basis of culvert Type 1 flow computations^eEstimated

WHITE RIVER BASIN

87

07048600 WHITE RIVER NEAR FAYETTEVILLE

LOCATION.--Lat 36°04'23", long 94°04'51", in NE1/4SW1/4 sec.8, T.16 N., R.29 W., Washington County, Hydrologic Unit 11010001, on left bank at downstream side of bridge on county road, 0.6 mi downstream from West Fork White River, 0.8 mi downstream from Lake Sequoyah Dam on White River, 4.3 mi east of Fayetteville and at mile 684.0.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--October 1963 to September 1994, October 1998 to current year. Annual maximum, water years 1995-98.

REVISED RECORDS.--WRD Ark, 1973: Drainage area. WRD Ark. 1974: 1966(M), 1972(M). WRD Ark. 1985: 1966(M), 1968-69(M), 1971-73(M).

GAGE.--Water-stage recorder. Datum of gage is 1,138.25 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Some regulation at low flow by Lake Sequoyah Dam 4.3 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	83	473	270	1310	182	509	680	581	3000	9.6	5.3
2	45	272	352	1600	1030	168	462	563	397	1550	9.2	5.2
3	35	248	313	1220	830	161	5970	474	311	1060	8.7	5.3
4	42	203	345	863	687	151	4250	2640	253	780	8.0	5.2
5	1090	171	613	699	573	137	3400	4120	213	588	7.7	18
6	3980	148	551	631	1080	137	3030	1640	175	441	9.2	15
7	1720	194	610	572	7720	130	1870	1140	147	355	8.5	8.1
8	906	320	531	496	2370	1000	1430	866	123	279	7.8	20
9	593	287	450	431	1650	1800	1660	681	102	220	7.1	15
10	422	1010	396	368	1270	1040	1270	1120	93	189	6.7	15
11	319	876	347	332	1500	802	1010	1450	128	164	7.2	8.3
12	250	612	867	312	1640	1430	818	1810	105	151	7.9	29
13	202	479	2430	292	1160	4380	691	1380	346	132	7.0	17
14	165	402	1380	267	966	3030	848	958	676	106	6.4	9.4
15	141	347	1000	241	828	2400	900	746	220	93	6.2	6.4
16	114	296	792	225	712	2040	712	615	192	75	6.0	5.5
17	93	259	647	224	618	1530	592	627	153	64	6.0	4.7
18	369	223	543	245	529	1200	514	1360	105	56	6.0	4.4
19	592	243	493	226	476	1050	451	902	108	48	6.2	3.8
20	414	264	424	207	412	1950	402	686	105	42	6.0	4.2
21	322	294	410	202	364	1360	357	692	84	37	6.3	6.0
22	257	260	437	210	320	1060	318	697	81	32	6.1	5.7
23	210	234	386	322	286	895	485	1330	83	29	18	4.6
24	176	220	353	355	263	755	449	1080	197	26	53	4.4
25	151	202	319	327	242	641	484	1100	308	23	56	4.0
26	129	184	295	309	230	546	1810	1330	462	21	50	3.9
27	109	169	277	292	211	479	2520	729	179	19	55	4.3
28	101	158	258	283	197	446	1460	539	224	17	11	4.3
29	88	150	236	529	---	643	1080	434	242	15	7.4	4.4
30	78	667	217	599	---	613	849	466	7990	14	6.0	4.2
31	75	---	196	1850	---	541	---	635	---	11	5.4	---
TOTAL	13239	9475	16941	14999	29474	32697	40601	33490	14383	9637	421.6	250.6
MEAN	427	316	546	484	1053	1055	1353	1080	479	311	13.6	8.35
MAX	3980	1010	2430	1850	7720	4380	5970	4120	7990	3000	56	29
MIN	35	83	196	202	197	130	318	434	81	11	5.4	3.8
AC-FT	26260	18790	33600	29750	58460	64850	80530	66430	28530	19110	836	497
CFSM	1.07	.79	1.37	1.21	2.63	2.64	3.38	2.70	1.20	.78	.03	.02
IN.	1.23	.88	1.58	1.39	2.74	3.04	3.78	3.11	1.34	.90	.04	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

	MEAN	269	665	718	516	788	1113	1122	850	414	74.4	40.5	131
MAX	2353	2808	2365	1287	2438	2828	2745	3615	2175	335	330	1346	
(WY)	1971	1986	1988	1991	1989	1973	1973	1990	1974	1979	1981	1974	
MIN	1.86	2.13	2.75	5.14	7.23	97.2	293	40.3	18.6	3.75	3.02	2.80	
(WY)	1990	1990	1990	1964	1964	1967	1977	1977	1977	1970	1969	1969	

WHITE RIVER BASIN

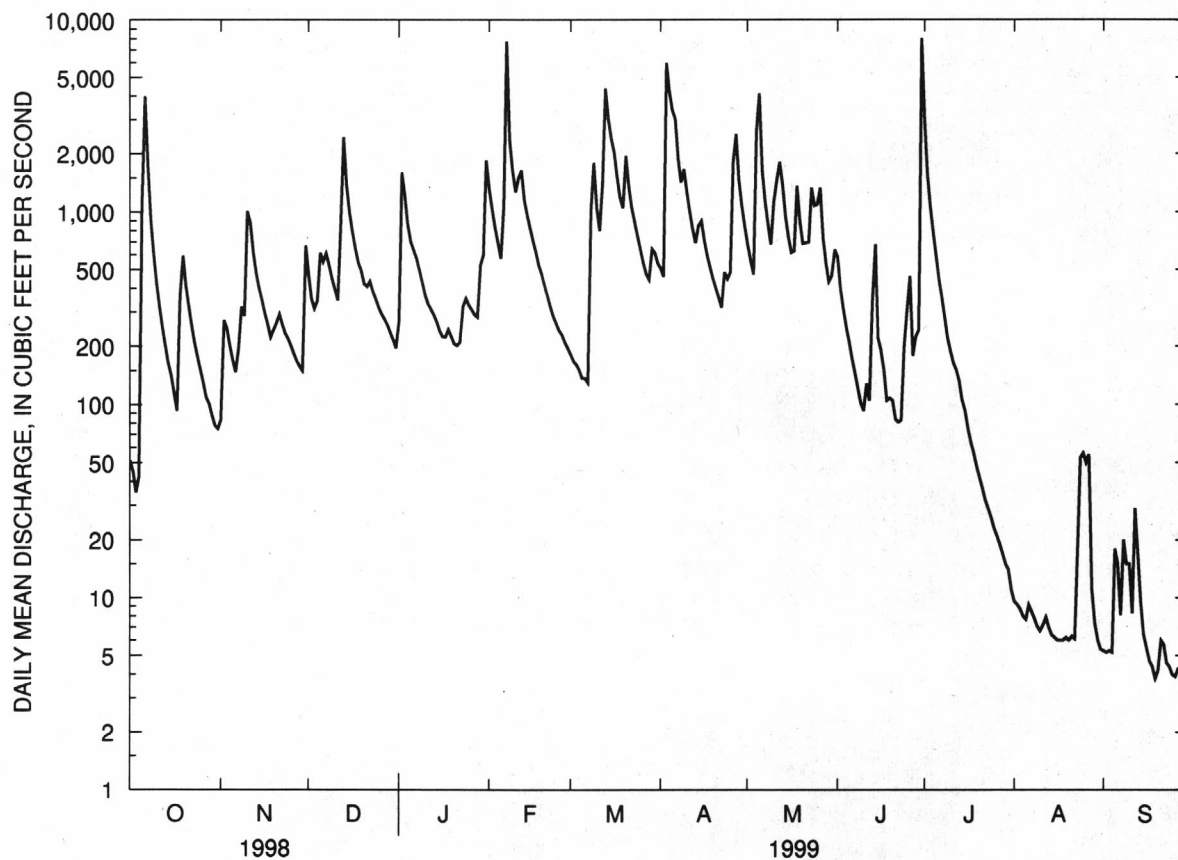
07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1964-94, 1999

ANNUAL TOTAL	215608.2		
ANNUAL MEAN	591		556
HIGHEST ANNUAL MEAN			1043 1973
LOWEST ANNUAL MEAN			158 1980
HIGHEST DAILY MEAN	7990	Jun 30	48000 Nov 19 1985
LOWEST DAILY MEAN	3.8	Sep 19	.12 Oct 2 1982
ANNUAL SEVEN-DAY MINIMUM	4.2	Sep 24	.28 Oct 18 1989
INSTANTANEOUS PEAK FLOW	16800	Jun 30	^a 81600 Nov 19 1985
INSTANTANEOUS PEAK STAGE	18.65	Jun 30	30.45 Nov 19 1985
ANNUAL RUNOFF (AC-FT)	427700		402800
ANNUAL RUNOFF (CFSM)	1.48		1.39
ANNUAL RUNOFF (INCHES)	20.05		18.89
10 PERCENT EXCEEDS	1400		1320
50 PERCENT EXCEEDS	309		172
90 PERCENT EXCEEDS	7.6		6.4

^aFrom rating curve extended above 35,400 ft³/s

WHITE RIVER BASIN

89

07048800 RICHLAND CREEK AT GOSHEN

LOCATION.--Lat 36°06'10", long 94°00'26", in NW1/4NW1/4 sec.31, T.17 N., R.28 W., Washington County, Hydrologic Unit 11110001, on downstream 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 mi².

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

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	11	101	34	439	61	160	214	e370	1060	3.8	1.3
2	4.4	14	101	393	341	56	146	186	e290	570	3.4	1.2
3	3.9	11	92	410	280	51	2700	164	e220	378	3.0	1.3
4	3.3	11	82	274	237	45	1420	1090	e160	279	3.4	1.2
5	3.3	12	102	210	198	38	1330	1600	e140	216	3.0	1.3
6	306	12	159	180	175	37	970	943	e100	170	2.5	1.4
7	406	13	134	179	2140	35	611	e620	e85	138	2.3	1.3
8	165	18	131	170	838	44	485	e510	e70	111	2.1	1.5
9	96	21	109	151	532	574	471	e410	58	89	2.1	1.4
10	68	51	94	124	410	315	371	e500	43	74	2.0	1.3
11	50	155	83	105	343	232	303	e630	38	64	1.9	1.3
12	34	126	79	97	687	192	256	e790	33	55	1.8	2.6
13	25	92	737	93	434	923	226	e630	36	48	1.7	1.9
14	21	76	491	82	341	948	323	e510	226	39	1.7	1.5
15	18	65	320	69	293	779	400	e400	105	31	1.7	1.4
16	16	56	243	62	255	878	312	e370	77	27	1.6	1.3
17	15	47	194	57	224	687	259	e460	82	24	1.6	1.3
18	16	37	157	70	199	464	225	e680	66	22	1.5	1.3
19	36	32	137	98	180	383	199	e600	52	21	1.5	1.3
20	71	33	117	82	162	527	176	e500	41	19	1.5	1.4
21	56	34	104	70	143	431	156	e470	66	16	1.5	1.4
22	41	44	130	68	126	353	136	e500	79	14	1.5	1.3
23	29	39	118	81	114	308	126	e700	52	12	1.6	1.2
24	22	34	97	115	102	269	114	e670	102	10	1.5	1.2
25	19	32	80	119	91	237	147	e680	188	8.6	1.4	1.2
26	17	30	67	105	83	209	583	e770	127	7.2	1.5	1.2
27	16	28	58	95	77	188	647	e500	102	6.5	1.9	1.2
28	15	27	53	88	69	174	391	e380	e90	5.5	1.6	1.2
29	14	27	48	85	---	210	304	e310	259	5.1	1.4	1.3
30	13	58	42	90	---	196	253	e330	4060	4.6	1.4	1.2
31	12	---	36	375	---	172	---	e430	---	4.0	1.3	---
TOTAL	1617.5	1246	4496	4231	9513	10016	14200	17547	7417	3528.5	60.7	40.9
MEAN	52.2	41.5	145	136	340	323	473	566	247	114	1.96	1.36
MAX	406	155	737	410	2140	948	2700	1600	4060	1060	3.8	2.6
MIN	3.3	11	36	34	69	35	114	164	33	4.0	1.3	1.2
AC-FT	3210	2470	8920	8390	18870	19870	28170	34800	14710	7000	120	81
CFSM	.38	.30	1.05	.99	2.46	2.34	3.43	4.10	1.79	.82	.01	.01
IN.	.44	.34	1.21	1.14	2.56	2.70	3.83	4.73	2.00	.95	.02	.01

WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN

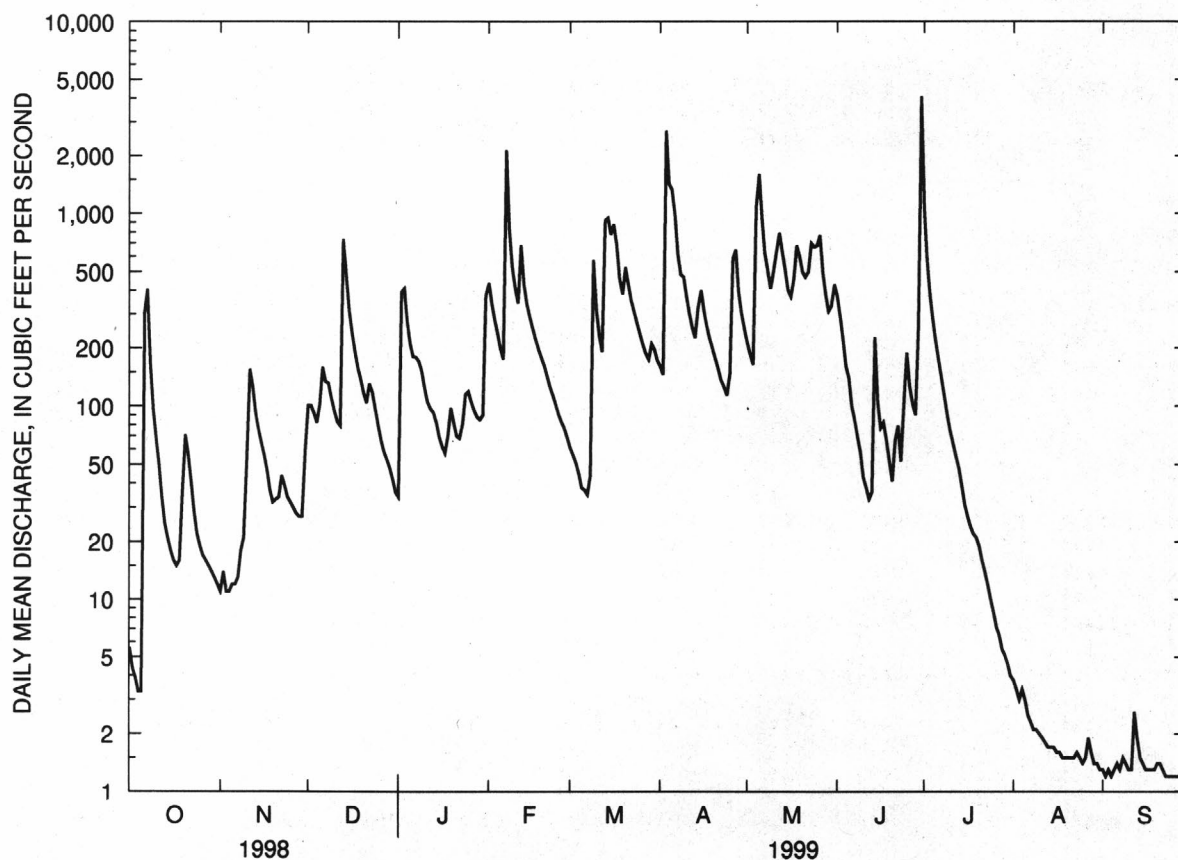
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 1999, BY WATER YEAR (WY)

MEAN	52.2	41.5	145	136	340	323	473	566	247	114	1.96	1.36
MAX	52.2	41.5	145	136	340	323	473	566	247	114	1.96	1.36
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	52.2	41.5	145	136	340	323	473	566	247	114	1.96	1.36
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 WATER YEAR

ANNUAL TOTAL	73913.6	
ANNUAL MEAN	203	
HIGHEST DAILY MEAN	4060	Jun 30
LOWEST DAILY MEAN	1.2	Sep 2
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 22
INSTANTANEOUS PEAK FLOW	^a 8630	Jun 30
INSTANTANEOUS PEAK STAGE	16.41	Jun 30
INSTANTANEOUS LOW FLOW	1.2	^b Sep 2-5
ANNUAL RUNOFF (AC-FT)	146600	
ANNUAL RUNOFF (CFSM)	1.47	
ANNUAL RUNOFF (INCHES)	19.92	
10 PERCENT EXCEEDS	510	
50 PERCENT EXCEEDS	85	
90 PERCENT EXCEEDS	1.5	

^aFrom rating curve extended above 5,200 ft³/s^bAlso Sept. 5, 10, 24-28^cEstimated

WHITE RIVER BASIN

91

07049000 WAR EAGLE CREEK NEAR HINDSVILLE

LOCATION.--Lat 36°12'02", long 93°51'16", 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 mi².

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 sea level. 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 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	34	243	102	785	110	344	424	551	5150	57	15
2	27	40	209	1440	608	104	306	361	439	1520	53	15
3	25	47	167	1020	486	98	3940	315	364	949	52	15
4	23	71	150	629	403	89	3940	798	299	680	53	17
5	36	59	222	470	331	84	2080	3000	256	528	54	21
6	1650	49	260	400	308	82	2240	1130	218	436	53	20
7	947	49	264	371	4440	78	1280	729	187	e380	45	16
8	421	72	277	331	1720	189	964	551	162	319	40	17
9	258	141	217	292	1050	1210	947	442	142	290	36	15
10	182	276	183	240	785	647	790	374	129	313	33	13
11	137	527	159	213	981	478	625	546	175	335	30	14
12	105	317	160	201	1210	410	510	656	192	271	28	24
13	83	236	2320	191	781	1960	443	831	182	240	26	30
14	67	194	1020	171	622	1890	503	570	321	218	23	25
15	56	166	641	151	534	1610	793	441	242	202	21	16
16	47	141	472	137	459	2120	636	372	179	184	19	21
17	42	121	374	131	398	1700	502	363	201	163	18	17
18	145	105	302	175	352	1090	428	1650	169	146	18	15
19	403	98	263	168	315	814	376	790	140	133	19	16
20	242	102	229	144	276	861	337	542	125	128	17	18
21	174	145	209	131	237	862	304	463	114	120	16	18
22	136	139	255	134	207	703	272	498	180	110	16	14
23	108	116	238	267	188	605	248	2660	136	99	22	14
24	88	100	203	341	170	518	230	1310	369	90	25	12
25	72	90	174	296	153	448	246	769	817	83	20	17
26	61	82	156	256	143	391	1020	1440	1080	77	20	11
27	53	73	143	233	137	348	1740	755	499	73	33	11
28	46	67	132	212	125	314	916	549	345	66	32	11
29	41	62	121	199	---	384	656	437	304	62	25	12
30	38	108	110	198	---	449	517	428	6370	61	19	12
31	35	---	97	893	---	376	---	540	---	60	17	---
TOTAL	5779	3827	9970	10137	18204	21022	28133	24734	14887	13486	940	492
MEAN	186	128	322	327	650	678	938	798	496	435	30.3	16.4
MAX	1650	527	2320	1440	4440	2120	3940	3000	6370	5150	57	30
MIN	23	34	97	102	125	78	230	315	114	60	16	11
AC-FT	11460	7590	19780	20110	36110	41700	55800	49060	29530	26750	1860	976

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

	129	179	237	215	345	506	655	708	186	142	69.3	54.0
MEAN	129	179	237	215	345	506	655	708	186	142	69.3	54.0
MAX	849	820	1026	640	1176	1228	2254	2582	1162	795	524	344
(WY)	1968	1969	1969	1969	1966	1968	1957	1957	1957	1960	1958	1970
MIN	3.72	7.21	8.03	7.81	15.9	62.0	104	133	23.3	2.63	1.49	2.29
(WY)	1957	1964	1964	1964	1964	1967	1963	1963	1954	1954	1954	1954

WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

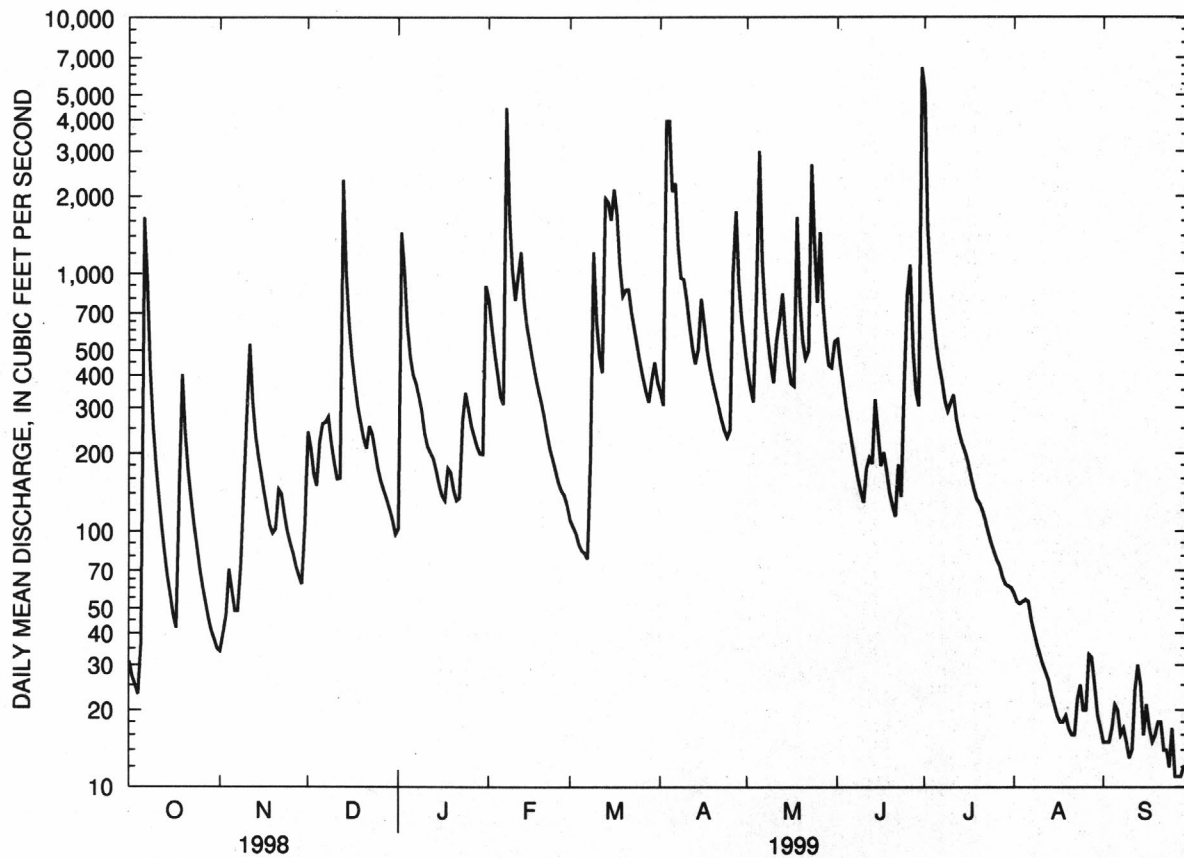
SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1952-70, 1999

ANNUAL TOTAL	151611			
ANNUAL MEAN	415		286	
HIGHEST ANNUAL MEAN			641	1957
LOWEST ANNUAL MEAN			47.7	1954
HIGHEST DAILY MEAN	6370	Jun 30	19000	May 23 1957
LOWEST DAILY MEAN	11	Sep 26	.20	Aug 18 1954
ANNUAL SEVEN-DAY MINIMUM	12	Sep 24	.33	Aug 13 1954
INSTANTANEOUS PEAK FLOW	14000	Jun 30	49000	Nov 19 1985
INSTANTANEOUS PEAK STAGE	16.52	Jun 30	28.49	Nov 19 1985
INSTANTANEOUS LOW FLOW	6.6	Sep 26	.20	Aug 18-19 1954
ANNUAL RUNOFF (AC-FT)	300700		206900	
10 PERCENT EXCEEDS	948		598	
50 PERCENT EXCEEDS	201		73	
90 PERCENT EXCEEDS	21		8.9	

eEstimated



WHITE RIVER BASIN

93

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.

DRAINAGE AREA.--1,192 mi².

PERIOD OF RECORD.--Water years 1968-71, 1973, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
20...	1329	80513	.00	183	145	8.2	746	21.2	8.6	99	5.00
20...	1330	80513	10.0	183	145	8.2	746	21.1	8.6	98	--
20...	1331	80513	20.0	183	145	8.2	746	21.1	8.6	99	--
20...	1332	80513	30.0	183	145	8.2	746	21.1	8.5	98	--
20...	1333	80513	40.0	183	145	8.1	746	21.1	8.4	97	--
20...	1334	80513	44.0	183	146	7.8	746	20.5	6.3	71	--
20...	1335	80513	45.0	183	145	7.0	746	18.2	4.6	50	--
20...	1336	80513	46.0	183	144	6.8	746	16.9	3.7	39	--
20...	1337	80513	47.0	183	144	6.6	746	16.6	3.6	38	--
20...	1338	80513	48.0	183	143	6.6	746	15.6	3.7	38	--
20...	1339	80513	50.0	183	144	6.6	746	15.3	3.5	36	--
20...	1340	80513	53.0	183	143	6.5	746	14.4	3.2	32	--
20...	1341	80513	60.0	183	143	6.5	746	13.4	2.4	24	--
20...	1342	80513	70.0	183	141	6.4	746	12.3	2.3	22	--
20...	1343	80513	80.0	183	140	6.4	746	11.4	2.8	26	--
20...	1344	80513	90.0	183	140	6.4	746	10.8	3.2	29	--
20...	1345	80513	100	183	138	6.4	746	10.2	3.6	33	--
20...	1346	80513	110	183	137	6.4	746	9.8	3.7	33	--
20...	1347	80513	120	183	136	6.4	746	9.4	3.3	30	--
20...	1348	80513	130	183	135	6.3	746	9.0	2.8	25	--
20...	1349	80513	140	183	136	6.3	746	8.8	2.5	22	--
20...	1350	80513	150	183	137	6.3	746	8.6	2.2	19	--
20...	1351	80513	160	183	138	6.3	746	8.4	1.6	14	--
20...	1352	80513	170	183	140	6.3	746	8.3	.6	5	--
20...	1353	80513	180	183	143	6.3	746	8.2	.4	4	--
20...	1354	80513	183	186	143	6.3	746	8.2	.4	3	--
NOV											
23...	1234	80513	.00	176	144	7.3	740	15.4	8.4	87	5.50
23...	1235	80513	10.0	176	144	7.3	740	15.2	8.4	87	--
23...	1237	80513	20.0	176	144	7.3	740	15.0	8.4	86	--
23...	1238	80513	30.0	176	144	7.3	740	15.0	8.3	84	--
23...	1239	80513	40.0	176	144	7.3	740	14.9	8.3	84	--
23...	1240	80513	50.0	176	144	7.3	740	14.9	8.3	84	--
23...	1241	80513	60.0	176	144	7.3	740	14.9	8.1	83	--
23...	1242	80513	70.0	176	144	7.3	740	14.8	8.1	82	--
23...	1245	80513	72.0	176	144	6.9	740	14.5	6.2	63	--
23...	1246	80513	73.0	176	143	6.6	740	13.9	1.8	18	--
23...	1247	80513	74.0	176	143	6.5	740	13.0	.7	7	--
23...	1249	80513	80.0	176	142	6.5	740	12.1	1.0	10	--
23...	1250	80513	90.0	176	140	6.5	740	11.3	1.7	16	--
23...	1251	80513	100	176	138	6.5	740	10.7	2.0	19	--
23...	1252	80513	110	176	138	6.5	740	10.1	2.0	19	--
23...	1253	80513	120	176	136	6.5	740	9.7	1.5	14	--
23...	1254	80513	130	176	136	6.4	740	9.4	.8	7	--
23...	1255	80513	140	176	136	6.4	740	9.1	.7	6	--
23...	1256	80513	150	176	138	6.4	740	8.9	.2	1	--
23...	1257	80513	160	176	143	6.5	740	8.7	.1	1	--
23...	1258	80513	170	176	147	6.5	740	8.6	.1	1	--
23...	1259	80513	176	176	148	6.5	740	8.5	.1	3	--
DEC											
07...	1154	80513	.00	180	147	7.6	738	14.6	9.4	96	4.90
07...	1155	80513	10.0	180	148	7.6	738	14.8	9.3	95	--
07...	1156	80513	20.0	180	150	7.7	738	14.6	9.3	94	--
07...	1157	80513	30.0	180	147	7.6	738	14.7	9.2	94	--
07...	1158	80513	40.0	180	149	7.5	738	14.7	8.7	89	--
07...	1159	80513	50.0	180	148	7.4	738	14.4	8.1	82	--
07...	1200	80513	60.0	180	149	7.3	738	14.3	7.7	78	--
07...	1201	80513	70.0	180	148	7.2	738	14.1	7.2	72	--
07...	1203	80513	76.0	180	147	6.9	738	13.4	3.4	33	--
07...	1204	80513	78.0	180	146	6.7	738	12.9	1.0	10	--
07...	1205	80513	80.0	180	145	6.7	738	11.9	.7	7	--
07...	1206	80513	90.0	180	142	6.7	738	11.0	1.4	13	--
07...	1207	80513	100	180	142	6.7	738	10.5	1.6	15	--
07...	1208	80513	110	180	140	6.7	738	10.1	1.7	15	--
07...	1209	80513	120	180	139	6.6	738	9.7	1.3	12	--
07...	1210	80513	130	180	138	6.6	738	9.5	.8	8	--
07...	1211	80513	140	180	140	6.6	738	9.0	.2	2	--
07...	1212	80513	150	180	142	6.6	738	8.8	.1	1	--
07...	1213	80513	160	180	146	6.6	738	8.6	.1	1	--
07...	1214	80513	170	180	149	6.7	738	8.6	.1	1	--
07...	1215	80513	180	180	158	6.8	738	8.4	.1	1	--

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
MAR											
23...	1217	80513	.00	188	138	8.0	741	9.0	11.9	106	6.30
23...	1219	80513	10.0	188	138	8.0	741	8.9	11.6	103	--
23...	1220	80513	20.0	188	138	8.0	741	8.9	11.6	103	--
23...	1221	80513	30.0	188	138	8.0	741	8.9	11.5	102	--
23...	1223	80513	40.0	188	138	8.0	741	8.9	11.5	102	--
23...	1224	80513	50.0	188	138	8.0	741	8.9	11.5	102	--
23...	1225	80513	60.0	188	138	7.9	741	8.2	11.3	99	--
23...	1226	80513	70.0	188	138	7.8	741	8.0	10.9	94	--
23...	1227	80513	80.0	188	137	7.8	741	8.0	10.7	93	--
23...	1229	80513	90.0	188	137	7.8	741	7.9	10.6	92	--
23...	1230	80513	100	188	137	7.8	741	7.9	10.5	91	--
23...	1231	80513	110	188	137	7.7	741	7.8	10.4	90	--
23...	1232	80513	120	188	137	7.7	741	7.8	12.2	105	--
23...	1233	80513	130	188	137	7.6	741	7.7	9.7	83	--
23...	1234	80513	140	188	137	7.6	741	7.7	9.3	80	--
23...	1235	80513	150	188	137	7.5	741	7.7	8.8	76	--
23...	1236	80513	160	188	138	7.5	741	7.7	8.6	74	--
23...	1237	80513	170	188	138	7.5	741	7.6	8.4	73	--
23...	1238	80513	180	188	139	7.5	741	7.6	8.4	72	--
23...	1239	80513	187	188	171	7.3	741	7.6	4.8	41	--
AUG											
24...	1157	80513	.00	180	144	8.4	742	28.3	8.7	116	5.40
24...	1158	80513	10.0	180	144	8.4	742	28.2	9.0	119	--
24...	1159	80513	20.0	180	144	8.4	742	28.1	8.8	116	--
24...	1200	80513	26.0	180	141	8.5	742	27.3	12.9	168	--
24...	1201	80513	27.0	180	138	8.6	742	25.8	13.6	173	--
24...	1202	80513	28.0	180	138	8.6	742	25.2	13.4	167	--
24...	1203	80513	30.0	180	138	8.5	742	24.2	11.6	142	--
24...	1204	80513	33.0	180	140	8.4	742	23.2	10.9	131	--
24...	1205	80513	36.0	180	140	8.1	742	22.2	9.3	110	--
24...	1206	80513	39.0	180	142	7.9	742	20.5	8.5	97	--
24...	1207	80513	40.0	180	142	7.8	742	20.1	8.4	95	--
24...	1208	80513	44.0	180	143	7.7	742	19.3	7.7	86	--
24...	1209	80513	50.0	180	143	7.7	742	17.7	5.9	64	--
24...	1210	80513	56.0	180	142	7.7	742	16.5	4.2	44	--
24...	1211	80513	60.0	180	142	7.6	742	15.9	3.7	39	--
24...	1212	80513	65.0	180	140	7.6	742	15.2	3.1	32	--
24...	1213	80513	70.0	180	140	7.5	742	14.8	3.0	31	--
24...	1214	80513	80.0	180	139	7.5	742	13.7	3.0	30	--
24...	1215	80513	90.0	180	138	7.4	742	12.6	3.1	30	--
24...	1216	80513	100	180	136	7.4	742	11.6	3.2	30	--
24...	1217	80513	110	180	136	7.4	742	10.7	3.1	29	--
24...	1218	80513	120	180	136	7.3	742	10.2	2.9	26	--
24...	1219	80513	130	180	137	7.3	742	9.8	2.7	24	--
24...	1220	80513	140	180	139	7.2	765	9.4	2.5	21	--
24...	1221	80513	150	180	139	7.2	742	9.2	2.1	18	--
24...	1222	80513	160	180	141	7.1	742	9.1	1.4	12	--
24...	1223	80513	170	180	142	7.1	742	9.0	.7	6	--
24...	1224	80513	180	180	143	7.0	742	9.0	.5	4	--
SEP											
22...	0941	80513	.00	185	143	8.6	748	23.2	8.1	97	5.00
22...	0942	80513	10.0	185	152	8.7	748	23.2	8.2	98	--
22...	0945	80513	20.0	185	149	8.7	748	23.2	8.2	98	--
22...	0946	80513	30.0	185	150	8.7	748	23.2	8.1	97	--
22...	0947	80513	37.0	185	150	8.0	748	22.0	6.1	71	--
22...	0948	80513	39.0	185	152	7.6	748	21.1	6.4	73	--
22...	0949	80513	40.0	185	151	7.5	748	20.9	5.8	67	--
22...	0950	80513	43.0	185	151	7.4	748	20.3	5.4	61	--
22...	0951	80513	46.0	185	151	7.3	748	19.6	5.0	56	--
22...	0952	80513	50.0	185	152	7.3	748	18.4	4.6	50	--
22...	0953	80513	55.0	185	153	7.2	748	17.7	3.9	42	--
22...	0954	80513	60.0	185	153	7.1	748	16.9	3.3	35	--
22...	0955	80513	66.0	185	151	7.0	748	15.8	2.4	25	--
22...	0956	80513	70.0	185	150	7.0	748	15.4	2.3	23	--
22...	0957	80513	80.0	185	150	6.9	748	14.2	2.1	21	--
22...	0958	80513	90.0	185	149	6.9	748	13.3	2.1	21	--
22...	0959	80513	100	185	147	6.8	748	12.6	2.4	23	--
22...	1000	80513	110	185	146	6.8	748	11.5	2.5	23	--
22...	1001	80513	120	185	144	6.8	748	10.8	2.4	22	--
22...	1002	80513	130	185	145	6.7	748	10.2	2.0	18	--
22...	1003	80513	140	185	145	6.7	748	9.8	1.6	14	--
22...	1004	80513	150	185	147	6.7	748	9.4	1.8	16	--
22...	1005	80513	160	185	148	6.7	748	9.2	1.1	9	--
22...	1006	80513	170	185	151	6.7	748	9.0	.8	7	--
22...	1007	80513	180	185	155	6.7	748	8.8	.8	7	--
22...	1008	80513	185	185	156	6.7	748	8.8	.9	8	--

WHITE RIVER BASIN

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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 mi².

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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 20...	1308	80513	151	6.4	751	13.1	6.9	67
NOV 23...	1321	80513	139	7.0	740	11.9	6.7	64
DEC 07...	1129	80513	146	6.9	745	9.3	7.6	67
MAR 23...	1157	80513	164	7.8	747	9.5	11.5	103
AUG 24...	1136	80513	137	7.8	740	14.6	8.4	86
SEP 22...	1028	80513	150	7.1	754	11.9	7.8	73

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	8.5	6.7	7.4	9.6	4.9	6.3	9.4	3.7	6.4
2	---	---	---	8.6	6.7	7.3	9.2	4.0	5.6	9.7	3.6	6.3
3	---	---	---	8.4	6.6	7.4	10.1	4.3	7.6	9.7	3.6	6.1
4	8.1	7.9	8.0	8.2	6.5	7.4	9.4	5.0	7.1	9.4	4.1	6.4
5	8.0	7.8	7.9	8.0	6.4	7.1	7.7	4.2	5.9	9.2	4.9	6.3
6	8.0	7.7	7.8	8.0	6.5	7.4	8.5	4.1	6.0	9.0	3.5	6.0
7	7.9	7.6	7.8	7.9	6.1	7.0	10.1	4.8	7.3	8.2	3.8	5.6
8	---	---	---	7.9	6.0	7.0	9.9	4.9	7.5	10.4	4.1	6.5
9	---	---	---	8.8	5.9	7.1	9.6	3.7	6.1	8.7	3.7	6.0
10	7.5	7.4	7.5	9.7	6.5	8.2	7.5	3.8	5.1	8.7	5.0	6.4
11	8.8	7.4	7.9	10.1	6.0	7.8	10.1	3.9	6.0	8.4	3.6	6.0
12	9.5	7.3	8.0	10.2	7.0	8.2	9.4	3.7	5.8	8.7	4.9	6.1
13	---	---	---	10.1	7.1	8.6	---	---	---	9.3	5.1	6.4
14	---	---	---	10.4	6.9	8.4	9.6	5.5	7.1	9.0	4.0	6.1
15	---	---	---	9.7	5.4	7.3	8.8	5.2	6.5	9.0	2.9	5.5
16	10.1	7.9	9.0	9.7	5.3	7.5	8.5	3.7	5.2	9.3	3.5	6.2
17	11.2	8.5	9.7	10.5	5.8	8.2	7.5	3.5	4.9	8.6	4.5	6.1
18	11.1	8.3	9.8	10.6	6.9	8.4	8.8	3.3	5.8	7.3	4.8	5.7
19	11.0	8.2	9.6	10.8	5.3	7.5	11.7	3.5	6.0	7.8	3.3	5.6
20	11.1	8.3	9.5	10.2	5.1	7.0	10.3	3.5	6.1	8.0	4.4	5.7
21	11.2	7.1	8.6	10.6	5.0	7.3	9.2	3.9	6.5	9.3	3.8	6.2
22	11.1	7.3	9.4	11.2	5.4	7.4	8.9	3.8	6.1	9.5	3.5	6.7
23	10.5	7.1	8.5	9.8	4.8	6.6	8.1	4.0	5.8	8.1	4.3	6.3
24	10.2	7.1	8.6	10.5	6.5	8.5	---	---	---	7.8	3.3	6.0
25	10.7	7.3	8.8	10.0	4.7	6.8	10.7	3.7	6.4	8.8	3.7	6.2
26	10.5	7.1	8.7	---	---	---	9.2	3.6	5.8	7.5	3.3	5.5
27	10.9	7.1	8.9	---	---	---	9.4	3.5	5.9	8.4	3.5	6.2
28	10.1	6.8	8.2	8.4	4.4	6.1	9.3	4.2	6.7	10.3	3.4	5.9
29	10.8	6.8	8.7	7.6	4.2	5.7	9.1	4.2	6.4	10.3	3.8	6.8
30	---	---	---	7.1	4.2	5.3	8.8	3.3	5.7	8.3	4.7	6.3
31	---	---	---	9.1	4.5	6.7	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	10.4	2.9	6.1

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	9.5	9.1	9.3	11.2	9.6	10.1	12.4	9.9	10.8
2	---	---	---	9.6	9.1	9.4	11.7	9.7	10.3	12.5	10.1	10.7
3	---	---	---	9.6	9.1	9.4	12.9	9.7	10.7	12.5	10.2	10.9
4	8.9	8.7	8.8	9.6	9.3	9.5	11.6	9.6	10.3	13.1	10.1	11.1
5	8.9	8.7	8.8	9.7	9.4	9.6	10.8	9.8	10.2	12.2	10.2	10.8
6	9.0	8.8	8.9	9.7	9.5	9.6	11.5	9.4	10.3	12.9	10.1	10.9
7	9.1	8.8	9.0	9.9	9.5	9.7	12.3	9.9	10.8	11.9	10.0	10.8
8	---	---	---	9.9	9.6	9.7	13.9	10.0	11.1	15.2	10.1	11.2
9	---	---	---	9.9	9.3	9.7	12.2	9.8	10.4	12.4	9.6	10.7
10	9.3	9.1	9.1	10.1	9.1	9.6	10.5	9.9	10.2	11.8	9.6	10.6
11	9.3	9.0	9.2	10.2	8.9	9.5	11.6	10.0	10.4	12.1	10.1	10.7
12	9.3	8.6	9.1	10.0	8.8	9.4	---	---	---	11.9	10.2	10.7
13	---	---	---	10.8	8.8	9.5	---	---	---	13.9	10.0	11.0
14	---	---	---	10.7	8.8	9.5	12.8	9.6	10.7	12.8	9.3	10.6
15	---	---	---	10.8	9.0	9.6	11.8	9.5	10.4	12.4	9.9	10.6
16	9.1	8.5	8.8	10.3	9.1	9.6	11.9	9.4	10.3	12.9	9.4	10.8
17	10.4	8.5	9.2	11.0	9.1	9.7	10.9	9.6	10.5	13.2	9.4	10.7
18	10.2	8.2	9.1	11.3	9.1	9.9	12.2	9.9	10.6	11.5	9.9	10.5
19	9.2	8.6	8.9	11.1	9.1	9.7	15.7	9.9	11.0	11.2	10.0	10.6
20	9.9	8.5	8.9	10.2	9.3	9.7	13.4	9.9	10.8	12.2	10.2	10.8
21	9.7	8.6	9.0	11.2	9.2	9.9	11.7	10.0	10.7	14.3	9.8	11.4
22	9.6	8.7	9.0	11.1	9.3	9.8	12.9	9.8	10.6	13.5	9.2	11.1
23	9.4	8.6	9.0	10.4	9.3	9.8	11.2	10.1	10.5	12.5	9.6	10.9
24	9.3	8.6	9.0	11.8	9.5	10.2	---	---	---	12.7	9.4	10.9
25	9.8	8.7	9.1	---	---	---	14.6	9.6	10.8	12.2	10.2	11.0
26	10.2	8.7	9.2	---	---	---	11.6	10.0	10.6	12.2	10.2	11.0
27	10.8	8.7	9.2	---	---	---	12.1	10.1	10.7	12.6	10.3	11.1
28	9.8	8.8	9.2	---	---	---	12.4	10.1	10.9	13.7	10.2	11.2
29	10.3	8.7	9.2	10.3	9.4	10.0	12.3	10.0	10.8	14.0	9.4	10.9
30	---	---	---	10.4	9.7	10.1	12.2	9.9	10.7	13.0	8.9	10.4
31	---	---	---	12.1	9.8	10.4	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	15.2	8.9	10.8

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DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER		
1	9.0	4.5	5.9	8.1	3.3	6.3	8.7	5.3	7.2
2	9.0	4.8	6.2	7.7	3.4	5.1	8.1	5.6	6.6
3	9.4	4.3	5.9	6.7	3.0	4.8	9.1	5.6	7.1
4	9.0	4.2	6.0	7.1	3.4	5.0	8.6	5.4	6.7
5	8.6	4.5	6.3	8.0	3.4	5.3	9.2	5.5	7.3
6	8.3	5.0	6.9	7.9	3.9	6.0	9.0	5.2	7.4
7	9.1	4.2	7.1	7.8	3.3	5.9	8.5	4.3	7.2
8	9.4	4.1	6.6	8.9	5.2	7.0	9.4	3.7	6.4
9	9.9	4.1	7.2	8.4	5.6	7.5	9.2	4.7	6.6
10	9.6	4.0	5.7	10.7	7.8	9.3	7.9	3.8	5.9
11	9.9	4.1	6.4	9.8	4.0	6.9	8.9	4.2	6.9
12	9.2	4.2	6.0	6.7	3.1	5.7	8.6	4.0	7.4
13	9.7	5.4	6.7	8.1	5.8	7.0	8.8	3.6	6.5
14	8.5	5.2	6.6	8.2	5.7	7.2	8.8	6.8	7.9
15	7.4	4.2	6.1	8.5	6.6	7.5	9.0	6.7	8.1
16	10.0	3.9	6.7	8.8	6.4	7.6	8.3	4.0	6.2
17	8.4	6.4	7.4	8.8	6.4	7.6	8.4	3.8	6.5
18	10.3	6.0	7.9	7.7	3.2	4.8	8.8	4.1	7.1
19	8.4	4.7	7.2	4.7	3.2	4.1	8.0	6.2	7.1
20	7.5	5.5	6.9	8.1	3.0	5.1	7.8	6.9	7.4
21	10.2	4.1	6.6	8.8	3.8	6.5	8.7	6.1	7.2
22	8.9	4.2	6.6	8.9	6.9	7.7	10.2	8.5	9.4
23	9.7	7.1	8.3	8.6	6.1	7.3	9.3	8.2	8.9
24	9.3	7.1	8.2	8.3	6.3	7.3	9.8	7.7	8.8
25	9.5	7.1	8.2	8.9	6.1	7.5	9.4	7.8	8.6
26	7.9	3.6	5.8	8.6	4.1	7.0	9.1	7.3	8.3
27	8.8	5.1	6.8	8.6	4.5	6.5	8.5	6.9	7.8
28	8.3	4.2	6.8	7.9	3.8	6.2	8.8	6.7	7.8
29	8.1	3.5	5.6	8.6	4.2	6.7	9.4	6.7	8.1
30	8.3	4.1	5.6	8.8	4.1	7.2	9.2	7.3	8.4
31	9.4	4.8	7.0	---	---	---	9.7	6.8	8.4
MONTH	10.3	3.5	6.7	10.7	3.0	6.5	10.2	3.6	7.5

WHITE RIVER BASIN

07049693 WHITE RIVER AT CAMPGROUND E NEAR BUSCH--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER		
1	12.4	9.7	11.0	12.2	9.8	11.0	11.6	9.7	10.4
2	12.0	9.7	10.3	11.6	9.9	10.4	10.4	8.3	9.7
3	14.4	9.6	11.0	10.8	9.8	10.2	11.9	10.1	10.8
4	13.8	9.8	10.9	9.9	9.3	9.6	11.4	10.0	10.4
5	12.7	10.1	11.5	9.8	8.9	9.3	12.8	9.6	10.9
6	11.5	9.9	10.9	11.7	9.1	10.3	12.2	10.4	11.3
7	14.1	9.7	11.8	10.2	8.8	9.8	10.9	8.9	9.5
8	13.7	9.5	11.2	10.1	9.3	9.7	10.4	8.4	9.3
9	13.5	9.6	11.1	11.0	9.1	9.7	9.6	7.2	8.6
10	13.9	9.5	10.5	12.3	8.9	10.9	9.7	8.3	8.7
11	13.6	9.4	10.6	11.5	7.4	9.8	9.1	7.4	8.3
12	14.2	9.6	10.5	10.1	8.5	9.7	9.7	8.0	8.2
13	12.6	8.7	10.1	10.2	8.9	9.6	10.4	8.5	9.4
14	12.8	9.3	10.8	11.6	10.1	10.6	9.5	7.0	8.2
15	12.3	9.8	11.1	11.8	9.6	10.4	9.6	6.5	8.0
16	14.1	9.8	11.7	11.6	8.6	10.0	10.4	7.3	8.8
17	14.0	12.8	13.3	11.9	9.1	10.2	10.2	7.2	8.8
18	14.6	11.7	12.9	10.4	9.1	10.0	10.1	8.8	9.1
19	13.1	9.2	11.5	10.3	9.7	10.1	8.9	7.9	8.6
20	11.5	8.7	10.7	11.1	8.7	9.7	9.0	7.7	8.2
21	13.6	9.7	11.0	10.9	8.4	9.5	9.0	5.6	7.8
22	12.5	8.5	10.4	10.7	7.8	9.2	6.1	4.1	5.1
23	11.7	8.8	10.2	12.1	9.4	10.4	6.2	5.2	5.7
24	10.9	8.7	9.9	10.3	8.7	9.5	7.2	5.2	6.1
25	12.2	9.0	10.6	12.6	9.8	10.9	6.9	4.7	5.9
26	10.9	9.3	10.1	11.0	8.3	9.7	8.1	5.4	6.7
27	12.4	9.2	10.7	11.6	9.0	10.2	8.9	6.5	7.7
28	11.7	9.8	10.9	12.8	10.0	10.7	8.4	6.4	7.6
29	12.7	9.8	10.5	12.9	10.4	11.8	7.8	6.4	7.3
30	11.9	9.6	10.4	12.8	10.0	11.7	8.7	5.5	6.9
31	13.4	9.8	11.4	---	---	---	8.3	6.4	7.5
MONTH	14.6	8.5	11.0	12.9	7.4	10.2	12.8	4.1	8.4

WHITE RIVER BASIN

99

07050500 KINGS RIVER NEAR BERRYVILLE

LOCATION.--Lat 36°25'36", 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 mi².

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.--WRD Ark. 1995: 1991 (M), 1992 (M), 1993 (M), 1994 (M).

GAGE.--Water-stage recorder. Datum of gage is 963.10 ft above sea level. 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.--Water-discharge records good, except estimated daily discharges which are fair. 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	63	243	207	885	241	467	728	452	10400	58	30
2	38	95	320	1240	764	233	444	637	387	3960	54	28
3	34	93	298	2210	642	223	2140	577	354	2040	53	26
4	32	90	270	1090	548	213	5510	1060	316	1220	51	25
5	119	115	260	721	480	204	2940	4220	276	829	50	25
6	611	126	280	588	676	198	3270	2220	245	627	48	22
7	1900	123	302	549	5330	189	2250	1180	220	520	47	20
8	677	156	303	532	3540	417	1710	793	202	433	44	22
9	420	169	305	479	1960	1170	1420	612	185	372	42	23
10	309	277	276	428	1320	1050	1330	512	400	347	43	21
11	237	515	250	384	1130	722	1080	485	1230	321	41	21
12	189	528	250	360	1570	600	932	723	1050	283	38	22
13	162	411	1820	345	1140	1380	819	1150	528	252	33	26
14	140	343	1880	328	867	2460	827	831	997	227	32	28
15	122	288	e1000	307	732	2290	1010	613	632	207	30	27
16	106	252	e800	285	647	3200	1050	504	452	188	27	24
17	97	229	e600	274	568	3820	911	513	388	174	25	22
18	109	206	e500	290	512	2390	808	1290	325	160	24	20
19	109	e220	e400	301	469	1670	721	1250	282	147	23	19
20	153	e260	e370	291	430	1400	661	761	256	138	22	18
21	170	e240	329	273	388	1310	609	593	234	129	21	17
22	149	e230	319	271	357	1090	568	543	213	118	20	18
23	130	e220	334	323	334	927	533	705	201	109	29	18
24	115	e200	314	423	314	786	490	1080	201	102	35	18
25	102	e180	289	457	297	675	485	743	1560	94	30	16
26	91	e170	265	426	282	584	764	651	1260	86	44	15
27	85	e155	251	394	269	524	1520	684	723	81	67	14
28	79	144	241	385	252	486	1330	517	515	77	53	12
29	74	136	232	377	---	474	1020	440	465	72	47	12
30	70	165	217	378	---	520	859	620	6000	66	39	13
31	66	---	205	581	---	502	---	555	---	62	33	---
TOTAL	6738	6399	13723	15497	26703	31948	38478	27790	20549	23841	1203	622
MEAN	217	213	443	500	954	1031	1283	896	685	769	38.8	20.7
MAX	1900	528	1880	2210	5330	3820	5510	4220	6000	10400	67	30
MIN	32	63	205	207	252	189	444	440	185	62	20	12
AC-FT	13360	12690	27220	30740	52970	63370	76320	55120	40760	47290	2390	1230
CFSM	.41	.40	.84	.95	1.81	1.96	2.43	1.70	1.30	1.46	.07	.04
IN.	.48	.45	.97	1.09	1.88	2.26	2.72	1.96	1.45	1.68	.08	.04

WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	199	570	510	591	830	1011	1236	1274	515	226	108	125
MAX	1471	2330	2100	2119	2792	3472	5184	4570	2494	1252	923	789
(WY)	1971	1975	1969	1950	1951	1945	1945	1961	1957	1960	1950	1970
MIN	1.49	6.14	14.0	12.9	35.7	94.3	128	199	38.2	9.21	1.08	4.25
(WY)	1964	1964	1964	1964	1964	1972	1963	1963	1972	1954	1954	1953

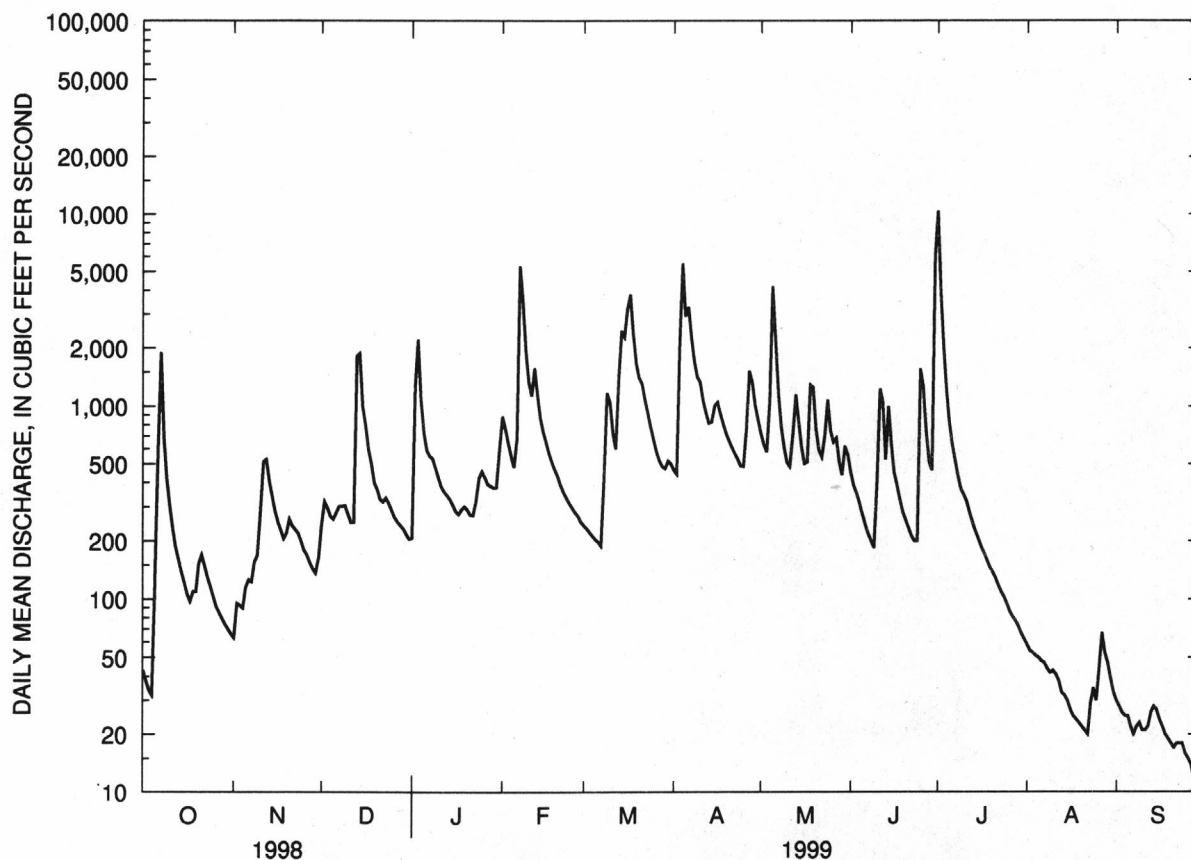
SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1939-75,1993-95,1999

ANNUAL TOTAL	213491	
ANNUAL MEAN	585	596
HIGHEST ANNUAL MEAN		1251 1945
LOWEST ANNUAL MEAN		88.3 1954
HIGHEST DAILY MEAN	10400 Jul 1	37300 Apr 15 1945
LOWEST DAILY MEAN	12 Sep 28	.20 Aug 17 1954
ANNUAL SEVEN-DAY MINIMUM	14 Sep 24	.40 Aug 13 1954
INSTANTANEOUS PEAK FLOW	14600 Jul 1	66000 Nov 19 1985
INSTANTANEOUS PEAK STAGE	17.33 Jul 1	38.91 Nov 19 1985
INSTANTANEOUS LOW FLOW	11 Sep 28,29	.10 Aug 27-28 1954
ANNUAL RUNOFF (AC-FT)	423500	431600
ANNUAL RUNOFF (CFSM)	1.11	1.13
ANNUAL RUNOFF (INCHES)	15.07	15.36
10 PERCENT EXCEEDS	1270	1360
50 PERCENT EXCEEDS	309	179
90 PERCENT EXCEEDS	29	20

°Estimated



WHITE RIVER BASIN

101

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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV 23...	1330	80513	81213	212	258	8.7	740	13.0	12.9	126
FEB 09...	1200	80513	81213	1930	180	7.9	736	11.7	10.5	100
MAR 08...	1800	80513	81213	570	213	6.4	735	8.4	11.2	99
APR 13...	1030	80513	81213	850	197	8.7	738	15.7	9.4	97
MAY 05...	0700	80513	81213	4030	--	--	--	--	--	--
05...	1600	80513	81213	6270	--	--	--	--	--	--
06...	0825	80513	81213	2390	--	--	--	--	--	--
JUN 08...	1500	80513	81213	199	232	8.2	737	29.0	9.3	126
25...	1545	80513	81213	2030	--	--	--	--	--	--
26...	0845	80513	81213	1370	--	--	--	--	--	--
30...	1945	80513	81213	12200	--	--	--	--	--	--
AUG 24...	1600	80513	81213	35	318	7.7	734	28.4	8.3	111
DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	STREP-TOCOCCI FECAL, KF AGAR PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV 23...	23	23	20	110	34	6.4	7.6	13	.3	1.7
FEB 09...	360	190	200	77	23	4.8	1.9	5	.1	1.3
MAR 08...	--	--	--	--	--	--	--	--	--	--
APR 13...	56	52	44	93	29	5.1	2.8	6	.1	1.2
MAY 05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
JUN 08...	K13	K6	20	110	35	6.4	3.9	7	.2	1.7
25...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
AUG 24...	26	23	K23	120	34	8.5	24	29	1	3.9
DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)
NOV 23...	7.7	6.4	142	--	--	<.010	--	.520	<.010	--
FEB 09...	5.4	3.1	108	1.39	6.1	.014	.05	1.40	--	--
MAR 08...	--	--	--	--	--	--	--	.980	.038	.05
APR 13...	5.3	3.4	114	--	--	<.010	--	.980	.020	.03
MAY 05...	--	--	--	--	--	<.010	--	.580	.020	.03
05...	--	--	--	--	--	<.010	--	.370	.020	.03
06...	--	--	--	--	--	<.010	--	.530	.020	.03
JUN 08...	5.2	3.8	138	.480	2.1	.010	.03	.490	<.010	--
25...	--	--	--	.770	3.4	.010	.03	.780	.030	.04
26...	--	--	--	.800	3.5	.010	.03	.810	.030	.04
30...	--	--	--	--	--	<.010	--	.650	.040	.05
AUG 24...	8.8	16	201	--	--	<.010	--	.110	.040	.05

WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH- DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH- DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED: SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 23...	--	<.20	--	.170	.160	.140	.43	34	19	95
FEB 09...	--	.30	1.7	.070	.100	--	--	53	276	93
MAR 08...	.30	.34	1.3	.270	--	.130	.40	--	--	--
APR 13...	--	<.20	--	.070	E.070	.060	.18	67	154	83
MAY 05...	1.8	1.8	2.4	.360	E.060	.050	.15	--	--	--
05...	1.5	1.5	1.9	.230	<.020	<.010	--	--	--	--
06...	.32	.34	.87	.060	E.030	.010	.03	--	--	--
JUN 08...	--	<.20	--	.100	E.080	.090	.28	44	24	95
25...	1.4	1.4	2.2	.200	E.050	.060	.18	--	--	--
26...	.84	.87	1.7	.120	E.050	.070	.21	--	--	--
30...	2.5	2.5	3.2	.400	E.100	.080	.25	--	--	--
AUG 24...	.30	.34	.45	.740	.700	.720	2.2	63	6.0	99

WHITE RIVER BASIN

103

07053250 YOCUM CREEK NEAR OAK GROVE

LOCATION.--Lat 36°27'17", long 93°21'21", in SW1/4NE1/4 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 downstream from Stillhouse Creek, and 4.7 mi east of Oak Grove.

DRAINAGE AREA.--52.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to current year. Occasional low-flow measurements 1964-67, 1987-88.

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 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	8.1	10	12	140	17	43	34	40	259	19	12
2	8.1	9.6	e18	32	98	14	38	32	34	208	16	11
3	8.7	8.8	e14	47	74	13	e350	29	30	140	13	12
4	9.6	9.9	e12	37	49	15	e300	39	27	111	14	11
5	8.7	10	e12	39	38	14	e160	85	25	94	16	11
6	8.4	9.2	e12	38	52	12	120	62	23	79	20	10
7	8.4	10	e11	39	354	13	98	49	21	65	20	9.2
8	e11	12	e11	46	176	63	90	40	19	54	16	8.5
9	e10	12	e11	41	118	97	79	35	18	44	17	7.9
10	e9.0	15	e11	32	101	66	70	31	124	39	14	7.7
11	e8.0	15	11	32	103	54	61	28	185	33	11	8.2
12	e8.0	16	12	35	101	45	53	76	142	27	13	10
13	e8.0	13	21	22	83	82	47	75	102	23	18	9.2
14	e7.0	13	32	20	76	124	56	57	86	24	19	7.9
15	e7.0	13	26	21	68	136	69	51	71	21	23	7.7
16	e8.0	12	23	20	52	255	56	50	62	18	22	7.5
17	e9.0	11	19	23	48	287	49	62	44	16	17	7.4
18	e13	10	19	19	40	189	45	77	37	15	17	7.6
19	11	10	14	19	33	142	42	53	34	17	16	8.7
20	10	10	13	20	27	125	38	44	32	20	15	8.9
21	9.7	9.8	13	25	23	112	36	41	29	18	16	8.5
22	8.9	11	12	20	24	101	35	40	29	17	18	8.4
23	8.4	11	13	20	23	92	32	39	24	16	152	7.4
24	8.2	9.5	12	24	22	84	30	36	24	18	88	7.2
25	9.2	9.3	12	27	20	74	34	35	22	20	45	7.3
26	9.0	9.3	12	32	17	69	49	30	21	18	31	8.4
27	8.0	10	13	32	17	63	60	27	21	14	24	8.4
28	7.4	9.4	12	24	16	56	49	25	20	15	19	7.5
29	7.2	10	10	22	---	51	42	24	23	19	17	7.7
30	7.8	13	10	34	---	46	38	31	180	17	15	7.6
31	7.3	---	9.6	163	---	43	---	50	---	16	14	---
TOTAL	270.2	329.9	440.6	1017	1993	2554	2269	1387	1549	1495	775	261.8
MEAN	8.72	11.0	14.2	32.8	71.2	82.4	75.6	44.7	51.6	48.2	25.0	8.73
MAX	13	16	32	163	354	287	350	85	185	259	152	12
MIN	7.0	8.1	9.6	12	16	12	30	24	18	14	11	7.2
AC-FT	536	654	874	2020	3950	5070	4500	2750	3070	2970	1540	519
CFSM	.17	.21	.27	.62	1.35	1.56	1.43	.85	.98	.91	.47	.17
IN.	.19	.23	.31	.72	1.40	1.80	1.60	.98	1.09	1.05	.55	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

MEAN	13.9	73.0	41.1	79.6	73.1	107	87.8	60.2	42.2	28.7	17.5	19.6
MAX	21.3	233	68.3	208	134	175	144	99.9	104	63.2	25.0	45.0
(WY)	1994	1997	1997	1998	1998	1998	1994	1995	1995	1993	1999	1996
MIN	7.71	11.0	14.2	21.9	27.3	52.5	52.3	27.5	12.3	12.8	11.9	8.73
(WY)	1995	1999	1999	1997	1996	1995	1998	1997	1998	1997	1994	1999

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

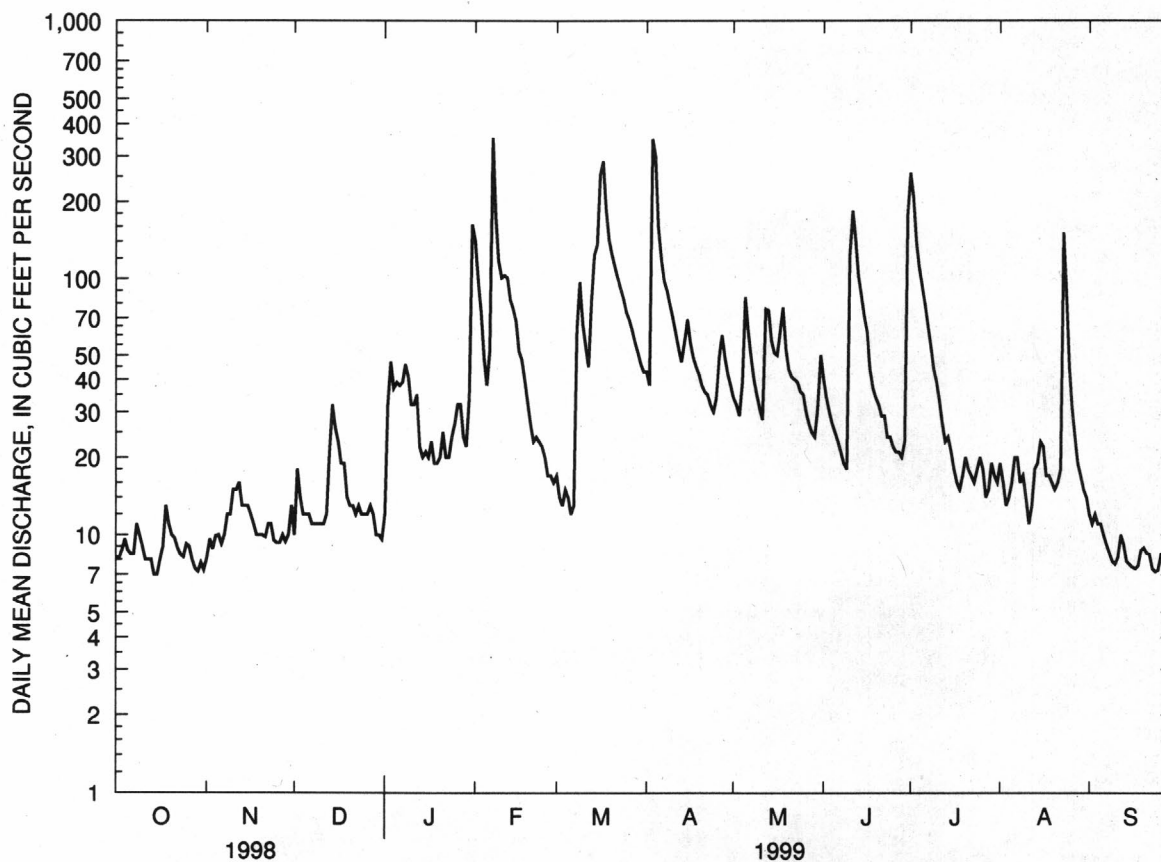
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1993 - 1999

ANNUAL TOTAL	21354.0		14341.5		
ANNUAL MEAN	58.5		39.3		52.4
HIGHEST ANNUAL MEAN					63.0
LOWEST ANNUAL MEAN					39.3
HIGHEST DAILY MEAN	1940	Jan 5	354	Feb 7	1940
LOWEST DAILY MEAN	2.5	Feb 9	7.0	Oct 14	2.5
ANNUAL SEVEN-DAY MINIMUM	3.0	Feb 4	7.7	Sep 23	3.0
INSTANTANEOUS PEAK FLOW			1130	Jun 10	^a 3740
INSTANTANEOUS PEAK STAGE			7.40	Jun 10	10.05
INSTANTANEOUS LOW FLOW			5.3	Oct 1	2.3
ANNUAL RUNOFF (AC-FT)	42360		28450		37980
ANNUAL RUNOFF (CFSM)	1.11		.74		.99
ANNUAL RUNOFF (INCHES)	15.04		10.10		13.49
10 PERCENT EXCEEDS	148		91		121
50 PERCENT EXCEEDS	14		21		25
90 PERCENT EXCEEDS	8.4		8.5		9.5

^aFrom rating curve extended above 930 ft³/s^eEstimated

WHITE RIVER BASIN

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07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
OCT												
21...	0730	80513	80020	9.9	379	7.9	747	16.0	7.8	81	110	53
NOV												
19...	0840	80513	80020	9.9	387	7.9	740	13.9	8.6	86	55	24
DEC												
07...	1330	80513	80020	--	386	8.2	740	13.0	10.7	105	28	20
JAN												
06...	1235	80513	80020	51	384	8.4	738	8.4	13.1	115	K12	27
FEB												
18...	0815	80513	80020	40	359	8.1	735	9.5	9.9	90	200	130
MAR												
23...	1255	80513	80020	93	325	8.4	769	13.1	9.9	93	32	30
APR												
07...	1015	80513	80020	96	325	8.1	742	14.0	11.2	112	450	210
21...	1115	80513	80020	35	336	7.8	731	17.1	13.5	146	--	--
MAY												
11...	0815	80513	80020	26	353	8.1	724	15.7	8.9	95	220	230
25...	1200	80513	80020	40	360	8.0	738	17.2	9.9	107	--	--
JUN												
08...	1625	80513	80020	19	345	8.1	738	25.1	9.9	125	270	150
21...	1220	80513	80020	29	361	8.1	741	19.7	9.1	103	--	--
JUL												
07...	1350	80513	80020	64	357	7.9	743	23.5	8.4	102	320	220
20...	0900	80513	80020	22	378	8.0	750	22.2	8.3	97	--	--
AUG												
04...	1720	80513	80020	15	346	8.2	738	25.5	9.6	121	370	280
25...	1210	80513	80020	45	336	7.8	760	21.5	7.2	82	--	--
SEP												
07...	1345	80513	80020	9.6	353	8.1	738	26.0	9.5	121	48	43
22...	1415	80513	80020	8.8	354	7.8	760	20.8	9.9	111	--	--

DATE	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT FET FIELD (MG/L AS CACO3) (00418)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
OCT												
21...	170	170	21	63	2.8	4.2	5	.1	2.2	147	0	181
NOV												
19...	110	180	29	68	3.1	4.6	5	.1	2.2	151	0	187
DEC												
07...	81	180	24	67	3.1	5.2	6	.2	2.2	155	0	190
JAN												
06...	69	170	28	64	3.3	5.5	6	.2	2.1	145	0	176
FEB												
18...	86	150	17	56	3.2	4.2	6	.1	2.4	141	0	167
MAR												
23...	51	150	34	54	3.1	4.3	6	.2	2.7	117	0	139
APR												
07...	72	150	18	55	3.5	4.5	6	.2	2.6	132	0	163
MAY												
11...	46	160	12	59	3.5	4.5	6	.2	2.5	148	0	181
JUN												
08...	230	170	27	61	3.5	4.7	6	.2	2.5	138	0	169
JUL												
07...	<1	170	36	62	3.7	4.5	5	.1	3.1	133	0	162
AUG												
04...	190	--	--	--	--	--	--	--	--	133	0	163
SEP												
07...	58	170	21	62	3.2	4.4	5	.1	2.8	146	0	179

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY RECORDS

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS (39086)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SiO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3 (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)
OCT 21...	148	4.8	11	<.10	10	223	203	.30	5.96	--	--	<.010
NOV 19...	153	4.8	11	<.10	9.8	223	210	.30	5.96	--	--	<.010
DEC 07...	155	5.3	13	<.10	9.5	225	213	.31	--	--	--	<.010
JAN 06...	144	6.6	12	<.10	7.6	219	210	.30	30.2	--	--	<.010
FEB 18...	137	5.0	9.5	<.10	8.2	204	197	.28	22.0	--	--	<.010
MAR 23...	114	5.6	8.9	<.10	8.8	191	178	.26	48.0	--	--	<.010
APR 07...	133	5.8	8.0	<.10	8.0	193	184	.26	50.0	--	--	<.010
MAY 11...	148	4.9	8.3	<.10	9.6	205	181	.28	14.4	--	--	<.010
JUN 08...	139	5.3	9.9	<.10	12	208	196	.28	10.7	3.22	14	.010
JUL 07...	133	4.7	8.4	<.10	11	245	197	.33	42.3	--	--	<.010
AUG 04...	133	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	146	4.6	9.8	<.10	11	206	201	.28	5.34	--	--	<.010

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4 (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L) AS N (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L) AS N (00623)	NITRO- GEN, TOTAL (MG/L) AS N (00600)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00602)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)
OCT 21...	--	3.49	<.020	--	--	--	.10	.11	3.6	3.6	.040
NOV 19...	--	3.19	<.020	--	--	--	<.10	<.10	--	--	.039
DEC 07...	--	3.18	.022	.03	--	--	<.10	<.10	--	--	.030
JAN 06...	--	5.22	<.020	--	--	--	<.10	.21	--	5.4	.034
FEB 18...	--	5.98	<.020	--	--	--	E.08	.13	--	6.1	.051
MAR 23...	--	4.97	<.020	--	--	--	.13	.15	5.1	5.1	.066
APR 07...	--	3.67	<.020	--	--	--	.20	.19	3.9	3.9	.075
MAY 11...	--	<.050	.057	.07	.10	--	.16	E.10	--	--	.052
JUN 08...	.03	3.23	.030	.04	.18	.13	.21	.16	3.4	3.4	.053
JUL 07...	--	4.52	.030	.04	.17	.11	.20	.14	4.7	4.7	.084
SEP 07...	--	3.32	<.020	--	--	--	<.10	<.10	--	--	.051

DATE	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS PO4 (00660)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (39632)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)
OCT 21...	.038	.028	.09	<10	<3.0	86	2.3	41	--	--	--
NOV 19...	.038	.028	.09	<10	E1.5	96	2.6	74	--	--	--
DEC 07...	.029	.030	.09	<10	<3.0	89	--	81	--	--	--
JAN 06...	.031	.029	.09	<10	<3.0	52	7.2	83	--	--	--
FEB 18...	.045	.035	.11	<10	<3.0	80	8.6	92	--	--	--
MAR 23...	.063	.043	.13	<10	<3.0	30	7.5	99	--	--	--
APR 07...	.066	.060	.18	E5.5	E1.8	41	11	100	--	--	--
MAY 21...	--	--	--	--	--	--	--	--	<.001	<.002	<.001
MAY 11...	<.004	.020	.06	<10	E2.5	79	5.5	54	<.001	<.002	<.001
JUN 25...	--	--	--	--	--	60	6.5	66	.009	<.002	<.001
JUN 08...	.049	.041	.13	<10	E1.7	41	2.1	78	<.001	<.002	<.001
JUL 21...	--	--	--	--	--	--	--	--	.006	<.002	<.001
JUL 07...	.078	.072	.22	<10	E2.8	81	14	52	<.001	<.002	<.001
AUG 20...	--	--	--	--	--	--	--	--	<.001	<.002	<.001
AUG 04...	--	--	--	--	--	81	3.3	59	<.001	<.002	<.001
SEP 25...	--	--	--	--	--	--	--	--	<.001	<.002	<.001
SEP 07...	.054	.033	.10	<10	<3.0	41	1.1	83	<.001	<.002	<.001

WHITE RIVER BASIN

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07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY RECORDS

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	PARA- THION, DIS- SOLVED (UG/L) (39542)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	BUTYL- ATE, WATER, DISS, REC, (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	FONOFOS WATER DISS REC (UG/L) (04095)
APR 21...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
MAY 11...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
MAY 25...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
JUN 08...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
JUN 21...	<.004	<.005	.005	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
JUL 07...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
JUL 20...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
AUG 04...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
AUG 25...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
SEP 07...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
DATE	P, P' DDE DISSOLV (UG/L) (34653)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)
APR 21...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
MAY 11...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
MAY 25...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUN 08...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUN 21...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUL 07...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUL 20...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
AUG 04...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
AUG 25...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
SEP 07...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
DATE	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
APR 21...	<.0060	<.0020	<.0040	E.0079	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
MAY 11...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
MAY 25...	<.0060	<.0020	<.0040	E.0078	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUN 08...	<.0060	<.0020	<.0040	.0112	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUN 21...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUL 07...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUL 20...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
AUG 04...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
AUG 25...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
SEP 07...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
DATE	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)
APR 21...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY 11...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY 25...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUN 08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUN 21...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL 07...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL 20...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
AUG 04...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
AUG 25...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
SEP 07...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

WHITE RIVER BASIN

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 mi².

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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	SAM- PLING DEPTH (FEET) (000003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (000400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (000300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
20...	0928	80513	.00	199	206	7.7	752	20.9	7.9	90	4.90
20...	0929	80513	10.0	199	206	7.7	752	21.0	7.8	89	--
20...	0930	80513	20.0	199	206	7.7	752	21.0	7.7	88	--
20...	0931	80513	30.0	199	207	7.7	752	20.9	7.8	88	--
20...	0932	80513	40.0	199	206	7.7	752	20.9	7.7	88	--
20...	0934	80513	49.0	199	220	7.2	752	20.1	2.5	28	--
20...	0935	80513	50.0	199	223	7.0	752	19.5	1.5	16	--
20...	0936	80513	51.0	199	222	7.0	752	19.0	.5	5	--
20...	0937	80513	52.0	199	229	6.9	752	18.1	.3	3	--
20...	0938	80513	54.0	199	232	6.9	752	17.6	.3	3	--
20...	0940	80513	60.0	199	237	6.9	752	16.3	.4	4	--
20...	0941	80513	68.0	199	233	6.9	752	15.4	.4	4	--
20...	0942	80513	70.0	199	232	6.9	752	15.2	.4	4	--
20...	0943	80513	80.0	199	223	6.9	752	14.2	.4	4	--
20...	0944	80513	90.0	199	204	6.8	752	13.5	.4	4	--
20...	0945	80513	100	199	199	6.7	752	12.9	.9	9	--
20...	0946	80513	110	199	194	6.7	752	12.5	1.2	11	--
20...	0947	80513	120	199	205	6.7	752	12.0	.9	9	--
20...	0948	80513	130	199	218	6.7	752	11.6	.6	5	--
20...	0949	80513	140	199	224	6.7	752	11.3	.5	4	--
20...	0950	80513	150	199	233	6.7	752	10.7	.5	4	--
20...	0951	80513	160	199	233	6.7	752	10.2	.5	4	--
20...	0952	80513	170	199	240	6.7	752	9.8	.5	4	--
20...	0953	80513	180	199	244	6.7	752	9.5	.5	5	--
20...	0954	80513	190	199	246	6.7	752	9.2	.5	4	--
20...	0955	80513	199	199	250	6.7	752	9.0	.5	5	--
NOV											
19...	1022	80513	.00	176	205	7.6	746	15.7	7.6	78	4.20
19...	1023	80513	10.0	176	206	7.6	746	15.7	7.6	78	--
19...	1024	80513	20.0	176	206	7.6	746	15.7	7.6	78	--
19...	1025	80513	30.0	176	206	7.0	746	15.0	7.5	76	--
19...	1026	80513	40.0	176	206	7.0	746	15.7	7.5	77	--
19...	1027	80513	50.0	176	207	7.5	746	15.6	6.9	71	--
19...	1028	80513	60.0	176	207	7.5	746	15.5	6.6	67	--
19...	1029	80513	70.0	176	208	7.4	746	15.3	5.4	55	--
19...	1030	80513	80.0	176	212	7.2	746	15.0	3.7	37	--
19...	1032	80513	83.0	176	215	7.0	746	14.1	.2	2	--
19...	1033	80513	90.0	176	204	7.0	746	13.3	.1	1	--
19...	1034	80513	100	176	199	6.9	746	12.8	.1	1	--
19...	1035	80513	110	176	197	6.9	746	12.6	.1	1	--
19...	1036	80513	120	176	203	6.9	746	12.1	.1	1	--
19...	1037	80513	130	176	209	6.9	746	11.7	.1	1	--
19...	1038	80513	140	176	218	6.9	746	11.1	.1	1	--
19...	1039	80513	150	176	227	6.9	746	10.6	.1	1	--
19...	1040	80513	160	176	230	6.9	746	10.2	.1	1	--
19...	1041	80513	170	176	232	6.9	746	10.0	.1	1	--
19...	1042	80513	176	176	233	6.9	746	9.8	.1	1	--
DEC											
08...	0754	80513	.00	176	218	7.9	750	14.3	8.3	82	3.40
08...	0755	80513	10.0	176	219	7.9	750	14.4	8.2	82	--
08...	0756	80513	20.0	176	219	7.9	750	14.4	8.2	81	--
08...	0757	80513	30.0	176	219	7.8	750	14.5	8.1	81	--
08...	0758	80513	40.0	176	219	7.8	750	14.5	8.1	81	--
08...	0759	80513	50.0	176	219	7.8	750	14.5	8.1	81	--
08...	0800	80513	60.0	176	217	7.8	750	14.6	8.0	80	--
08...	0801	80513	70.0	176	219	7.8	750	14.5	7.5	75	--
08...	0802	80513	80.0	176	221	7.4	750	14.3	4.6	46	--
08...	0803	80513	90.0	176	215	7.2	750	13.5	.5	5	--
08...	0804	80513	100	176	214	7.1	750	12.7	.2	2	--
08...	0805	80513	110	176	206	7.1	750	12.4	.2	1	--
08...	0806	80513	120	176	213	7.1	750	12.0	.1	1	--
08...	0807	80513	130	176	216	7.0	750	11.7	.1	1	--
08...	0808	80513	140	176	223	7.1	750	11.4	.1	1	--
08...	0809	80513	150	176	233	7.1	750	10.8	.1	1	--
08...	0810	80513	160	176	242	7.1	750	10.3	.1	1	--
08...	0811	80513	170	176	244	7.1	750	10.1	.1	1	--
08...	0812	80513	176	176	246	7.1	750	10.0	.1	1	--

WHITE RIVER BASIN

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07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	SAM- PLING DEPTH (FEET) (000003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (004000)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
MAR											
23...	0937	80513	.00	176	208	8.3	746	9.1	11.9	105	4.30
23...	0938	80513	10.0	176	208	8.3	746	9.1	11.9	105	--
23...	0940	80513	20.0	176	208	8.3	746	9.1	11.9	105	--
23...	0941	80513	30.0	176	207	8.3	746	9.1	11.9	105	--
23...	0942	80513	40.0	176	208	8.3	746	9.0	11.8	105	--
23...	0947	80513	50.0	176	208	8.3	746	9.0	11.8	105	--
23...	0948	80513	60.0	176	208	8.2	746	8.9	11.8	104	--
23...	0949	80513	70.0	176	208	8.1	746	8.0	11.4	98	--
23...	0950	80513	80.0	176	207	8.1	746	7.9	11.0	95	--
23...	0951	80513	90.0	176	209	8.1	746	7.8	11.0	95	--
23...	0953	80513	100	176	208	8.1	746	7.8	11.0	95	--
23...	0954	80513	110	176	208	8.1	746	7.8	11.0	94	--
23...	0955	80513	120	176	209	8.0	746	7.7	10.9	94	--
23...	0956	80513	130	176	209	8.0	746	7.7	10.9	93	--
23...	0957	80513	140	176	210	8.0	746	7.7	10.9	93	--
23...	0958	80513	150	176	209	8.0	746	7.7	10.9	93	--
23...	0959	80513	160	176	225	7.9	746	7.6	10.3	88	--
23...	1000	80513	170	176	258	7.7	746	7.3	8.4	71	--
23...	1002	80513	176	176	267	7.7	746	7.2	7.2	61	--
JUN											
16...	1348	80513	.00	200	191	8.5	755	25.0	9.9	121	7.10
16...	1349	80513	10.0	200	192	8.5	755	25.0	10.1	124	--
16...	1350	80513	16.0	200	192	8.5	755	24.6	10.6	129	--
16...	1351	80513	18.0	200	200	8.5	755	23.2	10.6	126	--
16...	1352	80513	20.0	200	209	8.4	755	21.7	10.3	118	--
16...	1353	80513	22.0	200	213	8.3	755	20.5	9.0	101	--
16...	1354	80513	24.0	200	214	8.1	755	19.7	7.9	87	--
16...	1355	80513	26.0	200	218	8.0	755	18.8	7.2	78	--
16...	1356	80513	28.0	200	223	8.0	755	18.0	6.7	72	--
16...	1357	80513	30.0	200	221	7.9	755	17.5	6.2	66	--
16...	1358	80513	35.0	200	229	7.8	755	17.0	5.6	58	--
16...	1359	80513	40.0	200	231	7.8	755	16.5	5.0	52	--
16...	1400	80513	50.0	200	225	7.8	755	15.7	5.3	54	--
16...	1401	80513	60.0	200	226	7.7	755	14.9	4.8	48	--
16...	1402	80513	70.0	200	231	7.7	755	13.9	4.7	46	--
16...	1403	80513	80.0	200	225	7.7	755	13.2	5.0	48	--
16...	1404	80513	90.0	200	222	7.7	755	12.6	5.3	51	--
16...	1405	80513	100	200	225	7.7	755	11.9	5.4	50	--
16...	1406	80513	110	200	229	7.7	755	11.5	5.3	49	--
16...	1407	80513	120	200	229	7.7	755	10.7	5.4	49	--
16...	1408	80513	130	200	232	7.7	755	10.1	5.5	50	--
16...	1409	80513	140	200	237	7.6	755	9.6	5.4	48	--
16...	1410	80513	150	200	245	7.6	755	9.1	4.9	43	--
16...	1411	80513	160	200	255	7.6	755	8.9	4.3	37	--
16...	1412	80513	170	200	257	7.5	755	8.8	4.0	35	--
16...	1413	80513	180	200	255	7.5	755	8.8	3.9	34	--
16...	1414	80513	190	200	254	7.5	755	8.7	3.8	33	--
16...	1415	80513	200	200	254	7.4	755	8.7	3.5	30	--
JUL											
28...	0842	80513	.00	181	192	8.4	754	31.4	7.5	104	5.20
28...	0844	80513	10.0	181	193	8.4	754	31.5	7.5	103	--
28...	0847	80513	17.0	181	189	8.6	754	30.3	9.6	129	--
28...	0848	80513	18.0	181	188	8.7	754	29.5	10.1	135	--
28...	0849	80513	19.0	181	190	8.6	754	29.0	10.2	135	--
28...	0851	80513	20.0	181	190	8.6	754	28.0	10.8	139	--
28...	0852	80513	21.0	181	193	8.6	754	27.4	10.9	139	--
28...	0853	80513	22.0	181	194	8.6	754	26.8	11.1	141	--
28...	0854	80513	24.0	181	203	8.6	754	25.6	10.7	132	--
28...	0855	80513	25.0	181	207	8.5	754	25.0	10.0	122	--
28...	0857	80513	27.0	181	216	8.4	754	24.3	8.4	102	--
28...	0858	80513	28.0	181	216	8.2	754	23.5	7.3	87	--
28...	0859	80513	29.0	181	226	7.9	754	22.4	6.4	74	--
28...	0900	80513	30.0	181	229	7.7	754	21.9	5.4	62	--
28...	0901	80513	31.0	181	229	7.5	754	21.4	4.3	49	--
28...	0902	80513	33.0	181	240	7.3	754	20.4	2.5	28	--
28...	0903	80513	35.0	181	245	7.2	754	19.5	1.1	12	--
28...	0904	80513	37.0	181	243	7.2	754	19.0	1.0	11	--
28...	0905	80513	40.0	181	243	7.2	754	18.5	.8	9	--
28...	0906	80513	45.0	181	243	7.2	754	17.5	.8	8	--
28...	0907	80513	50.0	181	238	7.1	754	16.6	1.4	14	--
28...	0908	80513	55.0	181	243	7.1	754	16.1	1.5	16	--
28...	0909	80513	60.0	181	248	7.1	754	15.6	1.6	17	--
28...	0911	80513	70.0	181	241	7.1	754	14.9	2.0	20	--
28...	0912	80513	80.0	181	222	7.1	754	14.4	2.4	24	--
28...	0913	80513	90.0	181	209	7.1	754	13.9	3.0	29	--
28...	0915	80513	100	181	201	7.1	754	13.6	3.4	33	--
28...	0916	80513	110	181	184	7.0	754	13.0	4.1	39	--
28...	0917	80513	120	181	182	7.0	754	12.6	4.4	42	--
28...	0919	80513	130	181	190	7.0	754	12.4	4.1	39	--
28...	0920	80513	140	181	208	7.1	754	12.1	3.7	35	--
28...	0921	80513	150	181	222	7.0	754	11.5	3.3	30	--
28...	0922	80513	160	181	246	6.9	754	10.7	1.7	15	--
28...	0923	80513	170	181	258	6.9	754	10.1	.8	7	--
28...	0924	80513	180	181	263	6.9	754	9.8	.6	5	--
28...	0925	80513	181	181	263	6.9	754	9.8	.6	5	--

WHITE RIVER BASIN

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM HG) (00025)	TEMPER- ATURE OF WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
AUG											
23...	1305	80513	.00	170	196	8.3	750	27.8	8.2	106	2.40
23...	1306	80513	10.0	170	197	8.3	750	27.8	8.2	106	--
23...	1307	80513	20.0	170	196	8.3	750	27.9	8.1	105	--
23...	1308	80513	23.0	170	198	8.3	750	27.8	8.0	103	--
23...	1309	80513	24.0	170	212	8.1	750	26.8	7.1	91	--
23...	1310	80513	25.0	170	219	8.1	750	25.9	6.5	82	--
23...	1311	80513	26.0	170	221	8.0	750	25.6	6.6	82	--
23...	1312	80513	28.0	170	232	7.9	750	24.1	4.7	57	--
23...	1313	80513	30.0	170	240	7.8	750	22.3	.9	10	--
23...	1314	80513	33.0	170	242	7.7	750	21.5	.2	3	--
23...	1315	80513	34.0	170	244	7.6	750	20.5	.2	2	--
23...	1316	80513	38.0	170	251	7.6	750	19.5	.2	2	--
23...	1317	80513	40.0	170	252	7.6	750	19.0	.2	2	--
23...	1318	80513	45.0	170	245	7.6	750	18.1	.1	2	--
23...	1319	80513	50.0	170	245	7.7	750	17.2	.1	1	--
23...	1320	80513	60.0	170	257	7.7	750	16.5	.1	1	--
23...	1321	80513	70.0	170	242	7.7	750	15.8	.1	1	--
23...	1322	80513	80.0	170	223	7.7	750	15.2	.6	6	--
23...	1323	80513	90.0	170	203	7.7	750	14.7	1.5	15	--
23...	1324	80513	100	170	189	7.7	750	14.3	2.2	22	--
23...	1325	80513	110	170	189	7.7	750	13.8	2.4	23	--
23...	1326	80513	120	170	185	7.7	750	13.5	2.8	28	--
23...	1327	80513	130	170	176	7.7	750	13.0	3.2	30	--
23...	1328	80513	140	170	180	7.7	750	12.7	2.9	28	--
23...	1329	80513	150	170	207	7.6	750	12.3	1.4	13	--
23...	1330	80513	160	170	235	7.6	750	11.9	.2	2	--
23...	1331	80513	170	170	250	7.5	750	11.0	.2	2	--
SEP											
22...	1330	80513	.00	173	212	8.5	762	23.9	7.6	90	2.10
22...	1331	80513	10.0	173	213	8.5	762	23.5	7.5	88	--
22...	1332	80513	20.0	173	212	8.5	762	23.3	7.6	90	--
22...	1333	80513	30.0	173	213	8.5	762	23.2	7.5	88	--
22...	1334	80513	40.0	173	213	8.4	762	23.1	7.0	82	--
22...	1336	80513	41.0	173	219	8.3	762	22.8	4.5	52	--
22...	1337	80513	42.0	173	252	7.4	762	20.7	.4	5	--
22...	1338	80513	43.0	173	254	7.4	762	20.0	.2	3	--
22...	1339	80513	44.0	173	255	7.4	762	19.7	.2	3	--
22...	1340	80513	50.0	173	261	7.4	762	18.6	.2	3	--
22...	1342	80513	60.0	173	261	7.3	762	17.4	.3	3	--
22...	1343	80513	70.0	173	258	7.3	762	16.4	.3	3	--
22...	1344	80513	80.0	173	245	7.2	762	15.8	.3	3	--
22...	1345	80513	90.0	173	231	7.2	762	15.1	.3	3	--
22...	1346	80513	100	173	218	7.2	762	14.6	.8	8	--
22...	1347	80513	110	173	202	7.1	762	14.1	1.5	15	--
22...	1348	80513	120	173	206	7.1	762	13.7	1.6	15	--
22...	1349	80513	130	173	193	7.0	762	13.2	1.7	16	--
22...	1350	80513	140	173	195	7.0	762	12.8	1.0	9	--
22...	1351	80513	150	173	203	7.0	762	12.4	.6	5	--
22...	1352	80513	160	173	218	7.0	762	12.1	.6	5	--
22...	1353	80513	170	173	234	7.0	762	11.7	.6	6	--
22...	1354	80513	173	173	239	7.0	762	11.6	.6	6	--

WHITE RIVER BASIN

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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 mi².

PERIOD OF RECORD.--October 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 20...	1018	80513	236	7.2	757	12.9	10.1	97
NOV 19...	1105	80513	213	7.2	752	12.0	4.5	42
DEC 08...	0725	80513	240	7.1	754	10.2	5.8	53
MAR 23...	0905	80513	216	7.8	751	7.9	11.5	98
JUN 16...	1318	80513	237	7.4	760	10.5	6.4	58
JUL 28...	0813	80513	247	7.1	754	13.8	9.1	88
AUG 23...	1052	80513	200	7.3	753	14.0	7.7	76
SEP 22...	1419	80513	212	8.3	757	17.7	10.5	111

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 mi².

PERIOD OF RECORD.--Water years 1954-60, 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE OF WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
21...	1328	80513	.00	169	258	7.8	755	21.8	8.0	92	4.00
21...	1329	80513	10.0	169	257	7.8	755	21.5	7.1	81	--
21...	1330	80513	20.0	169	258	7.8	755	21.5	7.0	80	--
21...	1331	80513	30.0	169	258	7.8	755	21.5	6.9	79	--
21...	1332	80513	40.0	169	258	7.8	755	21.5	7.0	80	--
21...	1333	80513	50.0	169	273	7.1	755	21.0	1.1	13	--
21...	1334	80513	53.0	169	280	7.0	755	20.1	.3	4	--
21...	1335	80513	57.0	169	279	7.0	755	19.3	.3	4	--
21...	1336	80513	60.0	169	278	7.0	755	19.0	.3	3	--
21...	1337	80513	70.0	169	278	7.0	755	18.3	.3	3	--
21...	1338	80513	80.0	169	280	7.0	755	17.5	.3	3	--
21...	1339	80513	90.0	169	282	6.9	755	16.5	.3	3	--
21...	1340	80513	100	169	282	6.9	755	15.6	.4	4	--
21...	1341	80513	110	169	282	6.9	755	14.7	.5	5	--
21...	1342	80513	120	169	281	6.9	755	13.7	.3	3	--
21...	1343	80513	130	169	279	6.9	755	12.7	.3	3	--
21...	1344	80513	140	169	276	6.8	755	11.9	.4	3	--
21...	1345	80513	150	169	274	6.8	755	11.2	.3	3	--
21...	1346	80513	160	169	271	6.8	755	10.0	.3	3	--
21...	1347	80513	169	169	272	6.8	755	9.7	.4	3	--
NOV											
24...	0832	80513	.00	166	268	7.6	756	15.7	7.8	79	4.10
24...	0833	80513	10.0	166	268	7.6	756	15.7	6.2	63	--
24...	0834	80513	20.0	166	267	7.6	756	15.8	6.1	62	--
24...	0835	80513	30.0	166	267	7.6	756	15.8	6.1	62	--
24...	0836	80513	40.0	166	267	7.6	756	15.9	6.0	61	--
24...	0837	80513	50.0	166	267	7.6	756	15.8	6.0	61	--
24...	0838	80513	60.0	166	266	7.6	756	15.9	6.0	61	--
24...	0839	80513	70.0	166	266	7.6	756	15.9	6.1	62	--
24...	0840	80513	80.0	166	266	7.6	756	15.9	6.1	62	--
24...	0841	80513	90.0	166	270	7.4	756	15.8	4.7	47	--
24...	0842	80513	100	166	282	7.2	756	15.2	.3	3	--
24...	0843	80513	110	166	281	7.2	756	14.5	.2	1	--
24...	0844	80513	120	166	281	7.2	756	13.7	.1	1	--
24...	0845	80513	130	166	277	7.1	756	12.7	.1	1	--
24...	0846	80513	140	166	274	7.1	756	11.9	.1	1	--
24...	0847	80513	150	166	270	7.1	756	11.1	.1	1	--
24...	0848	80513	160	166	270	7.1	756	10.2	.1	1	--
24...	0849	80513	166	166	271	7.1	756	9.9	.1	1	--
DEC											
09...	1355	80513	.00	167	260	7.7	759	15.1	7.5	75	5.80
09...	1356	80513	10.0	167	258	7.7	759	15.2	7.2	72	--
09...	1357	80513	20.0	167	259	7.7	759	15.2	7.1	71	--
09...	1358	80513	30.0	167	258	7.7	759	15.2	7.1	71	--
09...	1359	80513	40.0	167	259	7.7	759	15.2	7.0	70	--
09...	1400	80513	50.0	167	259	7.7	759	15.2	7.0	70	--
09...	1401	80513	60.0	167	259	7.7	759	15.2	7.0	70	--
09...	1402	80513	70.0	167	258	7.7	759	15.2	7.0	70	--
09...	1403	80513	80.0	167	258	7.7	759	15.2	7.0	70	--
09...	1404	80513	90.0	167	259	7.7	759	15.3	6.9	70	--
09...	1405	80513	100	167	258	7.7	759	15.3	6.9	69	--
09...	1406	80513	110	167	266	7.4	759	14.9	1.8	18	--
09...	1407	80513	120	167	274	7.2	759	13.4	.2	2	--
09...	1408	80513	130	167	269	7.2	759	12.3	.2	2	--
09...	1409	80513	140	167	266	7.2	759	11.4	.1	1	--
09...	1410	80513	150	167	263	7.2	759	10.8	.1	1	--
09...	1411	80513	160	167	265	7.1	759	10.2	.1	1	--
09...	1412	80513	167	167	266	7.1	759	10.0	.1	1	--
MAR											
22...	1339	80513	.00	174	267	8.3	753	10.1	11.5	104	8.80
22...	1341	80513	10.0	174	267	8.2	753	9.8	11.4	102	--
22...	1343	80513	20.0	174	267	8.2	753	9.8	11.4	102	--
22...	1344	80513	30.0	174	267	8.2	753	9.6	11.4	101	--
22...	1345	80513	40.0	174	268	8.2	753	9.5	11.3	100	--
22...	1346	80513	50.0	174	267	8.2	753	9.5	11.4	101	--
22...	1348	80513	60.0	174	268	8.1	753	8.6	11.1	97	--
22...	1349	80513	70.0	174	266	8.1	753	8.4	11.0	95	--
22...	1350	80513	80.0	174	266	8.1	753	8.2	11.0	95	--
22...	1351	80513	90.0	174	267	8.1	753	8.2	10.9	94	--
22...	1353	80513	100	174	267	8.1	753	8.2	10.8	93	--
22...	1354	80513	110	174	269	8.1	753	8.2	10.7	92	--
22...	1355	80513	120	174	268	8.1	753	8.2	10.7	92	--
22...	1356	80513	130	174	268	8.1	753	8.2	10.6	91	--
22...	1357	80513	140	174	268	8.1	753	8.2	10.5	90	--
22...	1358	80513	150	174	271	8.0	753	8.1	9.9	85	--
22...	1359	80513	160	174	270	7.9	753	8.0	9.5	81	--
22...	1400	80513	170	174	271	7.8	753	8.0	8.4	72	--
22...	1402	80513	174	174	302	7.6	753	8.0	3.7	31	--

WHITE RIVER BASIN

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07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
JUN											
15...	1150	80513	.00	182	276	8.6	760	26.5	8.5	106	5.70
15...	1151	80513	10.0	182	276	8.6	760	26.5	8.9	111	--
15...	1152	80513	20.0	182	277	8.6	760	26.5	8.9	110	--
15...	1153	80513	23.0	182	276	8.6	760	26.4	8.9	111	--
15...	1154	80513	24.0	182	274	8.6	760	26.1	9.3	115	--
15...	1155	80513	25.0	182	273	8.7	760	24.7	10.5	127	--
15...	1156	80513	26.0	182	273	8.7	760	23.8	11.0	131	--
15...	1157	80513	27.0	182	273	8.7	760	22.6	11.2	130	--
15...	1158	80513	28.0	182	273	8.6	760	21.6	11.2	127	--
15...	1159	80513	30.0	182	274	8.6	760	21.0	11.0	124	--
15...	1200	80513	32.0	182	274	8.6	760	20.5	10.8	121	--
15...	1201	80513	35.0	182	274	8.5	760	19.8	10.5	116	--
15...	1202	80513	40.0	182	274	8.4	760	18.7	10.1	108	--
15...	1203	80513	45.0	182	275	8.2	760	16.9	9.5	98	--
15...	1204	80513	50.0	182	276	8.1	760	15.8	9.0	91	--
15...	1205	80513	55.0	182	274	7.9	760	14.9	8.4	83	--
15...	1206	80513	60.0	182	272	7.7	760	14.3	7.7	75	--
15...	1207	80513	70.0	182	269	7.6	760	13.5	7.3	70	--
15...	1208	80513	80.0	182	268	7.6	760	12.9	7.2	69	--
15...	1209	80513	90.0	182	269	7.6	760	12.4	7.2	68	--
15...	1210	80513	100	182	270	7.6	760	12.0	7.2	68	--
15...	1211	80513	110	182	273	7.6	760	11.5	7.2	66	--
15...	1212	80513	120	182	274	7.6	760	10.7	7.3	66	--
15...	1213	80513	120	182	274	7.6	760	10.7	7.1	64	--
15...	1214	80513	130	182	277	7.5	760	9.8	6.6	58	--
15...	1215	80513	140	182	278	7.4	760	9.2	6.2	55	--
15...	1216	80513	150	182	278	7.4	760	8.9	6.0	52	--
15...	1217	80513	160	182	278	7.4	760	8.8	5.7	49	--
15...	1218	80513	170	182	279	7.4	760	8.6	5.4	46	--
15...	1219	80513	180	182	280	7.3	760	8.6	4.8	42	--
15...	1220	80513	182	182	281	7.3	760	8.5	4.3	37	--

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
JUL											
28...	1240	80513	.00	179	266	8.4	756	31.7	7.5	103	6.20
28...	1241	80513	10.0	179	265	8.4	756	31.3	7.6	103	--
28...	1242	80513	17.0	179	264	8.4	756	30.6	8.7	117	--
28...	1243	80513	18.0	179	263	8.4	756	29.4	9.5	126	--
28...	1244	80513	19.0	179	263	8.4	756	28.8	10.2	133	--
28...	1245	80513	20.0	179	263	8.4	756	28.3	10.7	139	--
28...	1246	80513	22.0	179	261	8.5	756	27.4	11.7	149	--
28...	1247	80513	24.0	179	261	8.5	756	26.6	12.2	153	--
28...	1248	80513	26.0	179	261	8.5	756	25.7	12.6	156	--
28...	1249	80513	28.0	179	264	8.5	756	24.7	12.7	154	--
28...	1250	80513	30.0	179	264	8.5	756	24.0	12.6	152	--
28...	1251	80513	32.0	179	263	8.4	756	23.1	12.5	147	--
28...	1252	80513	34.0	179	266	8.4	756	22.3	12.3	143	--
28...	1253	80513	35.0	179	267	8.4	756	21.5	11.9	136	--
28...	1254	80513	37.0	179	268	8.4	756	20.5	11.5	129	--
28...	1255	80513	39.0	179	270	8.3	756	19.5	10.8	118	--
28...	1256	80513	40.0	179	271	8.2	756	19.3	10.2	112	--
28...	1257	80513	44.0	179	273	8.0	756	18.5	9.3	100	--
28...	1258	80513	48.0	179	275	7.8	756	17.7	8.1	86	--
28...	1259	80513	50.0	179	275	7.6	756	17.4	7.2	75	--
28...	1301	80513	58.0	179	274	7.3	756	16.6	4.9	51	--
28...	1302	80513	60.0	179	274	7.3	756	16.5	4.6	48	--
28...	1303	80513	70.0	179	274	7.3	756	15.8	4.4	45	--
28...	1304	80513	80.0	179	273	7.2	756	15.3	4.4	44	--
28...	1305	80513	90.0	179	272	7.2	756	14.2	4.6	46	--
28...	1306	80513	100	179	270	7.2	756	13.7	4.9	48	--
28...	1307	80513	110	179	270	7.2	756	13.4	5.0	48	--
28...	1308	80513	120	179	269	7.2	756	12.8	5.2	50	--
28...	1309	80513	130	179	272	7.2	756	12.2	4.8	45	--
28...	1310	80513	140	179	277	7.1	756	11.1	3.8	35	--
28...	1311	80513	150	179	281	7.0	756	10.1	2.6	23	--
28...	1312	80513	160	179	282	7.0	756	9.6	1.2	11	--
28...	1313	80513	170	179	283	7.0	756	9.3	1.4	12	--
28...	1314	80513	179	179	286	7.0	756	9.1	.9	8	--

WHITE RIVER BASIN

07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
AUG											
25...	1332	80513	.00	165	263	8.1	754	28.7	9.6	126	6.60
25...	1333	80513	10.0	165	264	8.2	754	28.5	9.6	126	--
25...	1334	80513	20.0	165	262	8.2	754	28.4	9.6	125	--
25...	1335	80513	30.0	165	263	8.2	754	28.2	10.1	131	--
25...	1336	80513	31.0	165	261	8.2	754	27.8	12.7	163	--
25...	1337	80513	32.0	165	259	8.2	754	27.0	15.2	193	--
25...	1338	80513	33.0	165	259	8.2	754	26.3	15.6	196	--
25...	1339	80513	35.0	165	259	8.3	754	24.1	15.4	185	--
25...	1340	80513	37.0	165	263	8.3	754	22.8	14.7	172	--
25...	1341	80513	39.0	165	267	8.3	754	21.9	13.9	161	--
25...	1342	80513	40.0	165	268	8.3	754	21.7	13.9	160	--
25...	1343	80513	45.0	165	275	8.2	754	20.4	11.2	126	--
25...	1344	80513	48.0	165	277	8.0	754	19.6	9.3	103	--
25...	1345	80513	50.0	165	277	7.9	754	19.4	7.9	87	--
25...	1346	80513	58.0	165	278	7.8	754	18.5	6.0	65	--
25...	1347	80513	60.0	165	279	7.7	754	18.2	4.8	52	--
25...	1348	80513	70.0	165	278	7.7	754	17.2	3.4	35	--
25...	1349	80513	80.0	165	274	7.7	754	16.5	3.8	39	--
25...	1350	80513	90.0	165	274	7.6	754	15.8	3.5	36	--
25...	1351	80513	100	165	275	7.6	754	15.0	3.4	34	--
25...	1352	80513	110	165	276	7.6	754	14.3	3.6	36	--
25...	1353	80513	120	165	278	7.6	754	13.5	3.4	33	--
25...	1354	80513	130	165	280	7.6	754	12.6	2.7	26	--
25...	1355	80513	140	165	283	7.5	754	11.6	.5	4	--
25...	1356	80513	150	165	286	7.5	754	10.7	.2	2	--
25...	1357	80513	160	165	287	7.4	754	10.3	.2	2	--
25...	1358	80513	165	165	290	7.4	754	9.8	.2	2	--
SEP											
23...	1347	80513	.00	168	255	8.6	765	24.6	8.3	99	4.90
23...	1348	80513	10.0	168	256	8.6	765	24.2	9.0	107	--
23...	1349	80513	20.0	168	256	8.6	765	24.1	8.4	100	--
23...	1350	80513	30.0	168	256	8.6	765	24.0	8.4	100	--
23...	1351	80513	38.0	168	262	8.4	765	23.4	8.4	99	--
23...	1352	80513	39.0	168	272	8.2	765	22.1	8.9	102	--
23...	1353	80513	40.0	168	275	8.0	765	21.2	7.4	84	--
23...	1354	80513	42.0	168	276	7.7	765	20.5	5.5	61	--
23...	1355	80513	47.0	168	274	7.5	765	19.6	2.2	24	--
23...	1356	80513	50.0	168	272	7.4	765	19.2	1.2	13	--
23...	1357	80513	60.0	168	273	7.4	765	18.2	.8	9	--
23...	1358	80513	70.0	168	272	7.4	765	17.4	1.1	12	--
23...	1359	80513	80.0	168	276	7.3	765	16.6	1.7	18	--
23...	1400	80513	90.0	168	273	7.3	765	16.0	2.4	25	--
23...	1401	80513	100	168	275	7.3	765	15.5	2.3	23	--
23...	1402	80513	110	168	279	7.3	765	14.9	2.0	19	--
23...	1403	80513	120	168	279	7.2	765	14.1	1.9	18	--
23...	1404	80513	130	168	280	7.2	765	13.3	1.2	12	--
23...	1405	80513	140	168	282	7.1	765	12.5	.8	7	--
23...	1406	80513	150	168	285	7.1	765	11.6	.7	6	--
23...	1407	80513	160	168	288	7.1	765	10.5	.7	7	--
23...	1408	80513	168	168	290	7.1	765	10.0	.8	7	--

WHITE RIVER BASIN

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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 mi².

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 June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)			
OCT 21...		1412	80513	284	7.2	762	15.1	5.6	55		
NOV 24...		1023	80513	281	7.4	760	13.5	5.8	55		
DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
DEC											
09...	1320	80513	250	.00	12.0	275	7.4	14.6	5.3	52	765
09...	1321	80513	250	.40	37.0	274	7.4	14.5	5.4	53	765
09...	1323	80513	250	.10	62.0	275	7.4	14.5	5.5	54	765
09...	1324	80513	250	.20	87.0	274	7.4	14.5	5.3	52	765
09...	1325	80513	250	.30	112.0	274	7.3	14.4	5.0	49	765
09...	1326	80513	250	.30	137.0	273	7.3	14.2	4.4	43	765
09...	1327	80513	250	.30	162.0	273	7.4	14.2	4.2	41	765
09...	1328	80513	250	.50	187.0	273	7.4	14.2	4.1	39	765
09...	1329	80513	250	.50	212.0	273	7.3	14.1	3.7	36	765
09...	1331	80513	250	.90	237.0	274	7.4	13.7	4.3	41	765
09...	1332	80513	--	--	--	274	7.4	13.7	4.2	40	765
DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
MAR											
23...	1443	80513			266	8.1	758	8.5	11.4	98	
JUN											
15...	1242	80513			271	7.6	761	11.3	8.2	75	
JUL											
28...	1433	80513			273	7.3	755	13.5	6.1	59	
AUG											
25...	1523	80513			273	7.6	760	14.9	5.6	56	
SEP											
23...	1505	80513			281	7.8	755	16.8	8.3	86	

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
OCTOBER				NOVEMBER				DECEMBER				JANUARY			
1	7.7	2.4	4.7	5.3	1.9	2.9	5.6	2.4	3.3	---	---	---			
2	7.2	2.3	4.3	5.3	1.8	3.0	5.0	2.4	3.2	---	---	---			
3	6.3	2.2	4.3	7.1	1.9	3.1	9.7	2.4	4.1	---	---	---			
4	7.2	2.0	4.0	7.3	2.0	3.7	5.4	2.4	3.2	---	---	---			
5	---	---	---	7.6	1.9	4.3	5.2	2.3	3.2	---	---	---			
6	---	---	---	7.6	2.2	3.9	4.3	2.4	3.2	---	---	---			
7	---	---	---	5.2	1.9	3.1	7.7	2.6	4.6	---	---	---			
8	7.2	2.3	4.7	4.4	2.0	2.8	8.2	3.2	5.3	---	---	---			
9	8.4	2.4	6.3	6.2	1.8	2.8	6.4	2.5	3.9	---	---	---			
10	7.7	2.3	4.7	7.9	1.8	4.4	3.9	2.1	2.8	---	---	---			
11	6.8	2.3	4.2	8.9	2.4	4.9	8.9	2.4	4.2	---	---	---			
12	7.0	2.2	4.3	8.8	2.5	4.3	4.1	2.6	3.3	---	---	---			
13	7.2	2.4	4.3	5.6	2.5	3.5	5.5	3.1	4.3	---	---	---			
14	7.2	2.3	4.5	5.7	2.8	3.8	5.6	3.4	4.6	---	---	---			
15	7.4	2.5	4.6	5.6	3.0	4.0	8.9	2.7	5.4	---	---	---			
16	7.0	2.4	4.4	8.9	3.2	4.7	5.3	2.5	3.6	---	---	---			
17	4.9	2.3	3.4	9.1	3.4	5.1	8.4	4.4	6.7	---	---	---			
18	5.5	2.3	3.6	6.7	3.7	4.6	8.2	2.8	5.0	---	---	---			
19	6.2	2.2	4.0	9.5	3.8	5.8	3.7	2.6	3.0	---	---	---			
20	5.3	2.3	3.4	8.7	4.1	5.6	9.1	2.3	4.0	---	---	---			
21	7.6	2.3	4.1	6.2	4.1	4.9	8.4	2.4	5.0	---	---	---			
22	8.5	2.1	4.4	9.4	4.5	5.6	8.8	6.5	7.6	---	---	---			
23	4.8	2.1	3.2	6.6	4.7	5.3	8.8	7.0	8.0	---	---	---			
24	4.9	2.0	3.1	8.1	2.1	4.3	8.7	6.1	7.4	---	---	---			
25	6.8	2.1	3.7	5.6	2.2	3.2	7.1	5.0	6.3	---	---	---			
26	---	---	---	4.9	2.4	3.2	6.3	4.8	5.4	---	---	---			
27	---	---	---	5.1	2.4	3.3	5.3	4.0	4.7	---	---	---			
28	6.7	2.2	4.0	5.2	2.4	3.3	6.4	4.7	5.4	---	---	---			
29	9.4	2.2	4.4	5.4	2.2	3.1	7.8	4.9	6.1	---	---	---			
30	8.0	2.1	3.7	5.3	2.2	3.4	10.2	6.7	8.2	---	---	---			
31	5.8	1.9	3.5	---	---	---	7.3	5.6	6.5	---	---	---			
MONTH	---	---	---	9.5	1.8	4.0	10.2	2.1	4.9	---	---	---			
JUNE				JULY				AUGUST				SEPTEMBER			
1	---	---	---	9.6	6.9	8.0	10.0	5.4	7.2	8.6	4.1	5.3			
2	10.9	8.4	9.2	9.8	6.7	8.0	9.8	5.3	6.9	8.4	3.9	5.4			
3	10.9	7.8	8.8	10.3	6.6	8.0	10.0	5.4	7.6	8.8	4.0	5.8			
4	10.9	7.9	9.1	10.4	6.7	8.2	9.7	5.3	7.0	8.8	3.8	5.5			
5	10.9	7.6	8.7	9.4	6.7	7.8	10.3	5.6	6.8	8.9	3.7	5.7			
6	11.6	7.8	9.1	9.3	6.5	7.4	9.2	5.1	6.5	8.6	3.6	5.3			
7	11.0	7.5	8.6	9.6	6.4	7.2	9.7	5.1	6.9	7.7	3.4	4.8			
8	10.1	7.5	8.5	9.6	6.5	7.2	11.4	5.0	7.0	8.8	3.4	5.1			
9	10.4	7.4	8.5	8.7	6.5	7.1	8.8	4.9	6.4	8.8	3.5	5.3			
10	9.4	7.3	8.3	9.1	6.3	7.2	8.7	4.7	6.1	9.1	3.5	6.0			
11	10.3	7.4	8.6	9.3	6.3	7.2	8.6	4.7	6.3	8.0	3.3	5.5			
12	10.1	7.5	8.6	9.3	6.1	7.0	9.1	4.7	6.3	9.2	3.4	5.8			
13	10.5	7.3	8.7	8.7	6.3	7.2	9.4	4.8	7.5	8.8	3.5	5.4			
14	10.9	7.2	8.4	9.0	6.3	7.3	9.6	4.7	7.1	7.7	3.4	4.9			
15	11.0	7.3	8.9	9.5	6.1	7.3	8.9	4.6	6.5	7.9	3.4	5.1			
16	10.7	7.1	8.3	9.3	5.9	7.1	8.9	4.7	6.0	9.1	3.5	6.4			
17	11.1	7.2	8.9	9.6	5.7	6.7	9.1	4.9	6.5	8.6	3.5	6.1			
18	11.4	7.1	9.2	10.4	6.2	7.0	9.2	4.8	6.6	9.6	3.5	6.7			
19	11.3	6.9	8.6	8.7	5.9	7.0	9.4	5.5	7.4	9.6	3.3	6.2			
20	11.6	6.9	8.9	9.5	5.7	6.8	9.4	4.5	6.4	8.5	3.3	5.8			
21	11.2	7.0	8.8	9.4	5.6	6.7	9.4	4.5	6.1	10.9	3.5	6.6			
22	10.1	6.9	8.2	8.6	5.5	6.6	9.4	4.5	6.0	10.2	3.4	5.7			
23	10.3	7.2	8.6	8.4	5.4	6.5	9.7	4.6	6.2	8.8	3.6	6.6			
24	11.5	7.2	9.1	8.9	5.3	6.6	8.4	4.6	6.0	7.6	3.3	4.8			
25	11.4	7.3	8.6	8.7	5.4	6.8	8.3	4.5	5.7	8.6	3.3	5.5			
26	10.3	7.0	8.2	8.5	5.1	6.3	8.9	4.5	5.7	7.9	2.9	5.4			
27	11.1	7.1	8.9	9.6	5.0	7.0	8.4	4.5	5.7	8.2	3.2	4.8			
28	10.6	7.1	8.3	9.5	5.1	6.9	8.1	4.4	5.7	8.6	3.0	5.4			
29	9.9	7.1	8.1	9.9	5.4	6.6	8.4	4.3	5.8	9.6	3.4	6.3			
30	9.1	6.8	7.7	9.6	5.5	7.0	8.5	4.1	6.0	8.6	3.1	4.9			
31	---	---	---	9.4	5.7	7.5	8.6	4.1	6.1	---	---	---			
MONTH	---	---	---	10.4	5.0	7.1	11.4	4.1	6.5	10.9	2.9	5.6			

WHITE RIVER BASIN

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07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.9	13.6	14.3	14.4	13.0	13.5	14.0	12.7	13.3	---	---	---
2	14.7	13.2	13.8	14.6	13.2	13.7	14.2	12.7	13.2	---	---	---
3	15.2	13.4	14.2	15.1	13.1	13.6	15.0	12.9	13.5	---	---	---
4	15.4	13.5	14.3	15.2	12.9	13.6	13.4	12.8	13.1	---	---	---
5	---	---	---	15.3	12.7	13.9	14.9	12.9	13.5	---	---	---
6	---	---	---	15.0	12.5	13.3	14.1	12.9	13.6	---	---	---
7	---	---	---	13.1	12.3	12.6	14.6	12.9	13.7	---	---	---
8	15.1	13.0	14.0	13.6	12.6	13.1	14.6	12.3	13.3	---	---	---
9	15.1	12.8	14.4	14.5	12.7	13.2	14.1	12.3	12.8	---	---	---
10	15.3	13.0	14.1	16.0	13.0	13.8	13.1	12.4	12.8	---	---	---
11	15.3	13.2	14.0	15.1	12.8	14.0	14.1	12.5	13.1	---	---	---
12	15.5	13.2	14.2	14.9	12.6	13.5	12.9	12.6	12.7	---	---	---
13	15.3	13.0	14.1	14.3	12.8	13.4	13.7	12.6	13.0	---	---	---
14	15.3	13.0	14.1	14.7	13.0	13.6	13.7	12.2	12.9	---	---	---
15	15.3	13.0	14.1	14.7	13.0	13.5	13.7	12.2	13.0	---	---	---
16	15.1	13.3	14.2	14.8	12.7	13.5	13.4	12.2	12.6	---	---	---
17	14.6	13.8	14.1	14.8	12.9	13.7	13.8	12.4	12.9	---	---	---
18	15.1	13.2	14.0	14.4	12.6	13.2	13.5	12.4	12.8	---	---	---
19	15.3	13.1	14.1	14.9	13.3	13.9	12.8	12.4	12.6	---	---	---
20	14.8	13.2	13.7	15.0	12.9	13.8	13.2	12.4	12.7	---	---	---
21	15.3	13.3	14.0	14.0	12.7	13.0	13.1	12.2	12.8	---	---	---
22	14.9	12.8	13.9	14.2	12.5	12.9	13.1	11.1	12.6	---	---	---
23	14.4	12.7	13.2	14.3	12.5	13.1	12.9	11.5	11.9	---	---	---
24	14.7	12.6	13.3	14.4	12.8	13.4	12.0	10.9	11.4	---	---	---
25	14.9	12.8	13.7	14.6	13.1	13.5	12.0	10.7	11.1	---	---	---
26	---	---	---	14.2	12.7	13.2	11.7	10.5	11.0	---	---	---
27	---	---	---	14.5	12.6	13.2	11.7	10.8	11.1	---	---	---
28	15.1	13.3	14.2	14.6	12.9	13.4	11.7	10.6	11.0	---	---	---
29	16.4	13.4	14.3	14.8	13.1	13.6	11.5	9.9	10.7	---	---	---
30	14.9	13.3	14.0	14.2	13.2	13.6	11.6	10.1	10.9	---	---	---
31	14.8	13.3	13.8	---	---	---	11.1	10.0	10.4	---	---	---
MONTH	---	---	---	16.0	12.3	13.4	15.0	9.9	12.5	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	11.7	10.7	11.3	15.8	12.5	13.3	14.7	13.1	14.1
2	10.7	9.2	10.2	11.9	10.7	11.3	13.5	12.6	13.1	14.8	13.6	14.3
3	10.6	9.3	10.2	13.2	10.8	11.5	16.3	12.2	13.3	14.9	13.6	14.5
4	10.7	9.4	10.4	13.1	10.8	11.5	14.0	12.4	13.1	14.9	13.5	14.5
5	10.7	9.3	10.3	11.8	10.9	11.5	13.6	12.8	13.4	15.0	13.9	14.6
6	10.9	9.6	10.3	11.9	11.0	11.5	13.6	12.4	13.2	15.1	13.9	14.6
7	10.9	9.5	10.4	11.9	10.9	11.6	13.7	12.5	13.2	15.7	13.6	14.5
8	10.7	9.9	10.4	11.9	11.1	11.7	15.9	12.7	13.7	15.2	13.9	14.8
9	10.8	9.7	10.4	12.1	11.2	11.9	13.7	12.6	13.2	15.1	13.6	14.5
10	10.9	9.6	10.4	12.4	11.4	12.0	13.7	12.5	13.2	15.9	13.4	14.4
11	11.1	9.9	10.7	12.3	11.9	12.0	13.9	12.7	13.4	15.1	13.9	14.4
12	11.0	10.1	10.7	12.3	11.4	11.9	13.8	12.7	13.4	15.1	13.9	14.5
13	10.9	9.9	10.6	12.3	11.6	12.1	14.2	12.8	13.7	15.4	13.9	14.8
14	11.1	10.1	10.7	12.4	11.5	12.2	16.7	12.6	13.8	15.2	13.3	14.4
15	11.5	10.1	10.7	12.5	11.7	12.3	15.1	12.3	13.2	15.2	13.4	14.4
16	11.4	9.5	10.5	12.6	11.6	12.3	15.3	12.5	13.4	15.4	13.8	14.9
17	12.4	9.9	10.8	12.7	11.7	12.3	14.0	12.7	13.6	16.2	13.5	14.4
18	13.7	9.7	10.8	12.7	11.8	12.4	14.0	12.8	13.7	15.2	13.5	14.6
19	11.7	9.9	10.5	12.8	11.8	12.4	14.2	13.7	14.0	15.4	13.9	14.7
20	13.3	9.9	10.8	12.9	11.8	12.4	15.5	12.7	13.7	15.4	14.1	15.0
21	12.6	10.0	10.7	12.9	11.9	12.5	13.9	12.8	13.5	16.6	13.3	14.8
22	11.1	9.9	10.6	13.0	11.9	12.6	14.5	12.8	13.7	15.6	13.0	13.9
23	11.3	10.2	10.8	13.0	11.9	12.6	14.4	13.2	13.8	16.4	13.2	14.7
24	13.6	10.2	11.2	14.2	12.0	12.7	14.4	13.1	13.9	15.3	13.4	14.3
25	12.5	10.7	11.1	13.1	12.0	12.8	14.5	12.9	13.9	16.4	13.7	14.6
26	11.2	10.2	10.9	13.1	12.1	12.9	14.4	13.1	14.0	15.8	13.6	14.6
27	12.6	10.2	11.0	13.6	12.2	12.8	14.6	13.4	14.1	15.5	13.8	14.9
28	11.6	10.7	11.2	14.4	12.1	12.9	14.6	13.4	14.3	15.9	14.1	15.2
29	11.6	10.5	11.2	13.4	12.2	12.9	14.7	13.4	14.2	16.2	13.9	15.0
30	11.6	10.6	11.2	13.4	12.3	13.0	15.4	13.4	14.3	15.8	13.3	14.2
31	---	---	---	13.4	12.3	13.1	15.3	13.2	14.1	---	---	---
MONTH	---	---	---	14.4	10.7	12.2	16.7	12.2	13.6	16.6	13.0	14.6

WHITE RIVER BASIN

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 mi².

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 June through December.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	12.0	4.7	7.2	15.2	4.9	8.4	13.4	4.7	7.7	---	---	---
2	11.0	4.1	6.8	15.1	4.1	7.9	12.6	5.5	7.7	---	---	---
3	11.9	4.2	6.6	10.8	4.6	7.2	11.5	4.9	7.3	---	---	---
4	11.4	3.6	6.5	12.4	6.3	8.2	10.6	4.9	6.9	---	---	---
5	9.5	4.1	5.9	15.3	6.6	9.6	11.9	5.3	7.6	---	---	---
6	10.6	3.9	6.7	16.5	6.3	9.8	10.4	4.8	6.8	---	---	---
7	---	---	---	12.6	6.8	8.9	11.1	5.2	7.4	---	---	---
8	12.3	5.3	7.6	11.9	5.8	8.1	12.4	6.3	8.6	---	---	---
9	13.1	4.7	7.8	10.8	4.6	6.9	12.2	7.3	10.0	---	---	---
10	12.6	4.9	7.9	13.0	5.9	8.7	10.5	5.7	7.5	---	---	---
11	12.6	5.0	7.4	15.0	5.9	9.2	8.6	5.4	7.1	---	---	---
12	13.3	4.2	7.7	13.5	6.1	9.4	9.3	6.7	8.0	---	---	---
13	13.1	4.7	7.5	13.4	6.1	8.6	13.2	8.5	10.8	---	---	---
14	13.1	4.8	7.8	14.4	6.0	8.7	12.9	7.9	10.6	---	---	---
15	13.1	5.1	7.9	14.7	6.1	8.9	13.4	6.3	9.2	---	---	---
16	12.6	4.8	7.7	14.7	6.3	9.0	11.7	7.7	9.8	---	---	---
17	9.8	5.6	7.4	13.4	6.6	9.0	12.6	7.6	9.8	---	---	---
18	14.1	5.6	8.4	13.4	6.1	9.4	9.3	6.8	7.8	---	---	---
19	15.8	5.2	8.7	9.6	5.6	7.3	8.3	6.7	7.3	---	---	---
20	14.6	6.4	9.2	10.7	7.7	8.6	7.3	5.9	6.4	---	---	---
21	16.1	6.2	9.4	13.8	7.6	9.8	8.0	5.8	6.8	---	---	---
22	17.5	6.5	10.4	14.3	7.0	9.6	10.0	6.9	8.2	---	---	---
23	16.0	6.6	10.1	13.8	6.7	9.0	11.4	8.0	9.3	---	---	---
24	15.5	6.1	9.5	11.9	5.2	8.3	12.7	9.3	11.1	---	---	---
25	15.4	5.7	9.2	12.1	4.3	7.3	12.0	9.7	11.0	---	---	---
26	15.9	6.7	9.7	12.5	5.5	7.8	11.6	9.2	10.5	---	---	---
27	16.5	6.5	9.8	12.4	5.7	7.8	11.4	8.2	9.8	---	---	---
28	8.6	6.4	7.4	12.1	5.2	7.4	11.5	8.6	10.1	---	---	---
29	13.0	5.5	7.8	11.7	4.3	6.8	11.5	8.4	9.8	---	---	---
30	15.5	5.1	8.8	11.9	4.1	7.1	10.0	8.3	9.0	---	---	---
31	15.6	4.9	8.5	---	---	---	12.7	9.4	11.1	---	---	---
MONTH	---	---	---	16.5	4.1	8.4	13.4	4.7	8.7	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	9.4	7.3	8.2	13.8	5.5	7.3	11.1	4.7	6.4
2	9.9	7.8	8.7	10.2	7.0	8.2	9.0	5.3	6.7	9.0	4.8	6.1
3	9.6	7.7	8.6	14.1	7.0	8.7	14.2	5.5	8.5	8.8	4.6	6.1
4	9.9	7.8	8.7	14.5	7.2	8.6	13.2	5.0	7.5	8.4	4.6	6.2
5	9.8	7.5	8.6	11.5	7.1	7.9	9.8	6.1	7.4	10.5	4.4	6.4
6	10.4	7.7	8.8	10.9	7.0	7.6	9.3	5.2	6.7	11.0	4.4	6.2
7	10.4	7.0	8.6	8.0	6.9	7.2	8.4	5.6	6.6	13.5	4.3	6.1
8	9.4	7.3	8.6	7.8	6.7	7.1	14.2	4.9	8.0	7.0	4.4	5.7
9	9.5	7.4	8.6	8.0	6.7	7.0	11.9	4.9	6.2	11.9	4.3	6.6
10	10.1	7.3	8.8	9.9	6.6	7.1	10.0	5.1	6.3	14.5	5.4	7.9
11	12.5	7.5	8.9	8.3	6.5	7.1	8.6	5.3	6.7	12.5	4.7	6.8
12	11.7	7.5	8.7	10.3	6.3	7.1	10.7	5.3	6.5	9.8	4.7	6.7
13	11.1	7.5	9.0	8.7	6.4	7.1	11.0	5.6	8.0	8.6	5.2	6.7
14	12.4	7.1	8.7	10.1	6.5	7.4	13.8	5.6	8.4	8.2	5.6	6.6
15	14.4	7.3	9.4	9.6	6.3	7.4	13.0	5.2	7.4	10.7	5.4	7.0
16	13.9	7.2	9.0	9.7	6.5	7.4	12.9	5.3	7.5	14.8	5.6	7.7
17	15.3	7.3	9.7	10.1	6.4	7.3	9.7	5.1	6.5	16.3	5.6	9.1
18	16.8	7.1	10.8	8.6	6.5	7.3	9.3	5.1	6.3	10.0	5.6	7.5
19	17.0	5.8	9.8	9.6	6.2	7.3	9.4	5.2	7.5	14.0	4.8	8.1
20	17.5	6.2	10.5	11.4	6.2	7.5	13.3	5.7	7.5	9.5	5.1	7.2
21	16.0	6.0	8.8	10.1	6.1	7.2	10.3	5.1	6.9	16.9	5.9	10.3
22	10.3	6.1	8.1	9.7	6.0	6.9	---	---	---	14.8	5.6	8.8
23	10.1	7.1	8.6	12.3	5.7	7.0	---	---	---	16.1	5.8	9.7
24	16.0	6.8	9.8	12.6	5.7	7.3	---	---	---	10.6	5.5	7.2
25	14.0	7.1	8.6	8.8	5.9	7.1	---	---	---	15.7	5.5	8.9
26	12.1	7.0	8.4	8.6	5.5	6.6	8.5	4.8	6.0	14.7	4.8	8.3
27	14.3	7.3	8.9	11.6	5.5	7.1	8.6	4.9	6.1	7.6	3.9	5.8
28	9.6	6.7	8.0	12.8	5.4	6.9	7.8	5.1	6.3	8.2	4.1	6.1
29	9.6	7.1	8.1	10.2	5.4	6.3	12.4	4.9	6.6	12.0	5.8	8.1
30	10.2	7.1	8.1	9.4	5.4	6.3	13.6	5.3	7.1	15.9	5.3	8.5
31	---	---	---	10.2	5.6	7.3	13.6	5.2	7.2	---	---	---
MONTH	---	---	---	14.5	5.4	7.3	---	---	---	16.9	3.9	7.3

WHITE RIVER BASIN

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07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.2	15.0	15.9	16.6	13.3	14.7	16.6	11.9	13.5	---	---	---
2	16.1	13.9	14.9	16.2	14.3	14.9	17.4	11.1	13.5	---	---	---
3	18.5	14.8	15.6	15.2	13.1	14.4	17.0	12.5	14.3	---	---	---
4	18.4	14.7	15.6	15.0	12.0	13.0	14.8	12.8	13.5	---	---	---
5	17.4	15.2	16.3	15.2	11.8	13.7	18.2	12.6	14.5	---	---	---
6	16.4	15.2	16.0	16.6	11.1	13.5	16.2	13.6	14.7	---	---	---
7	---	---	---	12.4	10.7	11.3	14.4	11.9	13.1	---	---	---
8	19.5	13.1	15.3	13.1	11.1	12.1	14.8	10.5	12.8	---	---	---
9	19.9	13.3	15.4	14.5	11.9	12.7	14.5	10.1	11.9	---	---	---
10	19.7	13.2	15.5	16.0	12.6	14.3	11.8	10.4	11.1	---	---	---
11	19.9	13.2	15.4	17.4	10.6	13.7	13.2	10.3	11.7	---	---	---
12	19.5	13.6	15.6	13.8	10.4	12.6	11.4	9.1	10.8	---	---	---
13	19.7	13.1	15.4	15.2	11.8	13.1	14.3	8.9	11.1	---	---	---
14	19.7	13.3	15.6	17.8	12.1	14.2	15.3	9.8	11.9	---	---	---
15	19.1	13.1	15.4	18.0	11.7	13.9	14.7	9.6	12.3	---	---	---
16	17.9	14.1	15.6	18.1	11.1	13.7	14.1	9.4	11.3	---	---	---
17	19.0	15.8	17.3	17.8	11.9	14.0	14.5	9.3	11.6	---	---	---
18	18.5	14.4	16.2	17.4	11.1	13.8	13.2	8.9	11.3	---	---	---
19	18.5	13.3	14.9	14.7	13.5	14.0	11.8	10.7	11.2	---	---	---
20	18.1	13.6	15.3	15.2	11.2	13.3	12.8	10.6	11.5	---	---	---
21	19.3	13.8	15.5	16.6	11.0	12.9	12.7	11.1	11.9	---	---	---
22	18.9	12.5	15.2	15.7	10.4	12.5	12.9	6.8	11.6	---	---	---
23	18.4	11.8	14.3	16.7	11.1	13.2	12.6	7.7	9.6	---	---	---
24	18.0	11.5	13.9	15.5	11.1	13.1	10.9	7.3	8.9	---	---	---
25	18.9	11.8	14.5	17.2	11.9	13.8	12.1	6.7	8.8	---	---	---
26	18.9	12.6	15.0	17.4	10.9	13.1	12.4	6.9	9.1	---	---	---
27	19.3	13.3	15.4	17.4	10.4	13.1	12.1	8.2	9.7	---	---	---
28	16.2	13.5	14.9	17.3	11.6	13.8	12.4	8.3	10.0	---	---	---
29	19.2	13.8	15.8	17.0	12.9	14.5	10.7	8.4	9.3	---	---	---
30	19.3	14.4	16.1	16.6	12.8	14.6	11.2	6.3	9.4	---	---	---
31	18.1	14.1	15.4	---	---	---	11.6	6.5	8.6	---	---	---
MONTH	---	---	---	18.1	10.4	13.5	18.2	6.3	11.4	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	13.2	11.4	11.9	19.2	13.4	14.3	16.6	14.4	14.8
2	11.5	10.4	10.7	13.9	11.8	12.6	14.9	13.2	14.0	15.7	14.7	14.9
3	11.6	10.5	10.8	16.7	11.5	12.8	21.6	13.8	15.4	15.1	14.8	14.9
4	11.4	10.5	10.7	16.8	11.6	12.5	17.0	13.6	14.4	15.3	14.7	14.9
5	11.6	10.6	10.9	14.1	11.7	12.2	14.7	13.4	13.7	16.8	14.9	15.3
6	13.3	10.6	11.1	14.1	11.8	12.3	15.2	13.3	14.0	17.1	15.0	15.4
7	12.1	10.6	11.2	13.1	11.7	12.1	15.1	13.7	14.1	18.9	14.9	15.5
8	12.5	10.7	11.2	12.9	11.8	12.0	21.0	13.9	15.9	16.1	15.0	15.2
9	12.0	10.7	11.1	12.8	11.8	12.1	16.4	13.4	14.5	17.1	14.6	15.3
10	12.1	10.7	11.1	14.0	12.0	12.4	15.9	13.6	14.3	19.3	14.4	15.5
11	13.5	10.9	11.4	13.7	12.0	12.4	14.7	13.7	14.1	16.4	15.1	15.4
12	13.1	10.8	11.3	13.7	12.0	12.4	16.1	13.7	14.2	15.9	15.1	15.4
13	12.9	10.9	11.4	12.5	12.2	12.3	17.8	13.9	14.9	15.9	14.9	15.4
14	14.1	11.1	11.9	13.0	12.3	12.5	21.7	14.4	15.9	15.8	13.8	14.9
15	14.7	10.9	11.5	13.8	12.4	12.7	18.5	13.7	14.9	15.9	14.0	15.0
16	13.6	10.9	11.3	13.6	12.4	12.7	18.7	13.6	14.3	18.1	14.8	15.5
17	15.4	11.3	12.2	13.7	12.5	12.8	15.6	13.8	14.1	20.2	13.6	15.7
18	19.0	11.4	13.2	13.5	12.5	12.7	14.4	13.9	14.0	16.1	13.7	15.1
19	15.4	12.1	13.1	13.3	12.5	12.8	15.2	13.9	14.2	17.9	15.1	15.9
20	18.2	11.8	13.6	15.1	12.7	13.4	19.0	14.1	14.8	16.1	15.0	15.5
21	15.6	11.3	12.4	14.8	12.7	13.2	15.4	13.9	14.4	21.2	14.4	16.8
22	13.1	11.0	11.8	14.0	12.8	13.2	---	---	---	18.1	12.4	15.1
23	13.8	11.0	11.8	16.3	12.8	13.4	---	---	---	21.2	12.9	16.1
24	18.2	11.1	12.8	16.9	12.7	13.6	---	---	---	16.8	13.4	15.4
25	15.2	11.2	12.2	13.8	12.8	13.2	---	---	---	20.7	13.6	16.2
26	13.7	11.1	11.9	13.9	12.9	13.2	14.9	14.2	14.3	19.4	14.2	16.1
27	15.4	11.2	12.2	17.2	12.9	13.8	15.1	14.3	14.6	15.7	14.7	15.4
28	14.0	11.3	12.2	17.4	13.0	13.8	14.8	14.4	14.6	15.9	15.2	15.7
29	13.4	11.4	12.0	15.0	13.2	13.5	17.3	14.5	14.9	18.4	14.6	16.2
30	13.6	11.2	12.0	13.9	13.2	13.5	18.8	14.6	15.2	20.2	12.3	15.2
31	---	---	---	14.4	13.3	13.6	18.6	14.3	15.0	---	---	---
MONTH	---	---	---	17.4	11.4	12.8	---	---	---	21.2	12.3	15.5

WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW

LOCATION.--Lat 36°20'37", long 92°34'27", in SW1/4SE1/4 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 June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE 000027)	AGENCY ANA-LYZING SAMPLE (CODE 000028)	STREAM WIDTH (FT) (000004)	SAM-PLING DEPTH (FEET) (000003)	SAMPLE LOC-ATION, CROSS SECTION (FT FM R BK) (72103)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (000010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BARO-METRIC PRES-SURE (MM OF HG) (000025)
DEC												
09...	1207	80513	80513	400	.60	20.0	267	8.2	11.4	14.1	128	766
09...	1208	80513	80513	400	1.30	60.0	269	8.2	12.1	12.8	119	766
09...	1210	80513	80513	400	1.60	100.0	268	8.1	12.2	12.2	113	766
09...	1211	80513	80513	400	1.30	140.0	268	8.1	12.4	11.8	109	766
09...	1212	80513	80513	400	1.00	180.0	267	8.1	12.5	11.4	107	766
09...	1213	80513	80513	400	1.20	220.0	267	8.0	12.6	11.2	105	766
09...	1215	80513	80513	400	.90	260.0	267	8.0	12.8	10.7	100	766
09...	1216	80513	80513	400	1.80	300.0	266	8.0	12.9	10.8	101	766
09...	1218	80513	80513	400	1.00	340.0	266	8.0	13.0	11.0	104	766
09...	1219	80513	80513	400	1.80	380.0	265	8.1	13.0	11.4	108	766

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	12.0	4.9	7.9	10.8	5.7	8.0	13.2	7.4	9.6	---	---	---
2	10.9	5.6	7.6	11.3	5.6	7.9	13.3	8.1	9.9	---	---	---
3	11.9	5.8	7.8	8.7	5.5	7.0	11.3	7.2	8.9	---	---	---
4	11.2	4.4	7.3	10.0	5.9	7.5	11.2	7.2	8.6	---	---	---
5	10.0	5.9	7.4	11.3	5.2	7.9	12.7	7.7	9.6	---	---	---
6	10.8	4.8	7.9	11.9	6.1	8.8	11.6	7.2	9.0	---	---	---
7	12.5	5.1	8.5	10.7	7.1	8.6	12.3	8.1	9.5	---	---	---
8	12.4	6.1	8.5	10.8	7.0	8.5	13.6	9.2	10.7	---	---	---
9	12.1	5.7	8.2	9.7	5.5	7.6	14.4	9.6	11.3	---	---	---
10	12.0	5.8	8.7	11.8	6.0	8.9	11.7	8.6	9.8	---	---	---
11	11.9	5.8	8.1	12.3	5.8	8.7	13.6	8.3	10.3	---	---	---
12	11.9	5.8	8.3	11.8	6.7	9.1	11.5	8.6	9.8	---	---	---
13	12.0	5.1	7.8	11.6	7.1	8.8	14.1	8.7	10.6	---	---	---
14	11.4	6.1	8.3	12.1	6.9	8.9	14.3	9.0	10.9	---	---	---
15	11.5	5.6	8.1	12.1	6.9	8.9	13.7	7.7	10.0	---	---	---
16	10.6	6.0	7.9	12.3	6.5	8.8	14.2	9.0	11.0	---	---	---
17	9.0	5.8	7.1	12.2	6.5	8.8	14.4	7.8	10.3	---	---	---
18	11.5	5.1	7.8	12.3	7.4	9.4	10.2	7.4	9.3	---	---	---
19	11.5	4.5	7.6	8.8	6.6	7.4	10.9	8.0	9.3	---	---	---
20	11.1	5.5	7.6	11.7	7.2	8.3	10.6	6.9	8.8	---	---	---
21	11.6	5.4	7.8	12.3	7.8	9.5	10.6	7.7	8.5	---	---	---
22	12.5	5.9	8.7	11.9	7.8	9.5	10.8	7.2	8.8	---	---	---
23	11.9	6.7	8.7	12.1	7.3	9.3	13.2	8.0	10.7	---	---	---
24	11.5	6.4	8.4	12.3	7.6	9.2	14.0	9.5	11.7	---	---	---
25	11.5	5.3	8.0	12.5	6.9	9.1	13.9	10.5	11.9	---	---	---
26	---	---	---	12.9	7.9	9.7	13.5	9.6	11.4	---	---	---
27	---	---	---	13.0	8.0	9.7	13.1	9.1	10.6	---	---	---
28	8.1	5.5	6.8	12.8	7.5	9.5	13.2	9.0	10.6	---	---	---
29	8.9	5.2	6.9	12.0	6.7	9.0	13.4	8.4	10.5	---	---	---
30	11.3	6.1	8.0	12.3	7.7	9.4	12.7	8.4	10.0	---	---	---
31	11.3	5.5	8.1	---	---	---	13.8	9.3	11.4	---	---	---
MONTH	---	---	---	13.0	5.2	8.7	14.4	6.9	10.1	---	---	---

WHITE RIVER BASIN

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07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	9.1	7.6	8.3	13.4	6.3	8.0	11.7	5.1	7.1
2	9.7	8.0	8.7	12.9	7.8	9.3	8.9	6.3	7.2	10.5	5.1	6.5
3	9.9	8.0	8.7	15.0	8.8	10.2	13.6	6.5	9.2	9.6	5.0	6.4
4	9.3	8.2	8.8	16.0	9.3	10.6	12.1	5.9	8.1	10.1	4.9	6.5
5	9.4	7.9	8.7	14.2	9.9	10.5	8.8	6.7	7.3	11.3	4.8	6.7
6	13.2	8.0	9.2	15.1	9.8	10.9	9.8	6.2	7.4	11.1	4.9	7.0
7	9.6	7.5	8.7	11.1	10.5	10.9	12.1	6.8	8.1	12.1	4.8	6.7
8	11.1	8.0	8.9	12.1	10.9	11.3	13.8	6.2	9.2	7.1	4.8	5.8
9	9.3	7.6	8.6	12.8	11.4	11.7	13.2	6.6	7.8	12.0	4.6	7.2
10	9.4	7.8	8.8	15.8	11.8	12.5	13.0	6.8	8.2	13.0	6.2	8.1
11	12.9	8.2	9.2	15.4	12.3	13.0	10.6	7.1	8.4	11.3	5.0	7.2
12	12.3	8.3	9.0	17.2	12.9	13.7	14.0	6.6	8.3	10.3	5.4	7.2
13	11.9	8.1	9.2	15.0	6.2	10.6	14.3	7.7	9.6	7.9	5.0	6.3
14	13.0	7.5	9.1	9.6	6.4	7.0	15.4	7.4	10.3	11.0	4.8	6.5
15	14.2	8.1	9.6	9.8	6.4	7.4	13.6	6.3	8.7	10.8	5.0	6.5
16	13.7	7.8	8.9	10.1	6.4	7.3	14.4	6.5	8.4	12.4	5.1	7.1
17	14.8	7.0	9.5	10.3	6.3	7.1	12.2	6.1	7.9	13.3	5.7	8.7
18	14.5	7.2	10.4	9.7	6.2	6.9	11.3	6.4	7.9	9.4	5.8	7.4
19	14.1	6.2	9.3	9.0	6.3	7.1	10.6	6.5	8.0	11.8	5.7	8.2
20	14.5	6.3	9.5	10.9	6.2	7.3	13.7	6.4	8.4	8.4	5.1	6.3
21	14.3	5.8	8.6	10.9	6.1	7.0	11.9	6.1	8.0	13.7	5.7	9.5
22	10.4	6.6	8.0	9.2	6.0	6.9	13.3	6.0	7.9	12.9	6.3	9.0
23	9.3	6.8	7.8	11.5	6.2	7.2	9.6	6.2	7.2	13.7	6.0	9.2
24	14.1	6.8	9.1	12.3	6.2	7.5	11.2	6.2	7.5	9.4	6.2	7.1
25	13.3	6.9	8.1	8.4	5.9	7.0	10.8	5.9	7.1	11.1	5.8	7.7
26	11.8	6.7	7.7	8.1	5.8	6.5	9.8	5.4	6.6	11.0	4.9	7.4
27	13.3	6.7	8.2	12.2	6.2	7.7	10.8	5.3	6.7	8.1	4.1	5.7
28	9.4	5.9	7.3	12.9	6.0	7.7	8.5	5.3	6.4	7.7	4.2	5.7
29	9.2	6.3	7.4	11.2	6.0	7.0	12.4	5.2	7.1	10.7	5.4	8.1
30	9.2	6.6	7.6	9.5	6.1	6.9	13.2	5.4	7.5	12.9	6.6	8.7
31	---	---	---	11.7	6.2	7.9	12.5	5.1	7.4	---	---	---
MONTH	---	---	---	17.2	5.8	8.8	15.4	5.1	7.9	13.7	4.1	7.2

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
OCTOBER				NOVEMBER				DECEMBER			JANUARY		
1	19.5	15.8	17.2	17.1	15.1	16.3	15.7	13.2	14.1	---	---	---	
2	17.6	15.1	16.2	16.8	15.6	16.1	16.1	12.0	13.9	---	---	---	
3	20.5	15.4	17.0	15.9	14.8	15.5	16.3	13.4	14.8	---	---	---	
4	20.5	15.2	16.9	15.1	13.6	14.1	15.0	13.6	14.1	---	---	---	
5	19.2	15.7	17.4	15.2	13.6	14.5	16.9	13.0	14.7	---	---	---	
6	17.3	15.5	16.7	16.4	13.3	14.6	16.1	14.6	15.3	---	---	---	
7	20.5	15.3	17.2	13.6	12.4	12.7	14.7	12.8	13.6	---	---	---	
8	20.1	14.9	16.6	13.9	12.6	13.2	14.2	11.9	13.2	---	---	---	
9	20.2	14.5	16.3	15.0	13.1	13.7	13.8	11.5	12.5	---	---	---	
10	20.1	14.7	16.6	15.9	13.2	14.9	12.0	11.3	11.7	---	---	---	
11	20.4	14.9	16.7	17.1	12.2	14.5	13.5	11.0	12.4	---	---	---	
12	20.3	15.1	16.9	14.9	12.2	13.8	12.4	11.3	11.7	---	---	---	
13	---	---	---	15.0	13.0	13.9	13.8	10.6	12.0	---	---	---	
14	---	---	---	16.9	13.4	14.9	14.1	10.7	12.0	---	---	---	
15	19.8	14.8	16.6	17.0	13.0	14.7	14.8	10.5	12.7	---	---	---	
16	18.9	15.2	16.7	16.9	12.5	14.4	13.2	10.6	11.7	---	---	---	
17	18.6	16.7	17.8	16.8	13.2	14.6	13.4	9.9	11.6	---	---	---	
18	19.3	16.4	17.5	16.7	12.8	14.6	13.3	10.4	12.0	---	---	---	
19	18.8	14.8	16.2	15.3	14.4	14.6	12.1	11.2	11.7	---	---	---	
20	18.5	14.9	16.5	15.2	12.8	14.1	13.0	11.0	11.9	---	---	---	
21	19.8	15.2	16.9	15.7	12.2	13.5	12.7	11.5	12.1	---	---	---	
22	19.0	13.9	16.0	14.9	11.5	13.1	13.0	8.7	12.0	---	---	---	
23	18.3	13.7	15.5	15.5	12.1	13.6	12.7	9.1	10.4	---	---	---	
24	18.0	13.4	15.5	14.8	12.3	13.7	11.1	8.3	9.4	---	---	---	
25	18.8	13.7	15.8	16.6	13.3	14.4	10.4	7.1	8.6	---	---	---	
26	---	---	---	15.9	11.8	13.5	10.8	7.3	8.9	---	---	---	
27	---	---	---	15.7	11.4	13.5	10.9	8.6	9.7	---	---	---	
28	16.2	14.9	15.5	16.5	12.6	14.4	11.3	8.9	10.0	---	---	---	
29	17.6	15.2	16.1	16.3	14.0	15.1	10.1	8.4	9.5	---	---	---	
30	19.1	15.5	17.1	16.2	14.1	15.3	11.2	7.7	9.9	---	---	---	
31	18.7	15.6	16.9	---	---	---	10.4	7.5	8.8	---	---	---	
MONTH	---	---	---	17.1	11.4	14.3	16.9	7.1	11.8	---	---	---	

WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	12.9	11.4	11.9	21.0	13.6	15.1	18.9	14.5	15.2
2	11.8	10.4	10.9	15.7	11.8	12.9	17.0	13.4	14.6	17.2	14.7	15.2
3	12.2	10.6	11.0	18.6	11.6	13.1	23.5	14.2	16.6	17.4	14.7	15.3
4	12.4	10.6	10.9	18.3	11.6	12.8	19.0	13.7	15.4	17.1	14.8	15.3
5	12.3	10.7	11.1	15.5	11.8	12.5	15.0	13.6	14.0	18.1	14.9	15.7
6	14.1	10.8	11.4	15.6	11.9	12.7	15.6	13.5	14.4	19.8	14.8	16.0
7	12.6	10.9	11.4	13.7	11.9	12.4	16.9	13.9	14.6	21.0	14.8	16.0
8	13.3	10.8	11.4	13.5	11.9	12.3	22.4	14.4	17.2	16.7	15.0	15.4
9	12.6	10.8	11.3	13.6	12.1	12.4	19.0	13.6	15.0	19.9	15.0	16.0
10	12.7	10.8	11.3	15.3	12.2	12.9	19.4	13.8	15.1	20.8	15.2	16.2
11	14.3	10.9	11.7	14.8	12.1	12.7	16.3	13.9	14.7	18.0	15.1	16.2
12	14.1	10.9	11.6	15.7	12.2	12.9	19.5	13.8	15.0	17.4	15.1	16.0
13	14.3	11.0	11.8	13.2	12.4	12.7	20.0	14.1	15.4	16.3	.0	15.0
14	15.4	11.2	12.3	15.6	12.4	13.0	23.6	14.8	17.2	16.9	14.8	15.4
15	15.7	10.9	12.0	14.6	12.5	13.2	20.9	14.0	15.9	17.0	14.9	15.5
16	15.0	11.0	11.8	14.7	12.6	13.1	20.6	13.9	15.0	19.0	15.2	15.9
17	17.9	11.4	12.9	15.8	12.7	13.3	17.8	14.0	14.6	21.6	14.7	16.8
18	20.0	11.7	14.2	14.6	12.7	13.1	16.9	14.1	14.6	16.4	15.0	15.5
19	16.9	12.8	13.9	15.2	12.7	13.2	15.9	14.3	14.7	20.7	15.3	16.9
20	19.8	13.1	15.1	16.5	12.9	14.1	20.7	14.2	15.4	16.2	15.4	15.7
21	18.0	11.3	13.4	16.3	12.9	13.7	17.3	14.0	14.9	20.7	15.0	17.4
22	14.3	11.1	12.0	15.8	13.0	13.7	19.2	14.2	15.1	20.4	14.6	17.1
23	14.1	11.2	12.0	17.9	13.1	14.0	16.9	14.3	15.1	21.4	14.3	17.0
24	18.6	11.3	13.3	19.4	12.8	14.3	17.2	14.3	15.0	17.9	15.1	16.1
25	17.0	11.4	12.6	15.2	13.0	13.6	16.9	14.1	14.9	21.3	15.0	17.1
26	14.9	11.2	12.2	14.6	13.1	13.5	16.1	14.1	14.6	20.1	15.3	17.0
27	16.9	11.3	12.7	19.4	13.0	14.4	16.9	14.3	14.9	16.3	15.1	15.5
28	15.1	11.5	12.5	19.5	13.2	14.4	16.1	14.4	14.9	16.0	15.4	15.7
29	13.6	11.6	12.2	16.9	13.4	14.1	19.4	14.4	15.3	17.9	15.4	16.5
30	14.5	11.4	12.5	15.8	13.4	14.0	20.7	14.5	15.7	20.1	13.7	16.2
31	---	---	---	17.3	13.5	14.2	20.4	14.3	15.6	---	---	---
MONTH	---	---	---	19.5	11.4	13.3	23.6	13.4	15.2	21.6	.0	16.0

WHITE RIVER BASIN

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07055646 BUFFALO RIVER NEAR BOXLEY

LOCATION.--Lat 35°56'43", long 91°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, 0.8 mi upstream from Smith Creek, 2.6 mi south of Boxley, and at mi 108.9.

DRAINAGE AREA.--57 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, October 1998 to current year. Annual maximum water years 1996-98.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good.

REVISIONS.--Revised maximum discharges for water years 1993-95, and daily discharges, in cubic feet per second, for the high-water periods in these years are given below. These figures supersede those published in reports for 1993-95.

Extremes:

Water Year	Date	Discharge (ft ³ /s)	Gage Height (ft)
April-Sept 1993	May 10, 1993	1,640	5.91
1994	Nov. 14, 1993	11,600	10.68
1995	Nov. 5, 1994	5,620	8.66

Daily Discharges:

Apr. 18, 1993	448	Nov. 15, 1993	758	Jan. 27, 1994	667	Mar. 11, 1994	426
19, 1993	339	16, 1993	626	28, 1994	371	12, 1994	592
20, 1993	520	17, 1993	742	Feb. 22, 1994	1,030	13, 1994	530
May 10, 1993	959	18, 1993	376	23, 1994	714	14, 1994	350
11, 1993	534	Dec. 13, 1993	331	Feb. 24, 1994	384	Apr. 29, 1994	349
12, 1993	324	14, 1993	464	Mar. 8, 1994	396	30, 1994	1,010
Nov. 14, 1993	3,580	Jan. 26, 1994	572	9, 1994	368	May 1, 1994	475
Nov. 4, 1994	541	Nov. 16, 1994	388	Mar. 7, 1995	770	Apr. 19, 1995	214
5, 1994	3,850	Dec. 9, 1994	811	8, 1995	428	20, 1995	1,140
6, 1994	812	10, 1994	524	14, 1995	251	21, 1995	486
9, 1994	602	Jan. 13, 1995	1,250	15, 1995	455	29, 1995	189
10, 1994	677	14, 1995	1,380	Apr. 10, 1995	81	30, 1995	384
14, 1994	352	15, 1995	516	11, 1995	913	May 1, 1995	1,370
15, 1994	745	16, 1995	311	12, 1995	524	2, 1995	563
May 8, 1995	2,250	May 10, 1995	432	June 11, 1995	806	June 12, 1995	487
9, 1995	784	June 10, 1995	550				

	Total	Mean	Max	Min	Cfsm	In.
May 1993	4,510	145	959	34	2.53	2.92
Nov. 1993	7,639	255	3,580	12	4.44	4.95
Dec. 1993	3,926	127	464	26	2.21	2.54
Jan. 1994	3,131	101	667	17	1.76	2.03
Feb. 1994	4,855	173	1,030	40	3.02	3.15
Mar. 1994	6,183	199	592	48	3.47	4.01
Apr. 1994	4,358	145	1,010	48	2.53	2.82
May 1994	2,274.2	73.4	475	9.2	1.28	1.47
Water Year 1994	34,015.72	93.2	3,580	0.13	1.62	22.05
Nov. 1994	10,811	360	3,850	12	6.28	7.01
Dec. 1994	3,688	119	811	29	2.07	2.39
Jan. 1995	5,830	188	1,380	18	3.28	3.78
Mar. 1995	5,661	183	770	61	3.18	3.67
Apr. 1995	6,794	226	1,140	38	3.95	4.40
May 1995	8,392	271	2,250	19	4.72	5.44
June 1995	3,099	103	806	12	1.80	2.01
Calendar Year 1994	34,147.29	93.6	3,850	.13	1.63	22.13
Water Year 1995	46,375.86	127	3,850	.13	2.21	30.06

WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	18	92	57	275	35	132	118	26	621	3.1	.22
2	5.9	76	79	925	221	33	117	100	24	248	3.1	.21
3	5.4	65	75	395	181	31	1420	86	21	130	3.0	.18
4	5.2	51	111	248	145	28	1130	1660	17	83	3.1	.15
5	6.6	43	177	190	123	27	1240	1350	15	59	2.9	.14
6	1040	38	146	159	138	27	922	498	13	45	2.7	.14
7	293	35	181	133	1310	26	502	281	12	38	2.5	.10
8	120	46	142	116	514	246	362	191	10	30	2.3	.17
9	75	47	119	98	328	386	632	136	8.7	25	2.2	.18
10	55	188	102	84	247	229	375	120	8.1	20	2.0	.14
11	43	161	88	76	280	175	263	274	8.0	18	1.8	.15
12	34	116	839	73	282	174	201	461	7.6	16	1.6	.23
13	29	95	1170	69	220	529	163	389	7.3	14	1.4	.24
14	24	82	469	60	184	430	244	236	7.3	12	1.2	.19
15	20	70	287	54	156	423	405	167	8.0	11	.99	.14
16	18	60	212	50	132	526	282	128	8.9	9.2	.85	.12
17	104	52	162	52	113	417	224	175	8.8	8.1	.73	.10
18	323	45	131	72	100	285	183	266	7.8	7.3	.66	.09
19	173	43	115	61	89	220	151	161	7.0	6.5	.57	.08
20	106	94	96	57	77	221	126	119	6.5	5.9	.49	.08
21	78	84	106	56	67	186	109	109	6.1	5.4	.43	.07
22	60	74	152	148	59	154	93	93	5.7	5.1	.38	.06
23	49	67	122	179	54	132	89	92	5.5	4.7	.40	.05
24	41	61	107	151	49	114	76	82	6.1	4.3	.36	.05
25	35	56	94	132	46	99	77	64	7.6	4.0	.30	.04
26	31	50	86	118	43	86	260	58	8.4	3.7	.34	.04
27	28	44	79	109	41	77	320	48	6.7	3.6	.43	.04
28	24	41	71	100	38	94	230	39	6.3	3.5	.32	.04
29	21	38	64	93	---	216	181	32	13	3.3	.29	.04
30	20	78	56	156	---	169	143	29	1560	3.2	.26	.04
31	18	---	50	391	---	150	---	27	---	3.2	.24	---
TOTAL	2891.7	2018	5780	4662	5512	5945	10652	7589	1857.4	1451.0	40.94	3.52
MEAN	93.3	67.3	186	150	197	192	355	245	61.9	46.8	1.32	.12
MAX	1040	188	1170	925	1310	529	1420	1660	1560	621	3.1	.24
MIN	5.2	18	50	50	38	26	76	27	5.5	3.2	.24	.04
AC-FT	5740	4000	11460	9250	10930	11790	21130	15050	3680	2880	81	7.0
CFSM	1.63	1.17	3.25	2.62	3.43	3.34	6.19	4.26	1.08	.82	.02	.00
IN.	1.87	1.31	3.75	3.02	3.57	3.85	6.90	4.92	1.20	.94	.03	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

MEAN	33.6	173	114	131	112	171	249	158	47.5	13.1	4.01	5.07
MAX	93.3	360	186	188	197	199	355	271	103	46.8	12.4	13.3
(WY)	1999	1995	1999	1995	1999	1994	1999	1995	1995	1999	1994	1993
MIN	3.47	9.29	23.1	84.7	23.8	109	145	53.8	4.27	3.05	.57	.12
(WY)	1995	1996	1996	1996	1996	1996	1994	1996	1994	1993	1993	1999

WHITE RIVER BASIN

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07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

SUMMARY STATISTICS

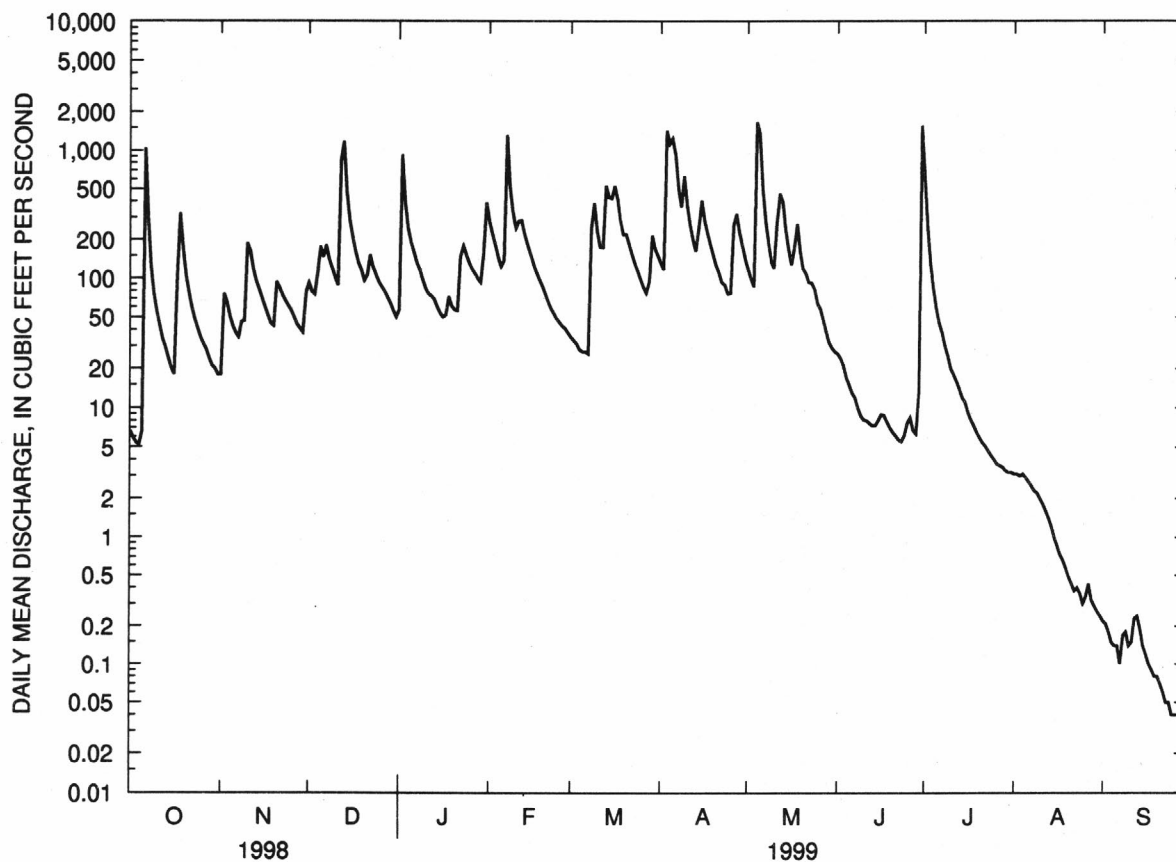
FOR 1999 WATER YEAR

WATER YEARS 1993-95,1999

ANNUAL TOTAL	48402.56			
ANNUAL MEAN	133		118	
HIGHEST ANNUAL MEAN			133	1999
LOWEST ANNUAL MEAN			93.2	1994
HIGHEST DAILY MEAN	1660	May 4	3850	Nov 5 1994
LOWEST DAILY MEAN	.04	Sep 25	.04	Sep 25 1999
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 24	.04	Sep 24 1999
INSTANTANEOUS PEAK FLOW	^a 10600	May 4	^a 29000	Sep 26 1996
INSTANTANEOUS PEAK STAGE	10.36	May 4	^b 14.79	Sep 26 1996
INSTANTANEOUS LOW FLOW	.04	Sep 24-28	.04	Sep 24-28 1999
ANNUAL RUNOFF (AC-FT)	96010		85210	
ANNUAL RUNOFF (CFSM)	2.31		2.05	
ANNUAL RUNOFF (INCHES)	31.37		27.84	
10 PERCENT EXCEEDS	286		246	
50 PERCENT EXCEEDS	60		26	
90 PERCENT EXCEEDS	.35		1.5	

^aFrom rating curve extended above 1,400 ft³/s, on basis of contracted measurement opening of peak flow

^bFrom 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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	BARO-	TEMPER-	OXYGEN,	OXYGEN,	COLI-	E. COLI
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANALYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	METRIC PRES- SURE (MM OF HG) (00025)					
OCT 21...	1045	80513	80020	68	63	7.3	743	15.5	9.5	97	32	24
DEC 08...	0900	80513	80020	141	54	7.5	740	11.0	9.7	91	K6	K6
JAN 26...	1030	80513	80020	114	50	8.0	740	6.0	11.9	99	<1	K2
MAR 23...	1610	80513	80020	139	49	7.8	762	11.1	9.7	88	<1	K2
JUN 08...	1210	80513	80020	6.4	93	7.5	736	21.3	8.3	97	K8	K3
SEP 07...	1100	80513	80020	.00	181	7.5	735	23.0	6.3	76	K11	K14
DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARE DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT FET FIELD (MG/L AS CACO3) (00418)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
OCT 21...	53	25	1	8.4	1.0	.98	8	.1	.71	24	0	29
DEC 08...	34	21	1	7.1	.92	.95	9	.1	.62	22	0	25
JAN 26...	K6	20	--	6.7	.87	.94	9	.1	.56	22	0	27
MAR 23...	K1	20	1	6.7	.84	.93	9	.1	.51	22	0	23
JUN 08...	65	43	6	15	1.5	1.1	5	.1	.85	39	0	46
SEP 07...	300	87	15	31	2.5	1.6	4	.1	1.3	72	0	88
DATE	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 21...	24	2.4	1.2	<.10	5.7	42	35	.06	7.71	<.010	<.050	<.020
DEC 08...	21	2.1	1.2	<.10	6.0	38	32	.05	14.5	<.010	.082	<.020
JAN 26...	22	2.8	1.3	<.10	5.1	28	32	.04	8.62	<.010	.065	<.020
MAR 23...	19	2.6	1.1	<.10	5.4	30	30	.04	11.3	<.010	.063	<.020
JUN 08...	38	2.8	.99	<.10	6.1	66	51	.09	1.14	<.010	<.050	<.020
SEP 07...	72	2.9	1.1	<.10	6.0	101	90	.14	--	<.010	<.050	<.020
DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
OCT 21...	<.10	.12	<.050	<.050	<.010	--	E7.6	<3.0	8	1.5	93	
DEC 08...	<.10	<.10	.021	<.050	.012	.04	E7.6	<3.0	8	3.0	89	
JAN 26...	E.05	<.10	.007	<.004	<.010	--	13	<3.0	12	3.7	85	
MAR 23...	<.10	<.10	.004	<.004	<.010	--	E7.4	<3.0	9	3.4	93	
JUN 08...	E.08	E.10	.005	<.004	.011	.03	E5.1	13	12	.21	100	
SEP 07...	<.10	<.10	.004	<.004	<.010	--	E7.6	137	18	--	96	

WHITE RIVER BASIN

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07055875 RICHLAND CREEK NEAR WITTS SPRING

LOCATION.--Lat 35°47'49", long 92°55'43", in SE1/4SW1/4SW1/4 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 mi².

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

GAGE.--Water-stage recorder.

REMARKS.--Records good, except those below 1 ft³/s, which are fair to poor.

REVISIONS.--The maximum discharges for the water years 1996 and 1997 have been revised to 11,300 ft³/s, Sept. 26, 1996, gage height, 10.35 ft, and 12,900 ft³/s, Nov. 7, 1996, gage height, 10.99 ft, superseding figures published in the report for 1998.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	12	46	79	168	36	182	90	18	373	1.2	.27
2	1.7	14	43	1200	149	35	150	79	17	167	1.1	.29
3	2.1	14	43	467	128	33	388	70	15	97	.94	.24
4	2.2	13	222	290	109	30	681	758	13	67	.85	.23
5	6.4	12	321	214	95	30	817	1040	11	50	.82	.22
6	354	11	200	174	96	40	607	425	9.2	39	.71	.19
7	128	11	163	144	570	35	405	264	7.9	33	.65	.16
8	61	15	123	123	347	279	306	184	6.5	27	.70	.16
9	39	16	101	104	254	488	258	130	5.5	23	.87	.14
10	28	97	86	92	199	295	201	103	5.1	19	.79	.11
11	21	99	76	85	186	218	158	101	5.5	17	.65	.09
12	17	74	381	82	165	191	126	96	4.7	15	.58	.10
13	14	59	526	77	136	479	110	104	5.7	13	.53	.14
14	11	51	292	67	118	400	151	79	9.6	11	.48	.12
15	9.3	44	200	60	109	357	265	66	7.0	9.5	.43	.12
16	9.5	39	151	57	100	402	219	57	5.6	8.2	.36	.11
17	167	33	117	59	89	325	182	52	4.8	7.0	.30	.05
18	520	30	101	63	83	248	151	64	3.9	5.9	.25	.00
19	185	29	100	56	77	197	128	47	3.3	4.9	.21	.00
20	99	50	86	53	69	178	110	39	3.1	4.1	.17	.00
21	70	48	122	53	60	149	99	35	2.9	3.5	.14	.00
22	51	44	199	73	53	125	89	35	2.6	2.9	.07	.00
23	39	41	166	93	51	112	80	e48	2.3	2.5	.06	.00
24	32	37	133	95	47	101	69	e42	3.7	2.5	.07	.00
25	27	34	111	90	45	90	68	37	27	2.5	.08	.00
26	23	31	100	84	43	81	90	e34	26	1.9	.12	.00
27	19	28	90	81	42	75	178	31	14	1.8	.30	.00
28	17	25	81	76	39	167	147	26	11	1.6	.37	.00
29	16	24	73	72	---	361	121	23	17	1.6	.38	.00
30	14	36	63	87	---	273	104	22	858	1.5	.34	.00
31	13	---	56	186	---	222	---	20	---	1.3	.29	---
TOTAL	1998.1	1071	4572	4536	3627	6052	6640	4201	1125.9	1014.2	14.81	2.74
MEAN	64.5	35.7	147	146	130	195	221	136	37.5	32.7	.48	.091
MAX	520	99	526	1200	570	488	817	1040	858	373	1.2	.29
MIN	1.7	11	43	53	39	30	68	20	2.3	1.3	.06	.00
AC-FT	3960	2120	9070	9000	7190	12000	13170	8330	2230	2010	29	5.4
CFSM	.96	.53	2.20	2.18	1.93	2.91	3.30	2.02	.56	.49	.01	.00
IN.	1.11	.59	2.54	2.52	2.01	3.36	3.69	2.33	.63	.56	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	34.1	187	124	175	200	246	222	63.7	33.0	8.67	.52	28.5
MAX	64.5	658	158	313	376	415	272	136	83.2	32.7	1.17	139
(WY)	1999	1997	1997	1998	1997	1998	1997	1999	1995	1999	1996	1996
MIN	5.79	17.6	85.6	82.8	37.8	130	184	27.8	6.35	.26	.11	.091
(WY)	1998	1998	1998	1997	1996	1996	1998	1997	1998	1998	1998	1999

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

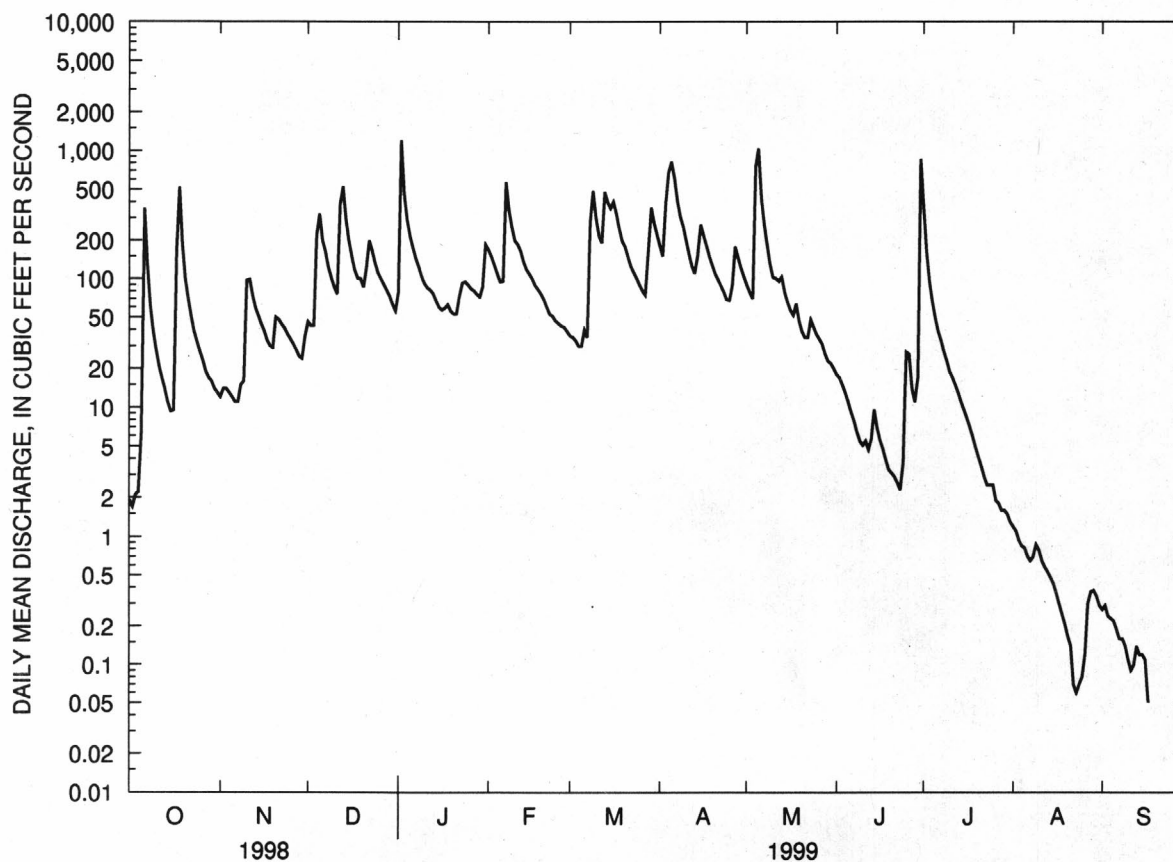
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1995 - 1999

ANNUAL TOTAL	44629.01		34854.75		
ANNUAL MEAN	122		95.5		109
HIGHEST ANNUAL MEAN					154
LOWEST ANNUAL MEAN					75.9
HIGHEST DAILY MEAN	3010	Jan 5	1200	Jan 2	4970
LOWEST DAILY MEAN	.00	Aug 2	.00	Sep 18	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 27	.00	Sep 18	.00
INSTANTANEOUS PEAK FLOW			4610	May 4	^a 12900
INSTANTANEOUS PEAK STAGE			7.13	May 4	10.99
INSTANTANEOUS LOW FLOW			.00	at times	.00
ANNUAL RUNOFF (AC-FT)	88520		69130		79010
ANNUAL RUNOFF (CFSM)	1.82		1.43		1.63
ANNUAL RUNOFF (INCHES)	24.78		19.35		22.12
10 PERCENT EXCEEDS	288		250		242
50 PERCENT EXCEEDS	39		44		28
90 PERCENT EXCEEDS	.11		.25		.16

^aFrom rating curve extended above 2,300 ft³/s on basis of slope-area measurement of peak flow^eEstimated

WHITE RIVER BASIN

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07056000 BUFFALO RIVER NEAR ST. JOE

LOCATION.--Lat 35°59'00", long 92°44'47", in SW1/4SW1/4 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 mi².

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 sea level. 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 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	121	330	532	2050	490	1640	1120	477	9520	90	58
2	121	120	477	3540	1680	470	1500	1020	445	2970	88	57
3	119	130	502	4450	1450	452	1570	947	419	1700	86	53
4	112	209	497	2410	1280	434	8430	1440	401	1180	83	47
5	119	243	1320	1740	1120	418	5630	12800	369	910	80	44
6	196	216	1390	1440	1020	408	6190	5060	337	738	73	39
7	1460	196	1130	1330	5230	396	4270	2770	309	625	68	36
8	966	186	1050	1270	4900	433	3150	1930	279	542	62	37
9	596	181	909	1140	2880	2280	3360	1490	253	475	59	35
10	429	219	792	1010	2140	2140	3060	1220	250	420	57	33
11	334	726	707	905	1780	1590	2380	1160	238	377	59	33
12	271	899	907	845	1740	1360	1920	1290	258	343	60	35
13	221	720	5360	809	1570	2600	1660	1690	331	311	51	36
14	184	616	3560	763	1370	3840	1580	1380	378	283	50	35
15	156	543	2070	704	1240	3570	2900	1120	365	258	49	37
16	139	489	1530	655	1150	4020	2840	975	301	233	48	37
17	258	443	1250	629	1050	3700	2250	893	267	211	46	36
18	1040	407	1060	637	959	2890	1910	1250	238	194	43	33
19	1430	380	950	712	893	2270	1680	1290	215	173	39	31
20	901	375	865	674	827	1970	1520	1010	199	159	36	29
21	627	382	792	640	757	1880	1380	861	185	144	34	28
22	478	519	910	738	695	1670	1270	796	173	131	32	27
23	383	500	1060	1140	646	1520	1160	934	165	122	39	27
24	321	461	962	1290	610	1390	1070	878	209	114	42	26
25	275	434	862	1160	579	1270	1000	788	851	108	40	25
26	237	404	784	1050	551	1160	1050	886	1070	107	52	24
27	205	379	729	975	534	1070	1620	904	758	103	61	24
28	181	358	683	917	513	1070	1650	735	568	100	58	23
29	163	336	639	861	---	1960	1390	627	487	98	60	22
30	147	331	593	824	---	2120	1240	561	3210	96	62	22
31	132	---	549	1490	---	1820	---	514	---	93	60	---
TOTAL	12330	11523	35219	37280	41214	52661	72270	50339	14005	22838	1767	1029
MEAN	398	384	1136	1203	1472	1699	2409	1624	467	737	57.0	34.3
MAX	1460	899	5360	4450	5230	4020	8430	12800	3210	9520	90	58
MIN	112	120	330	532	513	396	1000	514	165	93	32	22
AC-FT	24460	22860	69860	73940	81750	104500	143300	99850	27780	45300	3500	2040
CFSM	.48	.46	1.37	1.45	1.78	2.05	2.91	1.96	.56	.89	.07	.04
IN.	.55	.52	1.58	1.67	1.85	2.36	3.24	2.26	.63	1.02	.08	.05

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

MEAN	318	1025	1216	1188	1593	1998	2194	1866	765	232	166	176
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	321	67.6	29.6	15.0	10.2
(WY)	1964	1964	1990	1964	1963	1972	1963	1997	1977	1954	1954	1954

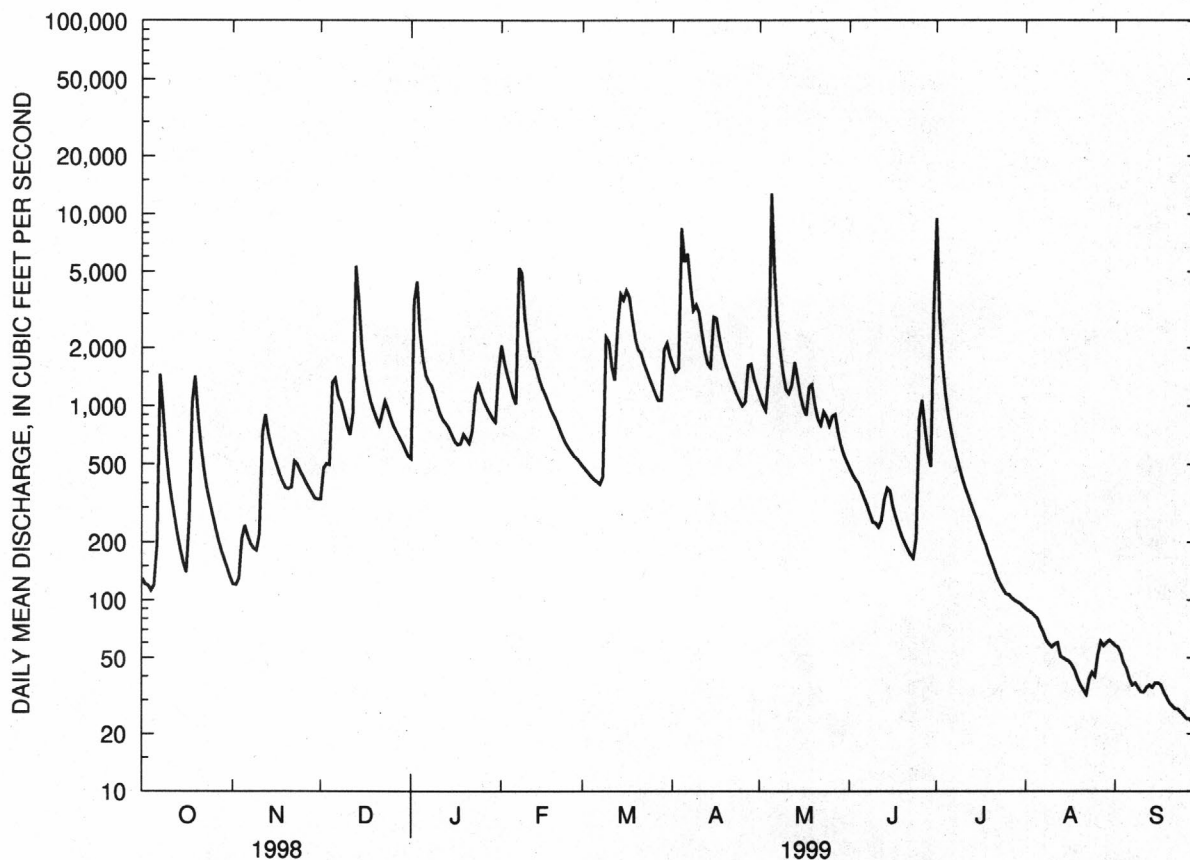
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1940 - 1999

ANNUAL TOTAL	403223		352475									
ANNUAL MEAN	1105		966							1058		
HIGHEST ANNUAL MEAN										2619		1945
LOWEST ANNUAL MEAN										316		1963
HIGHEST DAILY MEAN	14700	Jan 5	12800	May 5						124000	Dec 3	1982
LOWEST DAILY MEAN	18	Sep 9	22	Sep 29						7.0	Sep 17	1954
ANNUAL SEVEN-DAY MINIMUM	18	Sep 7	24	Sep 24						7.4	Sep 11	1954
INSTANTANEOUS PEAK FLOW			17600	May 5						^a 158000	Dec 3	1982
INSTANTANEOUS PEAK STAGE			17.91	May 5						53.75	Dec 3	1982
INSTANTANEOUS LOW FLOW			21	Sep 30						6.6	Sep 16,17,20	1954
ANNUAL RUNOFF (AC-FT)	799800		699100							766200		
ANNUAL RUNOFF (CFSM)	1.33		1.16							1.28		
ANNUAL RUNOFF (INCHES)	18.09		15.82							17.33		
10 PERCENT EXCEEDS	2510		2090							2350		
50 PERCENT EXCEEDS	434		596							320		
90 PERCENT EXCEEDS	33		48							45		

^aFrom rating curve extended above 91,000 ft³/s

WHITE RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
JAN 20...	1045	80513	80020	673	181	7.4	754	5.5	12.2	98	K1
FEB 09...	1030	80513	80020	2910	141	7.3	748	10.0	11.5	104	73
MAR 09...	1205	80513	80020	2940	145	7.8	753	9.9	10.2	91	140
MAR 25...	0845	80513	80020	1290	168	8.3	755	11.2	9.8	90	K8
APR 12...	1350	80513	80020	1890	163	8.0	762	17.3	10.0	104	K5
APR 15...	0830	80513	80020	2740	185	7.3	743	12.8	9.3	90	210
MAY 05...	1045	80513	80020	17600	114	6.5	735	15.5	9.2	96	500
JUN 03...	0940	80513	80020	422	225	6.8	750	24.0	7.2	88	K7
JUN 24...	1215	80513	81213	159	239	8.0	748	24.3	9.3	113	58
JUL 01...	0830	80513	80020	12100	121	7.4	752	19.8	8.0	89	K22000
JUL 22...	0900	80513	80020	122	232	7.5	761	28.5	6.4	83	8
AUG 11...	0835	80513	80020	53	231	7.8	748	28.6	5.7	74	K9
SEP 07...	1200	80513	80020	35	250	7.5	757	26.5	8.5	107	K14

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL SOLVED (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
JAN 20...	<1	K1	78	99	<.010	.196	<.020	--	--	--	E.07
FEB 09...	54	56	57	85	<.010	.336	.020	.03	.13	--	.15
MAR 09...	220	190	66	90	<.010	.176	<.020	--	--	--	.32
MAR 25...	K13	K12	159	--	<.010	.151	<.020	--	--	--	<.10
APR 12...	K10	K9	68	--	<.010	.139	<.020	--	--	--	E.09
APR 15...	200	150	81	--	<.010	.187	<.020	--	--	--	.13
MAY 05...	800	540	52	76	<.010	.165	.045	.06	2.0	.27	2.1
JUN 03...	K2	21	102	142	<.010	.106	.032	.04	.09	--	.12
JUN 24...	38	79	108	142	<.010	.080	.020	.03	--	--	<.20
JUL 01...	2300	K2500	61	106	<.010	.138	<.020	--	--	--	1.4
JUL 22...	K11	15	105	133	<.010	<.050	<.020	--	--	--	.13
AUG 11...	K12	83	103	129	<.010	<.050	<.020	--	--	--	.12
SEP 07...	K4	K7	112	146	<.010	<.050	<.020	--	--	--	E.05

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 20...	E.10	--	--	<.004	<.004	<.010	--	1.3	15	27	98
FEB 09...	E.10	.48	--	.024	.007	.016	.05	--	27	212	88
MAR 09...	.11	.49	.29	.049	.004	.017	.05	2.1	52	413	79
MAR 25...	E.10	--	--	.006	.005	<.010	--	.80	16	56	100
APR 12...	E.10	--	--	.010	.006	<.010	--	.90	15	77	96
APR 15...	E.10	.32	--	.024	.007	<.010	--	1.0	28	207	78
MAY 05...	.31	2.2	.48	.537	.033	.035	.11	6.6	565	26800	83
JUN 03...	E.10	.23	--	.007	<.004	.010	.03	1.2	21	24	96
JUN 24...	<.20	--	--	<.020	<.020	<.010	--	.60	23	9.9	99
JUL 01...	.25	1.5	.39	.376	.023	.019	.06	6.8	463	15100	55
JUL 22...	.20	--	--	.008	<.004	<.010	--	1.4	17	5.6	95
AUG 11...	.19	--	--	.008	<.004	<.010	--	1.1	16	2.3	99
SEP 07...	E.10	--	--	.006	<.004	<.010	--	1.3	18	1.7	96

WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL

LOCATION.--Lat 35°57'00", long 92°43'30", in NE1/4NW1/4 sec.18, T.15 N., R.16 W., Searcy County, Hydrologic Unit 11010005, on left bank 400 ft northeast of U.S. Highway 65 80 ft upstream from Holder Creek, and 1.8 mi southeast of Silver Hill.

DRAINAGE AREA.--83.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1999 to present.

GAGE.--Water-stage recorder. Datum of gage is 560.35 ft above sea level. 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.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period January to September, 730 ft³/s June 30, gage height 5.26 ft, from rating curve extended above 1,400 ft³/s; minimum 2.7 ft³/s, Sept. 24-25, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	115	25	142	61	13	307	9.9	4.0
2	---	---	---	---	103	23	121	53	12	141	9.5	4.1
3	---	---	---	---	90	22	277	48	12	91	9.0	3.9
4	---	---	---	---	77	20	563	e68	12	65	8.7	3.8
5	---	---	---	---	68	20	417	e101	11	49	8.3	4.4
6	---	---	---	---	66	19	412	75	11	38	7.9	3.9
7	---	---	---	---	382	20	266	53	11	31	7.4	3.6
8	---	---	---	---	216	86	212	43	11	27	7.0	4.2
9	---	---	---	---	159	279	199	36	10	26	6.8	3.8
10	---	---	---	---	132	145	157	32	10	23	6.4	3.7
11	---	---	---	---	112	110	128	29	10	23	6.7	3.6
12	---	---	---	---	111	94	105	28	9.9	21	6.3	4.2
13	---	---	---	---	91	350	92	27	10	19	5.8	3.7
14	---	---	---	---	82	308	162	27	9.7	17	5.5	3.6
15	---	---	---	---	75	308	358	24	9.4	15	5.3	3.5
16	---	---	---	---	66	413	211	22	9.2	15	5.1	3.4
17	---	---	---	---	61	333	162	23	9.0	14	4.8	3.3
18	---	---	---	---	54	221	134	66	8.7	13	4.8	3.3
19	---	---	---	---	51	170	115	39	8.6	14	4.6	3.3
20	---	---	---	---	45	160	99	29	8.4	13	4.5	3.3
21	---	---	---	---	40	140	86	25	8.1	13	4.4	3.2
22	---	---	---	84	38	119	75	22	8.1	12	4.3	3.2
23	---	---	---	105	36	105	67	21	8.2	12	5.7	3.2
24	---	---	---	96	33	92	58	20	9.7	12	4.7	2.9
25	---	---	---	82	30	80	54	18	11	12	4.5	2.9
26	---	---	---	75	29	71	61	18	17	12	4.7	3.0
27	---	---	---	69	28	66	172	17	20	12	4.6	3.1
28	---	---	---	60	26	172	106	16	18	11	4.4	3.0
29	---	---	---	55	---	344	84	15	16	11	4.3	3.0
30	---	---	---	60	---	208	71	15	923	11	4.2	3.0
31	---	---	---	123	---	166	---	14	---	10	4.0	---
TOTAL	---	---	---	---	2416	4689	5166	1085	1245.0	1090	184.1	105.1
MEAN	---	---	---	---	86.3	151	172	35.0	41.5	35.2	5.94	3.50
MAX	---	---	---	---	382	413	563	101	923	307	9.9	4.4
MIN	---	---	---	---	26	19	54	14	8.1	10	4.0	2.9
AC-FT	---	---	---	---	4790	9300	10250	2150	2470	2160	365	208
CFSM	---	---	---	---	1.04	1.82	2.07	.42	.50	.42	.07	.04
IN.	---	---	---	---	1.08	2.10	2.31	.49	.56	.49	.08	.05

WHITE RIVER BASIN

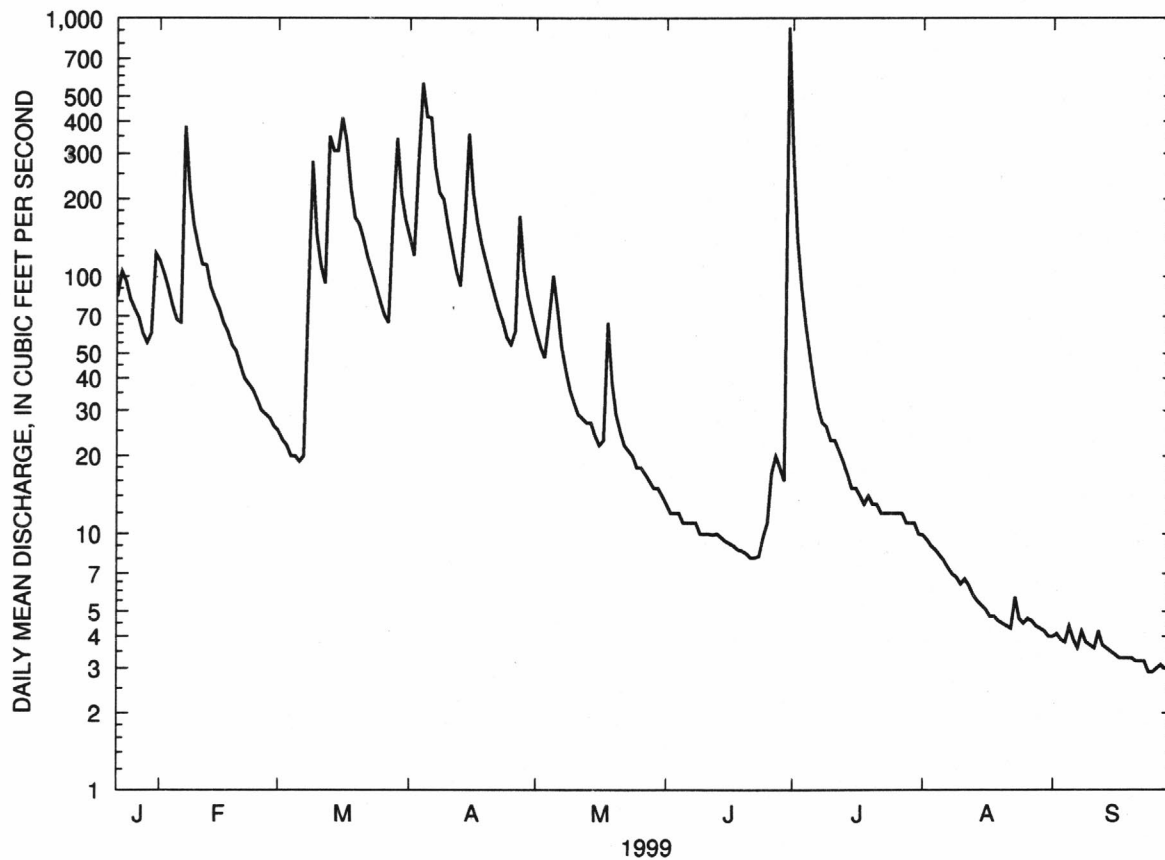
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07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

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

MEAN	---	---	---	---	86.3	151	172	35.0	41.5	35.2	5.94	3.50
MAX	---	---	---	---	86.3	151	172	35.0	41.5	35.2	5.94	3.50
(WY)	---	---	---	---	1999	1999	1999	1999	1999	1999	1999	1999
MIN	---	---	---	---	86.3	151	172	35.0	41.5	35.2	5.94	3.50
(WY)	---	---	---	---	1999	1999	1999	1999	1999	1999	1999	1999

e 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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	
JAN 20...	1000	80513	80020	4.4	206	7.3	752	6.0	12.9	105	K18	K5	
FEB 09...	1318	80513	80020	150	145	7.1	747	12.5	11.2	107	66	36	
MAR 09...	1045	80513	80020	254	99	7.3	753	8.9	10.6	92	700	860	
25...	0935	80513	80020	74	184	8.0	755	12.3	9.9	93	43	34	
APR 12...	1245	80513	80020	95	175	7.9	763	17.2	11.3	118	K30	K5	
15...	0730	80513	80020	390	131	7.2	740	13.0	9.3	91	K17	K3000	
MAY 04...	2345	80513	80020	175	180	6.9	731	17.0	9.2	99	500	400	
JUN 03...	1035	80513	80020	12	299	8.1	750	21.6	8.8	102	31	K11	
24...	1130	80513	81213	8.5	316	7.9	748	22.0	8.4	98	K3	K2	
30...	1700	80513	80020	1360	88	7.1	749	20.8	8.1	92	K23000	4400	
JUL 22...	0945	80513	80020	12	313	7.6	761	21.5	9.4	107	52	29	
AUG 10...	1400	80513	80020	6.3	321	7.6	744	28.9	7.4	98	94	110	
SEP 07...	1045	80513	80020	3.7	344	7.2	754	22.8	7.6	90	K17	K7	
DATE		STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L) AS N) (00607)
JAN 20...	23	78	117	--	--	<.010	--	.548	<.020	--	--	--	--
FEB 09...	28	53	87	--	--	<.010	--	.452	<.020	--	--	--	--
MAR 09...	700	56	70	--	--	<.010	--	.334	<.020	--	--	--	--
25...	26	95	--	--	--	<.010	--	.361	<.020	--	--	--	--
APR 12...	K12	66	--	--	--	<.010	--	.345	.020	.03	.11	.10	--
15...	1500	49	--	--	--	<.010	--	.223	<.020	--	--	--	--
MAY 04...	460	80	112	--	--	<.010	--	.376	.044	.06	.87	.29	--
JUN 03...	58	126	194	.454	2.0	.012	.04	.466	.075	.10	.15	.13	--
24...	K6	137	188	.510	2.3	.010	.03	.520	.040	.05	--	--	--
30...	K2700	33	102	--	--	<.010	--	.222	.020	.03	1.0	.34	--
JUL 22...	130	138	183	--	--	<.010	--	.465	.031	.04	.14	.20	--
AUG 10...	150	132	175	--	--	<.010	--	.388	.043	.06	.18	.13	--
SEP 07...	200	139	194	.442	2.0	.012	.04	.454	.020	.03	.13	--	--
DATE		NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 20...	.11	.11	.66	.66	.026	.020	.018	.06	2.4	17	.20	98	--
FEB 09...	.13	E.10	.58	--	.031	.018	.020	.06	--	19	7.7	94	--
MAR 09...	.27	.17	.60	.50	.055	.017	.026	.08	4.4	26	18	99	--
25...	E.07	E.10	--	--	.020	.017	<.010	--	.90	18	3.6	100	--
APR 12...	.13	.12	.48	.46	.027	.020	.018	.06	1.1	17	4.4	100	--
15...	.36	.18	.58	.41	.082	.031	.023	.07	3.3	28	29	92	--
MAY 04...	.92	.33	1.3	.71	.281	.099	.082	.25	6.5	123	58	98	--
JUN 03...	.22	.20	.69	.67	.031	.019	.026	.08	.90	51	1.7	71	--
24...	<.20	<.20	--	--	<.020	<.020	.020	.06	.50	46	1.1	85	--
30...	1.0	.36	1.3	.58	.292	.079	.047	.14	11	156	573	90	--
JUL 22...	.17	.23	.64	.70	.027	.017	.013	.04	1.1	52	1.7	88	--
AUG 10...	.23	.17	.61	.56	.027	.017	<.010	--	1.2	54	.92	83	--
SEP 07...	.15	E.10	.60	--	.019	.013	<.010	--	1.4	84	.84	82	--

WHITE RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1968-69, 1971-72, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
21...	0816	80513	.00	160	307	7.7	760	22.1	7.2	83	4.40
21...	0817	80513	10.0	160	307	7.7	760	22.1	7.2	83	--
21...	0818	80513	20.0	160	307	7.7	760	22.1	7.1	82	--
21...	0819	80513	30.0	160	307	7.7	760	22.2	7.1	82	--
21...	0820	80513	40.0	160	308	7.7	760	22.1	7.0	81	--
21...	0821	80513	50.0	160	306	7.7	760	22.1	6.9	80	--
21...	0822	80513	54.0	160	312	7.4	760	21.7	3.8	44	--
21...	0823	80513	56.0	160	326	7.0	760	20.4	.4	4	--
21...	0824	80513	58.0	160	325	7.0	760	19.9	.3	4	--
21...	0825	80513	60.0	160	318	7.0	760	19.5	.3	3	--
21...	0826	80513	66.0	160	316	7.0	760	18.5	.3	3	--
21...	0827	80513	70.0	160	317	7.0	760	17.5	.3	3	--
21...	0828	80513	75.0	160	317	7.0	760	16.3	.3	3	--
21...	0829	80513	80.0	160	317	7.0	760	15.7	.4	4	--
21...	0830	80513	90.0	160	318	7.0	760	14.3	.4	4	--
21...	0831	80513	100	160	318	7.0	760	13.6	.4	3	--
21...	0832	80513	110	160	321	6.9	760	12.8	.4	3	--
21...	0833	80513	120	160	324	6.9	760	12.1	.4	3	--
21...	0834	80513	130	160	331	6.9	760	11.6	.4	3	--
21...	0835	80513	140	160	340	6.9	760	11.2	.4	3	--
21...	0836	80513	150	160	345	6.9	760	10.8	.3	3	--
21...	0837	80513	160	160	347	6.9	760	10.5	.3	3	--
NOV											
24...	1334	80513	.00	158	309	7.7	755	16.3	7.1	73	4.70
24...	1335	80513	10.0	158	308	7.7	755	16.2	7.0	72	--
24...	1336	80513	20.0	158	308	7.7	755	16.2	6.8	70	--
24...	1337	80513	30.0	158	308	7.7	755	16.2	6.8	70	--
24...	1338	80513	40.0	158	308	7.7	755	16.2	6.8	70	--
24...	1339	80513	50.0	158	308	7.7	755	16.2	6.8	70	--
24...	1340	80513	60.0	158	308	7.7	755	16.2	6.8	70	--
24...	1341	80513	70.0	158	308	7.7	755	16.2	6.6	68	--
24...	1342	80513	80.0	158	324	7.2	755	15.5	.3	3	--
24...	1343	80513	90.0	158	327	7.2	755	14.8	.2	2	--
24...	1344	80513	100	158	321	7.2	755	14.4	.1	1	--
24...	1345	80513	110	158	322	7.2	755	13.6	.1	1	--
24...	1346	80513	120	158	324	7.2	755	12.8	.1	1	--
24...	1347	80513	130	158	340	7.2	755	11.9	.1	1	--
24...	1348	80513	140	158	346	7.2	755	11.3	.1	1	--
24...	1349	80513	150	158	348	7.2	755	10.9	.1	1	--
24...	1350	80513	158	158	353	7.2	755	10.7	.1	1	--
DEC											
08...	1154	80513	.00	155	323	7.9	760	15.1	7.8	78	4.40
08...	1155	80513	10.0	155	322	7.9	760	15.2	7.6	75	--
08...	1156	80513	20.0	155	323	7.9	760	15.2	7.4	74	--
08...	1157	80513	30.0	155	323	7.9	760	15.2	7.3	73	--
08...	1158	80513	40.0	155	321	7.9	760	15.3	7.3	73	--
08...	1159	80513	50.0	155	322	7.9	760	15.2	7.2	72	--
08...	1200	80513	60.0	155	321	7.8	760	15.2	7.2	72	--
08...	1201	80513	70.0	155	322	7.8	760	15.3	7.1	71	--
08...	1202	80513	80.0	155	322	7.8	760	15.3	7.1	71	--
08...	1203	80513	90.0	155	321	7.8	760	15.3	7.1	71	--
08...	1204	80513	100	155	336	7.3	760	14.5	.6	6	--
08...	1205	80513	110	155	334	7.3	760	13.8	.2	2	--
08...	1206	80513	120	155	339	7.3	760	12.6	.2	1	--
08...	1207	80513	130	155	354	7.2	760	12.0	.1	1	--
08...	1208	80513	140	155	359	7.2	760	11.6	.1	1	--
08...	1209	80513	150	155	360	7.3	760	11.2	.1	1	--
08...	1210	80513	155	155	362	7.3	760	11.0	.1	1	--
MAR											
22...	0930	80513	.00	160	318	8.4	758	10.0	12.0	107	6.50
22...	0932	80513	10.0	160	317	8.4	758	10.0	12.0	107	--
22...	0934	80513	20.0	160	318	8.4	758	10.0	11.9	106	--
22...	0936	80513	30.0	160	318	8.4	758	9.9	11.9	105	--
22...	0937	80513	40.0	160	318	8.3	758	9.1	11.7	102	--
22...	0939	80513	50.0	160	319	8.3	758	8.5	11.5	98	--
22...	0940	80513	60.0	160	319	8.3	758	8.4	11.4	97	--
22...	0942	80513	70.0	160	319	8.3	758	8.4	11.3	97	--
22...	0943	80513	80.0	160	319	8.3	758	7.3	11.3	94	--
22...	0945	80513	90.0	160	319	8.3	758	8.3	11.2	96	--
22...	0946	80513	100	160	318	8.3	758	8.3	11.2	96	--
22...	0948	80513	110	160	319	8.3	758	8.3	11.2	95	--
22...	0949	80513	120	160	319	8.3	758	8.3	11.1	95	--
22...	0951	80513	130	160	318	8.3	758	8.2	11.1	95	--
22...	0952	80513	140	160	318	8.3	758	8.2	11.0	94	--
22...	0953	80513	150	160	319	8.3	758	8.2	10.9	93	--
22...	0956	80513	160	160	317	7.7	758	8.2	2.2	19	--

WHITE RIVER BASIN

07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING	SAM- PLING	RESER- VOIR	SPE- CIFIC CON- DUCT- ANCE	PH WATER WHOLE FIELD (STAND- ARD	BARO- METRIC PRES- SURE (MM OF HG)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	TRANS- PAR- ENCY (SECCHI DISK) (M)
DATE	TIME	(CODE NUMBER) (000027)	DEPTH (FEET) (000003)	DEPTH (FEET) (72025)	(US/CM) (000095)	UNITS) (000400)	(000025)	(000010)	(000300)	(00301)	(00078)
JUN											
15...	0644	80513	.00	165	315	8.6	760	26.7	8.5	107	7.10
15...	0645	80513	10.0	165	315	8.6	760	26.7	8.8	110	--
15...	0646	80513	20.0	165	316	8.6	760	26.7	8.6	107	--
15...	0647	80513	25.0	165	316	8.6	760	26.7	8.3	104	--
15...	0649	80513	28.0	165	316	8.6	760	26.0	8.9	110	--
15...	0650	80513	29.0	165	318	8.6	760	22.8	11.4	132	--
15...	0651	80513	30.0	165	319	8.6	760	21.8	11.4	131	--
15...	0652	80513	31.0	165	320	8.6	760	21.1	11.6	131	--
15...	0655	80513	32.0	165	321	8.6	760	20.8	11.0	123	--
15...	0656	80513	35.0	165	321	8.5	760	20.0	11.1	123	--
15...	0657	80513	40.0	165	321	8.4	760	18.4	10.8	115	--
15...	0658	80513	45.0	165	324	8.2	760	16.4	9.3	95	--
15...	0659	80513	50.0	165	325	8.1	760	15.5	8.8	88	--
15...	0700	80513	55.0	165	324	8.0	760	14.8	8.2	82	--
15...	0701	80513	60.0	165	324	7.9	760	13.9	7.8	76	--
15...	0702	80513	65.0	165	324	7.9	760	13.2	7.3	70	--
15...	0703	80513	70.0	165	325	7.8	760	12.6	7.1	67	--
15...	0704	80513	80.0	165	326	7.7	760	11.4	6.9	63	--
15...	0705	80513	90.0	165	331	7.6	760	10.2	6.4	57	--
15...	0706	80513	100	165	333	7.6	760	9.9	6.1	54	--
15...	0707	80513	110	165	332	7.6	760	9.5	6.3	55	--
15...	0708	80513	120	165	331	7.6	760	9.5	6.0	52	--
15...	0709	80513	130	165	331	7.6	760	9.3	6.0	53	--
15...	0710	80513	140	165	330	7.5	760	9.2	5.8	51	--
15...	0711	80513	150	165	329	7.5	760	9.1	5.3	47	--
15...	0712	80513	160	165	328	7.5	760	9.0	5.1	45	--
15...	0713	80513	165	165	328	7.5	760	9.0	4.3	38	--
JUL											
29...	0836	80513	.00	167	301	8.4	756	30.4	7.6	103	6.60
29...	0837	80513	10.0	167	298	8.4	756	30.4	8.1	109	--
29...	0838	80513	20.0	167	299	8.4	756	30.3	8.2	110	--
29...	0839	80513	22.0	167	300	8.4	756	29.5	10.0	133	--
29...	0841	80513	24.0	167	303	8.4	756	28.6	11.1	145	--
29...	0842	80513	25.0	167	307	8.4	756	28.0	11.6	149	--
29...	0843	80513	27.0	167	314	8.4	756	27.2	11.8	151	--
29...	0844	80513	29.0	167	316	8.4	756	26.4	11.7	146	--
29...	0845	80513	30.0	167	317	8.4	756	25.6	11.7	144	--
29...	0846	80513	32.0	167	320	8.3	756	24.6	11.3	137	--
29...	0848	80513	34.0	167	323	8.2	756	23.4	10.4	124	--
29...	0849	80513	36.0	167	322	8.1	756	22.3	9.7	113	--
29...	0850	80513	38.0	167	324	8.0	756	21.5	9.2	105	--
29...	0851	80513	40.0	167	322	8.0	756	20.7	9.1	102	--
29...	0852	80513	43.0	167	321	8.0	756	19.6	8.6	94	--
29...	0853	80513	46.0	167	319	7.9	756	18.8	8.6	93	--
29...	0855	80513	50.0	167	320	7.9	756	17.7	8.0	85	--
29...	0856	80513	55.0	167	322	7.8	756	16.8	7.2	75	--
29...	0857	80513	60.0	167	322	7.7	756	15.8	6.7	68	--
29...	0858	80513	65.0	167	322	7.6	756	14.9	6.2	62	--
29...	0859	80513	70.0	167	323	7.5	756	14.1	5.7	56	--
29...	0901	80513	79.0	167	324	7.4	756	13.0	5.1	48	--
29...	0902	80513	80.0	167	326	7.4	756	12.7	4.8	46	--
29...	0903	80513	90.0	167	326	7.3	756	11.9	4.4	41	--
29...	0904	80513	100	167	329	7.3	756	10.8	3.8	35	--
29...	0905	80513	110	167	329	7.2	756	10.1	3.7	33	--
29...	0906	80513	120	167	329	7.2	756	10.0	3.4	31	--
29...	0907	80513	130	167	331	7.2	756	9.8	3.3	29	--
29...	0908	80513	140	167	332	7.2	756	9.6	3.0	27	--
29...	0909	80513	150	167	332	7.2	756	9.5	2.1	18	--
29...	0910	80513	160	167	332	7.1	756	9.5	1.6	14	--
29...	0911	80513	167	167	334	7.1	756	9.4	1.6	14	--
AUG											
25...	0840	80513	.00	153	308	7.9	758	28.4	9.5	123	6.10
25...	0841	80513	10.0	153	309	8.0	758	28.4	9.4	122	--
25...	0842	80513	20.0	153	308	8.0	758	28.4	9.4	122	--
25...	0844	80513	30.0	153	308	8.0	758	28.5	9.4	121	--
25...	0846	80513	33.0	153	310	8.0	758	28.1	10.0	129	--
25...	0847	80513	34.0	153	329	8.0	758	25.9	12.8	159	--
25...	0848	80513	35.0	153	330	7.9	758	25.2	12.6	154	--
25...	0849	80513	37.0	153	331	7.9	758	24.2	11.0	132	--
25...	0850	80513	40.0	153	334	7.8	758	23.2	9.5	112	--
25...	0851	80513	44.0	153	331	7.7	758	22.2	8.1	94	--
25...	0852	80513	47.0	153	329	7.7	758	21.0	6.9	78	--
25...	0853	80513	50.0	153	331	7.6	758	19.8	6.4	70	--
25...	0854	80513	55.0	153	330	7.6	758	18.5	5.5	59	--
25...	0855	80513	60.0	153	330	7.7	758	17.3	5.0	52	--
25...	0856	80513	65.0	153	329	7.7	758	16.2	4.5	46	--
25...	0857	80513	70.0	153	331	7.8	758	15.3	3.7	37	--
25...	0858	80513	75.0	153	329	7.8	758	14.6	3.3	32	--
25...	0859	80513	80.0	153	331	7.8	758	13.8	2.9	28	--
25...	0900	80513	90.0	153	334	7.8	758	12.6	2.2	20	--
25...	0901	80513	100	153	338	7.7	758	11.6	1.1	10	--
25...	0902	80513	110	153	338	7.7	758	11.1	.7	7	--
25...	0903	80513	120	153	343	7.7	758	10.6	.2	2	--
25...	0904	80513	130	153	345	7.6	758	10.4	.2	1	--
25...	0905	80513	140	153	347	7.6	758	10.2	.1	1	--
25...	0906	80513	150	153	345	7.5	758	10.0	.1	1	--
25...	0907	80513	153	153	343	7.5	758	10.0	.1	1	--

WHITE RIVER BASIN

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07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED WATER (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
SEP											
23...	0902	80513	.00	158	305	8.5	760	24.2	7.7	93	4.60
23...	0903	80513	10.0	158	305	8.5	760	24.3	7.8	94	--
23...	0904	80513	20.0	158	304	8.5	760	24.3	7.8	94	--
23...	0905	80513	30.0	158	306	8.5	760	24.2	7.9	94	--
23...	0906	80513	40.0	158	305	8.5	760	24.3	7.8	93	--
23...	0907	80513	45.0	158	312	8.3	760	23.7	6.2	73	--
23...	0908	80513	46.0	158	326	7.7	760	21.9	3.0	34	--
23...	0909	80513	47.0	158	331	7.6	760	20.5	2.5	28	--
23...	0910	80513	48.0	158	328	7.6	760	20.2	2.5	27	--
23...	0911	80513	50.0	158	331	7.5	760	19.4	1.9	20	--
23...	0912	80513	53.0	158	329	7.5	760	18.7	1.8	19	--
23...	0913	80513	60.0	158	328	7.5	760	17.3	1.5	16	--
23...	0914	80513	65.0	158	329	7.5	760	16.3	1.7	17	--
23...	0915	80513	70.0	158	328	7.5	760	15.2	2.0	20	--
23...	0916	80513	75.0	158	333	7.4	760	14.5	1.7	17	--
23...	0917	80513	80.0	158	330	7.4	760	14.0	1.5	15	--
23...	0918	80513	90.0	158	334	7.4	760	13.0	1.2	12	--
23...	0919	80513	100	158	335	7.3	760	12.3	1.2	12	--
23...	0920	80513	110	158	340	7.3	760	11.7	.6	6	--
23...	0921	80513	120	158	344	7.2	760	11.1	.7	6	--
23...	0922	80513	130	158	346	7.2	760	10.7	.6	5	--
23...	0923	80513	140	158	348	7.2	760	10.4	.7	7	--
23...	0924	80513	150	158	349	7.2	760	10.0	.8	7	--
23...	0925	80513	158	158	349	7.2	760	9.9	.8	7	--

WHITE RIVER BASIN

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 Norfork Dam, 3.9 mi northeast of Norfork, and at mile 4.8.

DRAINAGE AREA.--1,808 mi².

PERIOD OF RECORD.--Water years 1946-71, 1974-89, November 1990 to current year.

REMARKS.--Flow completely regulated by Norfork Reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT								
21...	0930	80513	342	7.4	765	12.4	10.4	98
NOV								
24...	1409	80513	331	7.6	760	14.1	9.8	95
DEC								
08...	1256	80513	339	8.1	763	14.7	11.7	115
MAR								
22...	1102	80513	319	8.3	760	8.6	12.1	104
JUN								
15...	0841	80513	332	7.8	760	10.8	9.6	87
JUL								
29...	0932	80513	331	7.4	761	11.9	8.0	74
AUG								
25...	0935	80513	347	8.1	762	13.9	10.7	104
SEP								
23...	0947	80513	365	7.6	756	12.3	10.5	99

WHITE RIVER BASIN

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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 mi².

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.--WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 316.38 ft above sea level. 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.--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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4940	1590	1310	2100	3320	3580	16400	13400	21200	19700	9510	7980
2	1670	2280	1310	2630	6040	13000	15900	13100	18900	21100	8590	10300
3	1560	1830	1240	8420	6510	13800	14300	14300	18400	14900	7600	10200
4	1810	1680	1820	9340	6990	15400	12400	15000	18900	11500	2390	10300
5	2600	1540	1970	25900	13700	11900	24100	18500	18600	13200	7870	9410
6	3850	3260	1860	16200	9250	9330	20000	23100	19000	13000	11800	8190
7	2950	2270	3340	11800	8410	5420	20100	13000	12900	15000	10300	8450
8	2330	2320	3180	15100	19100	5270	24000	11100	17900	17300	6710	9140
9	3680	2450	3620	6190	18300	13800	23100	9310	17700	18300	2630	10100
10	3130	2450	4490	5880	20900	19600	28600	9580	14700	16500	10200	6650
11	2240	2550	3200	5380	14200	20400	26500	8870	12600	15500	10900	2640
12	1910	2940	2410	3160	14600	15700	27400	10300	12400	14800	10400	2760
13	1570	2670	2590	4150	16900	19900	17500	13600	11700	14800	12800	3220
14	1980	2110	7540	4620	15100	15200	9330	15700	8210	15300	5840	6680
15	1970	2080	7760	5970	8580	14300	9880	15500	8930	12200	2240	4810
16	1570	2190	6650	3030	10400	22300	11300	16100	7520	13100	4690	5100
17	1770	1520	4680	2260	17100	18300	11600	19400	7670	11600	12500	4060
18	1620	1710	5300	1900	18400	17300	9550	13300	6170	13100	16000	2030
19	1900	1940	4790	2790	21000	18200	9270	12200	3100	12600	12200	3840
20	2870	2360	3420	5270	18100	15500	9260	15900	2660	11100	10800	2700
21	2840	2700	4170	2540	14500	17400	8630	15200	2530	10600	8000	4510
22	2330	1810	6050	6050	12800	13500	8590	14800	5040	11100	8800	1840
23	2700	1430	13600	6630	15300	21700	7540	16200	11800	12300	7830	1020
24	2270	1430	5120	3050	15000	16000	7930	15400	9360	11300	10600	1460
25	2620	1660	2380	3370	7950	12200	7740	15900	8960	8070	12000	1570
26	3300	1380	1990	5310	5990	12100	7420	18400	11500	11000	13700	1810
27	e2800	1510	1970	4360	2150	12400	8290	18600	12600	14300	14300	1780
28	2370	1390	2260	4860	2210	15400	8480	20500	9300	10600	14700	8750
29	3990	1380	2630	5470	---	13900	10000	18000	10800	12700	12000	8600
30	3880	1610	3530	5820	---	12800	9650	19600	14300	14600	11900	2290
31	2750	---	3700	2610	---	13100	---	21200	---	14000	8210	---
TOTAL	79770	60040	119880	192160	342800	448700	424760	475060	355350	425170	298010	162190
MEAN	2573	2001	3867	6199	12240	14470	14160	15320	11840	13720	9613	5406
MAX	4940	3260	13600	25900	21000	22300	28600	23100	21200	21100	16000	10300
MIN	1560	1380	1240	1900	2150	3580	7420	8870	2530	8070	2240	1020
AC-FT	158200	119100	237800	381100	679900	890000	842500	942300	704800	843300	591100	321700

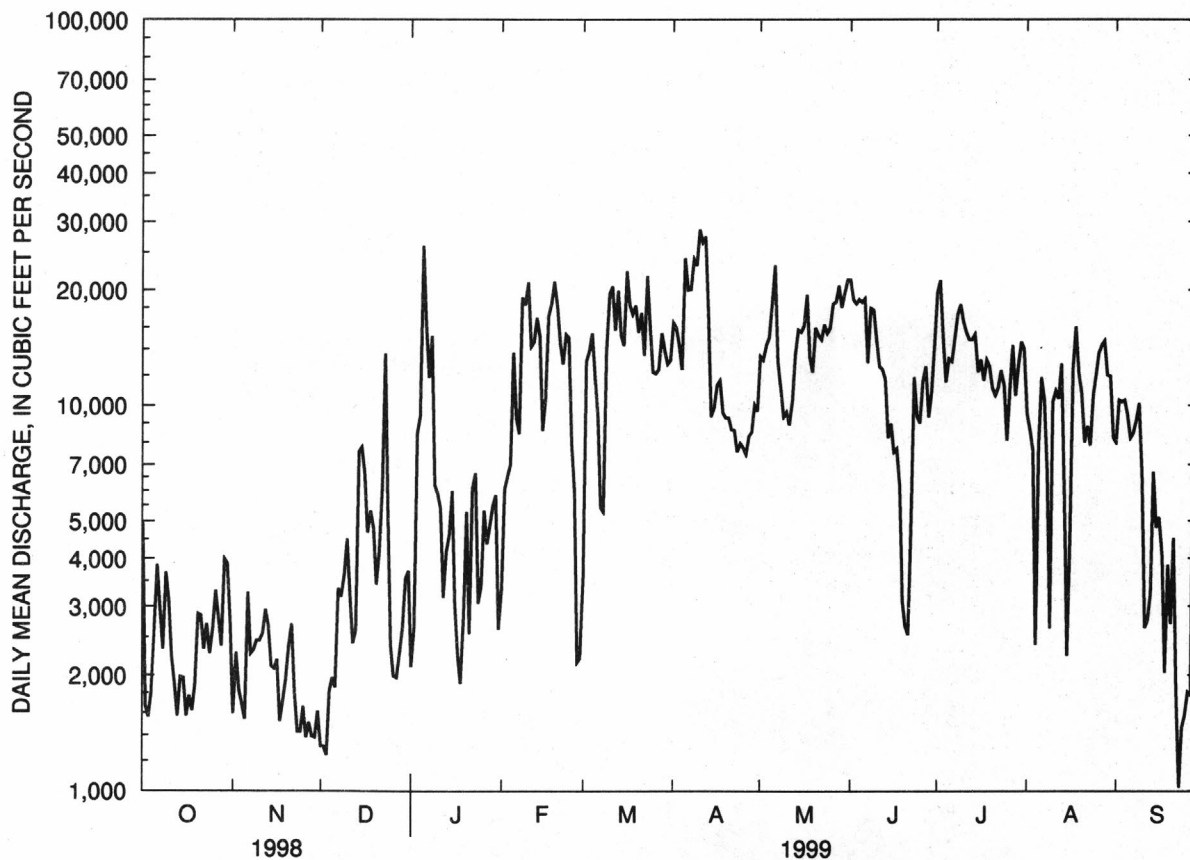
WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

MEAN	5484	7368	10120	10920	12610	14600	16250	14370	10270	9191	7542	5818
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	3749	1610	3525	3225	1545	1210	678
(WY)	1955	1982	1982	1955	1964	1981	1981	1982	1952	1944	1943	1943

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1940 - 1999	
ANNUAL TOTAL	3898660		3383890			
ANNUAL MEAN	10680		9271		10370	
HIGHEST ANNUAL MEAN					22890	
LOWEST ANNUAL MEAN					3482	
HIGHEST DAILY MEAN	42100	Mar 20	28600	Apr 10	292000	Apr 16 1945
LOWEST DAILY MEAN	1240	Dec 3	1020	Sep 23	310	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	1390	Nov 27	1390	Nov 27	412	Sep 23 1954
INSTANTANEOUS PEAK FLOW			34200	Apr 12	310000	Apr 16 1945
INSTANTANEOUS PEAK STAGE			12.25	Apr 12	^a 49.84	Apr 16 1945
INSTANTANEOUS LOW FLOW			760	Sep 23, 24	^b 305	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	7733000		6712000		7510000	
10 PERCENT EXCEEDS	21200		18300		21900	
50 PERCENT EXCEEDS	8910		8750		7010	
90 PERCENT EXCEEDS	1970		1930		2010	

^aAt present datum^bObserved^eEstimated

WHITE RIVER BASIN

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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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	
NOV 23...	0930	80513	81213	1530	281	7.7	764	11.9	10.5	97	K7	
JAN 21...	0745	80513	81213	2450	277	7.5	750	7.0	11.8	99	1	
MAR 24...	1050	80513	81213	16100	281	8.2	758	9.7	10.7	95	K7	
JUN 02...	1445	80513	81213	15600	292	8.1	756	13.5	10.4	101	K10	
JUL 21...	1040	80513	81213	17000	280	7.4	754	14.5	8.2	81	60	
SEP 08...	1000	80513	81213	16500	283	7.8	761	17.2	7.6	79	<1	
		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
NOV 23...	--	K4	150	38	13	2.5	3	.1	1.4	136	5.9	
JAN 21...	--	4	140	38	9.9	2.7	4	.1	1.2	123	6.2	
MAR 24...	--	K2	140	36	12	2.9	4	.1	1.2	12	6.9	
JUN 02...	--	K10	140	36	13	3.3	5	.1	1.5	112	6.1	
JUL 21...	31	47	130	37	10	5.2	8	.2	1.7	123	6.4	
SEP 08...	<1	<1	130	38	9.3	4.1	6	.2	1.7	124	6.6	
		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)
NOV 23...	4.4	<.10	4.4	162	152	.22	669	--	--	<.010	--	
JAN 21...	4.8	<.10	3.6	156	142	.21	1030	.296	1.3	.014	.05	
MAR 24...	4.5	<.10	3.9	156	76	.21	6780	--	--	<.010	--	
JUN 02...	4.9	<.10	3.6	163	137	.22	6870	.330	1.5	.010	.03	
JUL 21...	6.2	--	--	159	142	.22	7300	--	--	<.010	--	
SEP 08...	6.5	--	--	136	143	.18	6060	--	--	<.010	--	
		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
NOV 23...	.100	.040	.05	--	.20	--	.24	--	.34	--	--	
JAN 21...	.310	.018	.02	--	--	--	<.20	--	--	--	--	
MAR 24...	.240	.010	.01	--	--	--	<.20	--	--	--	--	
JUN 02...	.340	.020	.03	--	--	--	<.20	--	--	--	--	
JUL 21...	.410	<.010	--	--	--	.21	--	.62	--	<.020	<.020	
SEP 08...	.450	.030	.04	.21	--	.24	--	.69	--	<.020	<.020	

WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 23...	<.010	--	20	27	<.50	<.50	<1.0	<1.0	<1.0	10	<1.0
JAN 21...	<.010	--	19	24	<.50	<.50	<1.0	<1.0	2.6	4.1	<1.0
MAR 24...	<.010	--	18	27	<.50	<.50	<1.0	<1.0	<1.0	2.4	<1.0
JUN 02...	<.010	--	20	28	<.50	<.50	<1.0	<1.0	<1.0	3.4	<1.0
JUL 21...	<.010	--	--	--	--	--	--	--	--	--	--
SEP 08...	.020	.06	--	--	--	--	--	--	--	--	--

DATE	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)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 23...	<4	4.7	<2.0	3.9	<1.0	33	<1	<1.0	26	107	94
JAN 21...	<4	2.8	<2.0	<1.0	<1.0	36	<1	2.2	19	126	97
MAR 24...	<4	2.0	<2.0	<1.0	<1.0	33	<1	<1.0	25	1090	100
JUN 02...	<1	3.7	<2.0	<1.0	<1.0	31	<1	<1.0	29	1220	99
JUL 21...	--	--	--	--	--	--	--	--	24	1100	96
SEP 08...	--	--	--	--	--	--	--	--	28	1250	99

WHITE RIVER BASIN

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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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1965 to current year.

REVISED RECORDS.--WRD Ark. 1973: Drainage area.

GAGE.--No estimated daily discharges. Water-stage recorder and crest-stage gage. Datum of gage is 434.99 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good except those above 300 ft³/s, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

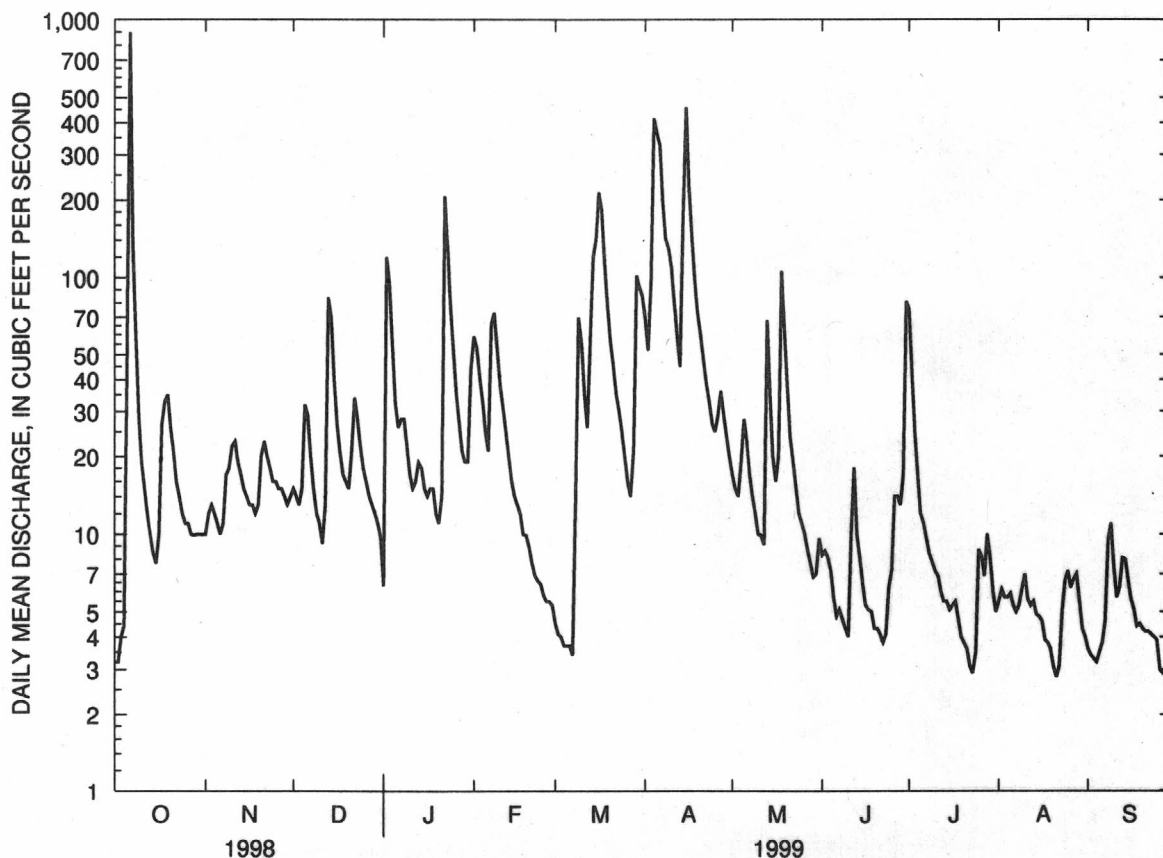
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	10	15	6.3	59	4.5	69	17	8.3	75	5.5	3.6
2	3.2	12	14	120	53	4.1	52	15	8.6	42	6.1	3.4
3	4.0	13	13	95	41	4.0	95	14	8.1	25	5.7	3.3
4	4.4	12	15	55	33	3.7	415	19	7.2	17	5.7	3.2
5	45	11	32	32	25	3.7	365	28	5.7	12	5.9	3.5
6	896	10	29	26	21	3.7	327	23	4.8	11	5.3	3.8
7	134	11	20	28	66	3.4	195	17	5.1	9.6	5.0	4.6
8	60	17	15	28	73	13	141	14	4.7	8.4	5.3	9.5
9	29	18	12	22	53	70	130	12	4.3	7.8	6.1	11
10	19	22	11	17	38	55	109	10	4.0	7.2	7.0	7.4
11	15	23	9.2	15	31	35	80	9.9	10	6.9	5.6	5.7
12	12	19	13	16	25	26	59	9.1	18	6.0	5.3	6.2
13	10	17	84	19	20	57	45	68	10	5.5	5.5	8.1
14	8.5	15	70	18	16	121	170	35	8.1	5.5	4.9	8.0
15	7.7	14	40	15	14	140	458	20	6.4	5.1	4.8	6.6
16	10	13	27	14	13	214	226	16	5.3	5.3	4.6	5.6
17	27	13	21	15	12	182	144	20	5.1	5.5	3.9	5.1
18	33	12	17	15	10	114	98	106	5.0	4.7	3.8	4.4
19	35	13	16	12	9.9	77	73	62	4.3	4.0	3.6	4.5
20	26	20	15	11	8.9	56	60	38	4.3	3.8	3.1	4.3
21	21	23	21	14	7.7	45	48	24	4.1	3.6	2.8	4.2
22	16	20	34	207	6.9	35	39	19	3.8	3.1	3.1	4.2
23	14	18	28	129	6.6	30	33	15	4.1	2.9	5.0	4.1
24	12	16	22	76	6.4	25	27	12	6.2	3.5	6.6	4.0
25	11	16	18	51	5.8	20	25	11	7.3	8.7	7.2	3.9
26	11	15	16	35	5.5	16	29	10	14	8.2	6.2	3.0
27	10	15	14	27	5.5	14	36	8.7	14	6.9	6.7	2.9
28	9.9	14	13	21	5.3	21	29	7.7	13	10	7.0	2.9
29	10	13	12	19	---	102	24	6.8	17	8.1	5.6	2.3
30	10	14	11	19	---	92	20	7.0	81	6.0	4.3	2.0
31	10	---	9.7	44	---	85	---	9.6	---	5.0	4.0	---
TOTAL	1516.9	459	686.9	1221.3	671.5	1672.1	3621	683.8	301.8	333.3	161.2	145.3
MEAN	48.9	15.3	22.2	39.4	24.0	53.9	121	22.1	10.1	10.8	5.20	4.84
MAX	896	23	84	207	73	214	458	106	81	75	7.2	11
MIN	3.2	10	9.2	6.3	5.3	3.4	20	6.8	3.8	2.9	2.8	2.0
AC-FT	3010	910	1360	2420	1330	3320	7180	1360	599	661	320	288
CFSM	.84	.26	.38	.68	.41	.93	2.08	.38	.17	.19	.09	.08
IN.	.97	.29	.44	.78	.43	1.07	2.32	.44	.19	.21	.10	.09

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	17.8	49.8	71.7	44.3	63.2	96.5	109	66.7	22.6	10.2	6.39	11.7
MAX	99.3	232	501	171	295	296	493	230	102	32.8	16.6	56.7
(WY)	1974	1997	1983	1993	1989	1975	1973	1990	1974	1992	1981	1968
MIN	3.84	4.10	3.57	4.43	9.16	9.15	12.9	8.12	6.45	3.89	3.06	2.45
(WY)	1967	1990	1990	1981	1972	1972	1971	1977	1966	1980	1987	1987
SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR					FOR 1999 WATER YEAR			WATER YEARS 1966 - 1999			
ANNUAL TOTAL	16813.7					11474.1						
ANNUAL MEAN	46.1					31.4			46.8			
HIGHEST ANNUAL MEAN									102			
LOWEST ANNUAL MEAN									15.8			
HIGHEST DAILY MEAN	988 Feb 11					896 Oct 6			11500 Dec 3 1982			
LOWEST DAILY MEAN	1.6 Sep 10					2.0 Sep 30			1.3 Sep 11 1995			
ANNUAL SEVEN-DAY MINIMUM	1.9 Sep 6					3.0 Sep 24			1.6 Sep 7 1995			
INSTANTANEOUS PEAK FLOW						3220 Oct 6			^a 25200 Dec 3 1982			
INSTANTANEOUS PEAK STAGE						8.08 Oct 6			20.60 Dec 3 1982			
INSTANTANEOUS LOW FLOW						1.8 ^b Sep 29			^c 1.2 Sep 11 1995			
ANNUAL RUNOFF (AC-FT)	33350					22760			33900			
ANNUAL RUNOFF (CFSM)	.79					.54			.81			
ANNUAL RUNOFF (INCHES)	10.77					7.35			10.94			
10 PERCENT EXCEEDS	92					71			89			
50 PERCENT EXCEEDS	15					13			13			
90 PERCENT EXCEEDS	4.4					4.1			4.1			

^aFrom rating curve extended above 3,700 ft³/s on basis of step-backwater computations^bAlso Aug. 20, 21^cAlso Nov. 4, 1997

WHITE RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	BARO-	TEMPER-	OXYGEN,	OXYGEN,	COLI-
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	METRIC PRES- SURE (MM OF HG) (00025)				
OCT 20...	1400	80513	80020	26	282	7.9	761	16.0	10.4	105	K9
NOV 18...	1310	80513	80020	12	303	8.2	752	11.8	11.0	103	K4
DEC 07...	0850	80513	80020	20	309	8.2	740	13.0	9.5	93	K430
JAN 21...	0915	80513	80020	11	279	7.5	748	7.0	9.8	82	97
FEB 17...	1300	80513	80020	12	264	8.5	754	9.5	12.2	108	K3
MAR 24...	1235	80513	80020	25	247	8.5	756	14.2	8.9	87	K1
APR 06...	1145	80513	80020	317	195	8.2	758	13.2	10.3	99	K12
MAY 10...	1140	80513	80020	11	271	8.4	738	19.3	10.4	117	K4
JUN 09...	0925	80513	80020	4.4	276	8.1	755	22.0	7.2	84	41
JUL 08...	1020	80513	80020	8.9	268	7.9	755	24.3	6.6	80	150
AUG 05...	0945	80513	80020	6.4	271	8.0	754	23.4	4.6	55	K17
SEP 08...	0910	80513	80020	13	253	8.6	753	22.6	5.4	63	K1000
DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT FET FIELD MG/L AS CACO3 (00418)
OCT 20...	K9	31	140	6	46	5.9	1.2	2	.0	.76	132
NOV 18...	K4	24	160	14	51	7.0	1.4	2	.0	.77	143
DEC 07...	380	86	160	17	53	6.6	1.3	2	.0	.82	143
JAN 21...	350	K4	140	9	46	6.0	1.2	2	.0	.38	127
FEB 17...	K2	<1	130	--	41	5.6	1.0	2	.0	.59	133
MAR 24...	K1	K1	120	7	41	5.3	1.1	2	.0	.60	119
APR 06...	K9	27	100	5	34	3.7	.87	2	.0	.66	94
MAY 10...	K4	26	140	0	47	5.7	1.2	2	.0	.74	139
JUN 09...	31	110	140	3	46	6.1	1.3	2	.0	1.6	134
JUL 08...	23	33	140	12	46	5.9	1.3	2	.0	.67	126
AUG 05...	K10	130	--	--	--	--	--	--	--	--	128
SEP 08...	K95	K4200	130	--	41	6.3	1.4	2	.1	1.0	143

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED MG/L AS SO4 (00945)	CHLO-RIDE, DIS- SOLVED MG/L AS CL (00940)	FLUO-RIDE, DIS- SOLVED MG/L AS F (00950)	SILICA, DIS- SOLVED MG/L AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED MG/L (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS- SOLVED MG/L (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
OCT 20...	18	125	133	4.5	1.7	<.10	7.3	162	147	.22	11.4
NOV 18...	8	157	143	4.2	2.3	<.10	7.4	171	160	.23	5.54
DEC 07...	0	174	143	4.1	1.8	<.10	7.7	177	161	.24	9.56
JAN 21...	0	159	130	5.5	1.6	<.10	6.1	155	145	.21	4.60
FEB 17...	5	150	131	4.6	1.4	<.10	6.1	141	139	.19	4.57
MAR 24...	0	143	117	5.6	1.2	<.10	6.7	137	132	.19	9.25
APR 06...	0	115	94	5.2	1.2	<.10	7.6	117	110	.16	100
MAY 10...	1	168	139	4.4	1.5	<.10	7.8	159	152	.22	4.72
JUN 09...	0	166	136	4.2	1.9	<.10	9.2	173	152	.24	2.06
JUL 08...	0	154	126	3.1	1.5	<.10	8.7	168	143	.23	4.04
AUG 05...	0	157	129	--	--	--	--	--	--	--	--
SEP 08...	0	172	141	3.1	2.1	<.10	9.1	146	149	.20	5.12
DATE	NITRO-GEN, NITRITE DIS- SOLVED MG/L AS N (00613)	NITRO-GEN, NO2+NO3 DIS- SOLVED MG/L AS N (00631)	NITRO-GEN, AMMONIA DIS- SOLVED MG/L AS N (00608)	NITRO-GEN, AMMONIA DIS- SOLVED MG/L AS NH4 (71846)	NITRO-GEN, ORGANIC TOTAL MG/L AS N (00605)	NITRO-GEN, ORGANIC DIS- SOLVED MG/L AS N (00607)	NITRO-GEN,AM- MONIA + ORGANIC TOTAL MG/L AS N (00625)	NITRO-GEN,AM- MONIA + ORGANIC DIS. MG/L AS N (00623)	NITRO-GEN, TOTAL MG/L AS N (00600)	NITRO-GEN DIS- SOLVED MG/L AS N (00602)	PHOS-PHORUS TOTAL MG/L AS P (00665)
OCT 20...	<.010	.073	<.020	--	--	--	.11	.10	.19	.17	<.050
NOV 18...	<.010	.064	<.020	--	--	--	.12	<.10	.19	--	.010
DEC 07...	<.010	.061	<.020	--	--	--	<.10	<.10	--	--	<.050
JAN 21...	<.010	.074	<.020	--	--	--	.11	E.10	.18	--	.007
FEB 17...	<.010	<.050	<.020	--	--	--	<.10	E.10	--	--	<.004
MAR 24...	<.010	.077	<.020	--	--	--	<.10	E.10	--	--	<.004
APR 06...	<.010	.076	<.020	--	--	--	.10	E.10	.18	--	<.004
MAY 10...	<.010	.060	.067	.09	--	.06	E.08	.13	--	.19	<.004
JUN 09...	<.010	.097	<.020	--	--	--	E.09	E.10	--	--	.004
JUL 08...	<.010	.064	.027	.03	.12	--	.15	E.10	.21	--	<.004
AUG 05...	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	<.010	.099	<.020	--	--	--	<.10	<.10	--	--	.005
DATE	PHOS-PHORUS DIS- SOLVED MG/L AS P (00666)	PHOS-PHORUS ORTHO, DIS- SOLVED MG/L AS P (00671)	PHOS-PHATE, ORTHO, DIS- SOLVED MG/L AS PO4 (00660)	IRON, DIS- SOLVED UG/L AS FE (01046)	MANGA-NESE, DIS- SOLVED UG/L AS MN (01056)	SEDI-MENT, SUS-PENDED MG/L (80154)	SEDI-MENT, DIS- CHARGE, SUS-PENDED T/DAY (80155)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM (70331)	ATRA-ZINE, WATER, DISS, REC UG/L (39632)	DI-AZINON, DIS- SOLVED UG/L (39572)	DI-ELDRIN DIS- SOLVED UG/L (39381)
OCT 20...	<.050	<.010	--	<10	E2.5	58	4.1	90	--	--	--
NOV 18...	<.050	<.010	--	<10	E2.3	80	2.6	98	--	--	--
DEC 07...	<.050	<.010	--	<10	<3.0	53	2.9	84	--	--	--
JAN 21...	<.004	<.010	--	<10	<3.0	43	1.3	86	--	--	--
FEB 17...	<.004	<.010	--	<10	<3.0	34	1.1	85	--	--	--
MAR 24...	<.004	<.010	--	<10	E2.1	20	1.4	93	--	--	--
APR 06...	<.004	.011	.03	<10	<3.0	21	18	100	--	--	--
MAY 10...	<.004	.021	.06	<10	3.3	46	1.4	82	--	--	--
JUN 09...	.014	.012	.04	<10	3.1	33	.39	75	<.001	<.002	<.001
JUL 08...	<.004	.016	.05	<10	4.2	76	1.8	72	.006	<.002	<.001
AUG 05...	--	--	--	--	--	61	1.1	76	<.001	<.002	<.001
SEP 08...	<.004	<.010	--	E6.8	18	33	1.2	99	<.001	<.002	<.001

WHITE RIVER BASIN

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07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	PARA- THION, DIS- SOLVED (UG/L) (39542)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	FONOFOS WATER DISS REC (UG/L) (04095)
JUN 09...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
JUL 08...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
AUG 05...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
SEP 08...	<.004	.009	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030
DATE	P, P' DDE DISSOLV (UG/L) (34653)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
JUN 09...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUL 08...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
AUG 05...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
SEP 08...	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
DATE	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
JUN 09...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUL 08...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
AUG 05...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
SEP 08...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
DATE	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)
JUN 09...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL 08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
AUG 05...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
SEP 08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

WHITE RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1939 to September 1995, 1999. 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 sea level. 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 since June 3, 1948, by Clearwater Lake (Missouri), 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	545	898	752	928	4560	3760	1940	3960	987	1200	e437	299
2	538	950	724	1130	5150	3480	1870	3880	1090	949	e412	312
3	539	1060	702	2030	4980	3040	1920	3900	1100	832	396	309
4	540	1150	703	2620	4320	2680	2860	3940	1060	750	380	303
5	569	1100	773	2690	3870	2450	5720	4140	976	669	374	286
6	1310	854	894	2530	3670	2300	8580	4650	913	608	388	275
7	2520	682	927	2150	3680	2010	8770	5080	878	572	401	269
8	3420	715	871	1840	3930	1740	7500	5030	876	565	474	262
9	3790	784	820	1750	4320	1690	6200	4500	822	564	781	258
10	3420	840	802	1740	4500	1860	5120	4070	758	558	867	256
11	2740	974	794	1670	4480	2010	4560	3850	699	539	786	263
12	2070	1080	788	1530	4350	2120	4360	3560	669	498	633	276
13	1520	1100	784	1410	4510	2270	4330	3170	690	448	615	293
14	1220	1120	782	1430	4720	2550	4480	2840	822	413	584	309
15	1090	1100	789	1430	4620	2930	5200	2510	1090	402	465	320
16	1030	1070	808	1350	4360	3430	7760	2260	1260	437	377	321
17	994	1050	823	1290	4150	3950	9000	2100	1120	482	343	298
18	990	1010	825	1470	4020	4170	8050	2070	900	456	343	272
19	1040	939	815	1920	3920	4070	6560	2040	778	396	341	262
20	1130	876	781	2130	3920	3880	5480	2010	699	365	336	259
21	1110	890	786	2240	4010	3860	4870	1840	628	e345	334	266
22	1040	951	1330	3060	4080	3970	4520	1540	565	e327	337	276
23	968	947	1930	6530	4110	3970	4400	1260	532	e342	350	281
24	980	880	2010	11900	4100	3780	4400	1050	686	e347	353	280
25	983	807	1740	12400	4080	3490	4390	919	1310	e349	360	278
26	928	763	1420	10100	4020	3120	4380	842	1540	e342	353	277
27	897	757	1230	7640	4000	2830	4410	796	1420	e390	328	277
28	899	764	1160	5890	3900	2630	4400	771	1340	e554	311	277
29	914	767	1110	4870	---	2480	4360	722	1540	e526	303	276
30	918	769	1030	4310	---	2300	4160	707	1480	e488	291	276
31	905	---	959	4180	---	2090	---	806	---	e468	287	---
TOTAL	41557	27647	30662	108158	118330	90910	154550	80813	29228	16181	13340	8466
MEAN	1341	922	989	3489	4226	2933	5152	2607	974	522	430	282
MAX	3790	1150	2010	12400	5150	4170	9000	5080	1540	1200	867	321
MIN	538	682	702	928	3670	1690	1870	707	532	327	287	256
AC-FT	82430	54840	60820	214500	234700	180300	306500	160300	57970	32100	26460	16790

WHITE RIVER BASIN

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07064000 BLACK RIVER NEAR CORNING--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	746	1302	1951	2452	2584	3043	3406	2844	1698	980	686	662
MAX	2868	5220	8417	8969	7490	10050	11330	8136	12180	3858	3266	2116
(WY)	1950	1973	1983	1950	1949	1945	1945	1943	1945	1957	1957	1957
MIN	269	331	356	319	459	521	783	691	431	347	272	252
(WY)	1957	1945	1956	1956	1963	1941	1981	1988	1988	1944	1941	1954

SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1948-95, 1999

ANNUAL TOTAL	719842		
ANNUAL MEAN	1972		^a 1888
HIGHEST ANNUAL MEAN			4014 1973
LOWEST ANNUAL MEAN			662 1954
HIGHEST DAILY MEAN	12400	Jan 25	32000 Jun 13 1945
LOWEST DAILY MEAN	256	Sep 10	^b 237 Sep 22 1941
ANNUAL SEVEN-DAY MINIMUM	266	Sep 6	237 Sep 21 1941
INSTANTANEOUS PEAK FLOW	12800	Jan 24, 25	^c 32500 Mar 13 1964
INSTANTANEOUS PEAK STAGE	13.08	Jan 24, 25	^d 15.23 Mar 13 1964
INSTANTANEOUS LOW FLOW	255	Sep 9, 10	
ANNUAL RUNOFF (AC-FT)	1428000		1368000
10 PERCENT EXCEEDS	4400		4140
50 PERCENT EXCEEDS	1060		1080
90 PERCENT EXCEEDS	332		407

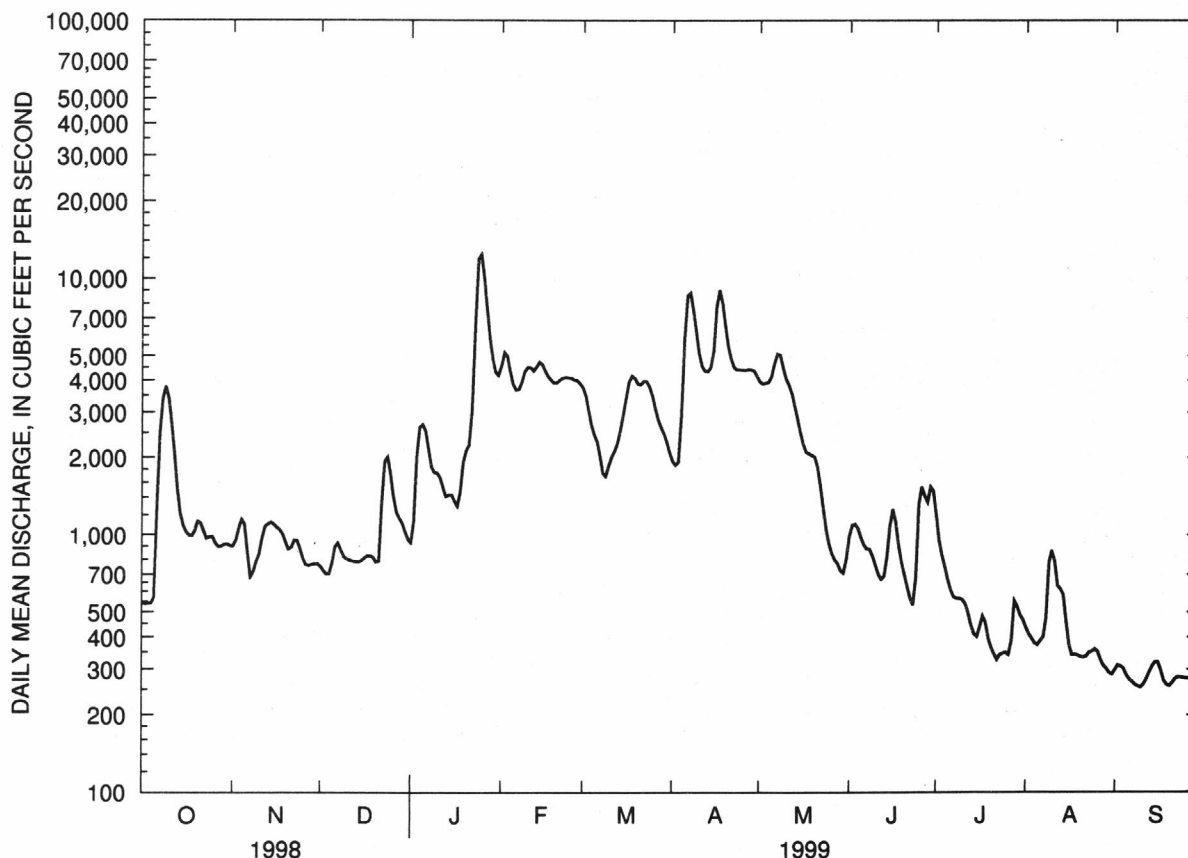
^aPrior to regulation, water years 1939-47, 1,741 ft³/s

^bMinimum instantaneous low flow for period of record, 224 ft³/s, Sept. 22-27, 1941 (minimum gage height observed -0.52 ft, Sept. 26, 1941)

^cMaximum discharge for period of record, 48,600 ft³/s, June 13, 1945

^dMaximum gage height for period of record, 16.92 ft, June 13, 1945

^eEstimated



WHITE RIVER BASIN

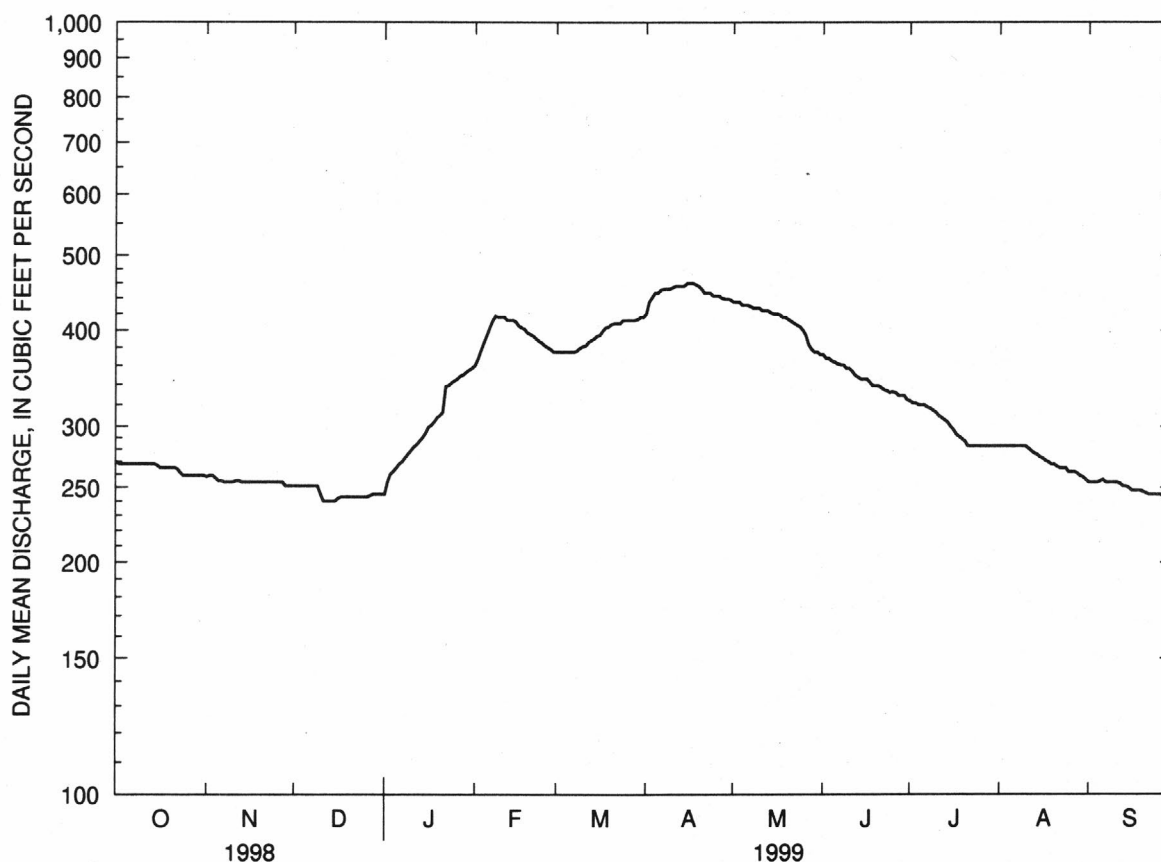
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07069190 MAMMOTH SPRING AT MAMMOTH SPRING--CONTINUED

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1981 - 1999	
ANNUAL TOTAL	131673		118029			
ANNUAL MEAN	361		323		370	
HIGHEST ANNUAL MEAN					453	1985
LOWEST ANNUAL MEAN					285	1987
HIGHEST DAILY MEAN	530	Mar 21	460	Apr 15	689	Apr 13 1991
LOWEST DAILY MEAN	240	Dec 11	240	Dec 11	182	Dec 18 1981
ANNUAL SEVEN-DAY MINIMUM	241	Dec 11	241	Dec 11	183	Dec 26 1981
INSTANTANEOUS PEAK FLOW			460	Apr 14-18	706	Apr 13 1991
INSTANTANEOUS PEAK STAGE			4.64	Apr 14-18	5.13	Apr 13 1991
INSTANTANEOUS LOW FLOW			240	Dec 10-16	182	^a Dec 17 1981
ANNUAL RUNOFF (AC-FT)	261200		234100		267900	
10 PERCENT EXCEEDS	503		428		494	
50 PERCENT EXCEEDS	353		294		364	
90 PERCENT EXCEEDS	254		248		245	

^aAlso Dec. 28-31, 1981; Jan. 1-2, 1992

^eEstimated



WHITE RIVER BASIN

07072500 BLACK RIVER AT BLACK ROCK

LOCATION.--Lat 36°06'15", long 91°05'50", in NW1/4 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 mi².

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 sea level. 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. Flow slightly regulated since June 3, 1948, by Clearwater Lake (Missouri), 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3460	4010	3820	4610	18200	8600	9560	13000	5120	4840	2840	2420
2	3390	4000	3800	6920	17800	8470	9110	12000	5160	4760	2790	2430
3	3360	4000	3780	9420	17100	8310	9710	11300	5090	4690	2720	2430
4	3330	3970	3800	8770	16500	8120	15400	10700	5060	4510	2690	2440
5	3350	3970	3950	8030	15600	7910	19200	11900	5070	4250	2680	2430
6	7630	4000	4030	7440	14500	7800	21300	13200	4970	4010	2640	2430
7	8810	4020	4070	6960	13800	7630	21100	13600	4810	3790	2620	2410
8	8590	4060	4150	6620	14000	7640	20300	13800	4670	3600	2650	2420
9	9230	4060	4260	6440	15200	8750	19900	13600	4520	3450	2930	2480
10	9010	4600	4270	6320	16200	9450	19900	13000	4410	3380	3460	2500
11	7980	5100	4200	6250	17500	10300	19700	12200	4300	3320	3810	2460
12	7120	4750	4120	6170	19100	11100	19300	11600	4210	3280	3710	2430
13	6710	4590	4080	6090	19800	11000	18700	11000	4200	3200	3550	2440
14	6590	4500	4050	6040	19900	10700	18100	10500	4300	3140	3350	2440
15	6480	4450	4030	6020	19200	10700	23000	10100	4380	3080	3130	2440
16	6230	4380	4020	6150	18000	11000	24500	9660	4420	3010	3000	2440
17	5890	4310	4020	6290	16600	11400	23700	9360	4270	2970	2870	2420
18	5800	4260	4010	6550	15100	11900	23400	9210	4200	2970	2740	2410
19	5880	4180	3990	6750	13600	12500	23500	8930	4130	2980	2650	2400
20	5610	4210	3980	6830	12400	13300	23800	8570	4020	2960	2580	2390
21	5530	4240	4220	7380	11300	13800	24100	8080	3910	2920	2550	2370
22	5340	4220	5390	15300	10500	14100	23900	7600	3780	2870	2540	2360
23	5060	4200	5550	17500	9890	13700	23000	7230	3720	2800	2540	2370
24	4810	4160	5460	17100	9380	13100	21700	6920	3690	2770	2550	2370
25	4600	4150	5350	16300	9010	12400	20300	6610	3880	2800	2540	2370
26	4450	4090	5290	15600	8760	11800	18900	6320	4210	2840	2520	2370
27	4350	4010	5240	15300	8710	11200	17800	6010	4350	2960	2510	2360
28	4270	3940	5160	15600	8700	10700	16500	5680	4670	3230	2500	2360
29	4200	3870	5050	16200	---	10600	15200	5400	4920	3340	2480	2360
30	4130	3850	4900	16800	---	10500	14100	5160	4910	3090	2460	2350
31	4060	---	4750	17900	---	10000	---	5030	---	2920	2430	---
TOTAL	175250	126150	136790	305650	406350	328480	578680	297270	133350	104730	87030	72300
MEAN	5653	4205	4413	9860	14510	10600	19290	9589	4445	3378	2807	2410
MAX	9230	5100	5550	17900	19900	14100	24500	13800	5160	4840	3810	2500
MIN	3330	3850	3780	4610	8700	7630	9110	5030	3690	2770	2430	2350
AC-FT	347600	250200	271300	606300	806000	651500	1148000	589600	264500	207700	172600	143400

WHITE RIVER BASIN

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07072500 BLACK RIVER AT BLACK ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1999, BY WATER YEAR (WY)

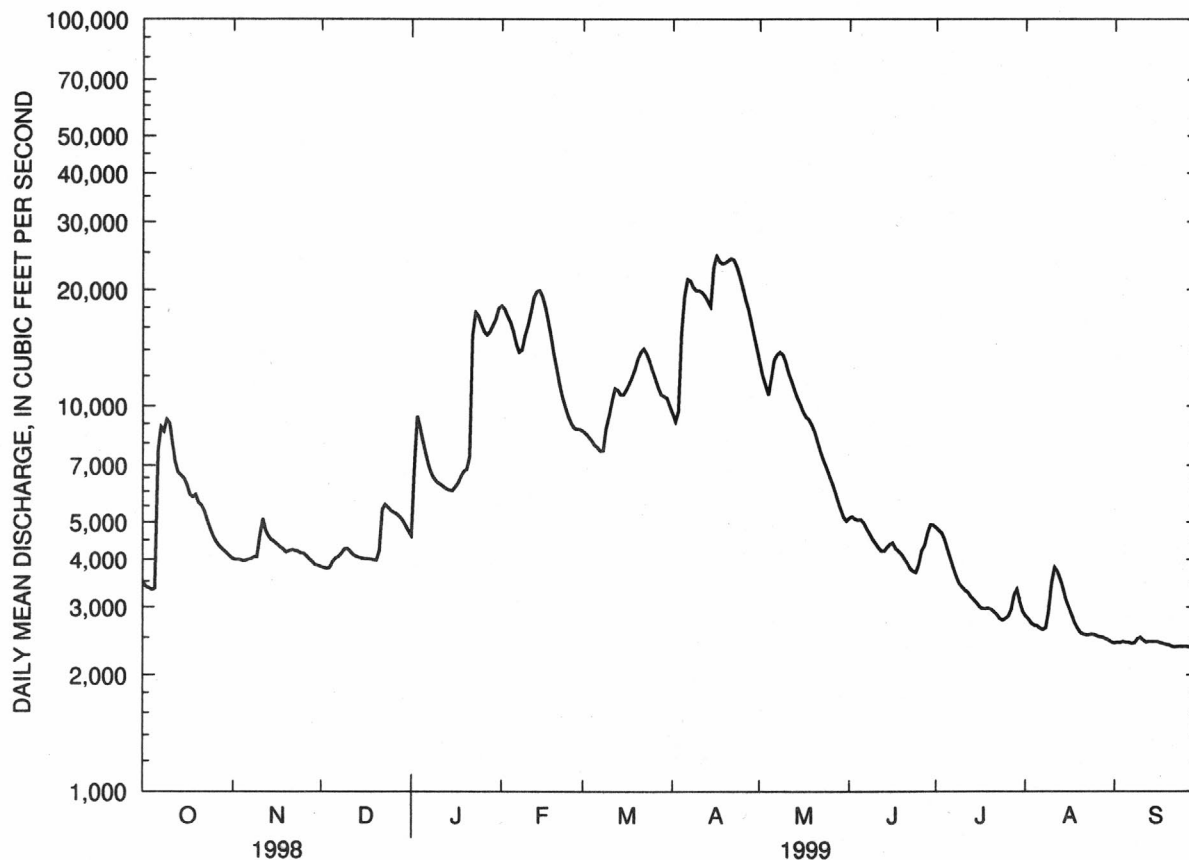
MEAN	3975	6538	8891	10430	11100	13510	15610	13500	8147	5106	4023	3746
MAX	11570	23020	44020	40410	36240	39110	50920	36370	38940	17630	9130	7630
(WY)	1985	1973	1983	1950	1989	1945	1945	1961	1945	1951	1998	1975
MIN	1797	1984	2042	1998	2650	3137	3721	4259	2680	2455	2028	1853
(WY)	1957	1957	1956	1956	1963	1941	1981	1941	1941	1954	1954	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1948 - 1999	
ANNUAL TOTAL	3160080		2752030			
ANNUAL MEAN	8658		7540		^a 8699	
HIGHEST ANNUAL MEAN					17330	
LOWEST ANNUAL MEAN					3552	
HIGHEST DAILY MEAN	30100	Mar 21	24500	Apr 16	123000	Dec 5 1982
LOWEST DAILY MEAN	3330	Oct 4	2350	Sep 30	1730	Sep 18 1956
ANNUAL SEVEN-DAY MINIMUM	3470	Sep 29	2360	Sep 24	1730	Sep 22 1956
INSTANTANEOUS PEAK FLOW			25100	Apr 15	^b 190000	Dec 4 1982
INSTANTANEOUS PEAK STAGE			19.34	Apr 15	^c 31.51	Dec 4 1982
ANNUAL RUNOFF (AC-FT)	6268000		5459000		6302000	
10 PERCENT EXCEEDS	15600		16700		18700	
50 PERCENT EXCEEDS	6360		4970		5600	
90 PERCENT EXCEEDS	4070		2530		2690	

^aPrior to regulation, water years 1930-31, 1940-47, 7,854 ft³/s

^bFrom rating curve extended above 105,000 ft³/s

^cFrom floodmarks



WHITE RIVER BASIN

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 500 ft downstream from State Highway 37 at Elgin Ferry.

DRAINAGE AREA.--8,418 mi².

PERIOD OF RECORD.--January 1999 to current year. Annual maximum stage water years 1979-98.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	19000	10500	12500	16600	6420	5720	3470	2860
2	---	---	---	---	19500	10400	12100	14500	6530	5680	3260	2830
3	---	---	---	---	19600	10300	11900	12900	6460	6050	3150	2840
4	---	---	---	---	19200	10200	13800	11900	6310	5610	3060	2850
5	---	---	---	---	18800	10200	17200	11600	6210	5190	3010	2860
6	---	---	---	---	18100	10200	19500	12400	6200	4920	2980	2870
7	---	---	---	---	17300	9890	21600	13300	6110	4690	2960	2840
8	---	---	---	---	16600	9670	22600	13600	5740	4480	2950	2820
9	---	---	---	---	16500	10100	22900	13500	5600	4410	2960	2840
10	---	---	---	---	16900	11100	23000	13200	5530	4390	3150	2890
11	---	---	---	---	17500	11700	23000	12700	5360	4880	3590	2900
12	---	---	---	---	18100	12700	23000	12100	5110	4650	3940	2880
13	---	---	---	---	18600	13500	22800	11500	5120	4250	3960	2850
14	---	---	---	---	19200	14500	22600	11100	5200	4000	3870	2840
15	---	---	---	---	19700	14800	22600	10800	5290	3910	3710	2830
16	---	---	---	---	19800	14500	23700	10500	5190	3750	3510	2830
17	---	---	---	---	19600	14800	25400	10100	5110	3650	3390	2820
18	---	---	---	---	19000	15100	25600	10100	4950	3580	3300	2800
19	---	---	---	---	18200	15000	25000	9820	4850	3530	3280	2790
20	---	---	---	7500	16900	15200	24600	9410	4760	3510	3170	2790
21	---	---	---	7650	15600	15500	24000	9130	4630	3480	3060	2770
22	---	---	---	12400	14200	15900	23600	8740	4510	3400	3000	2740
23	---	---	---	17800	13000	16200	23500	8360	4420	3350	2970	2720
24	---	---	---	19800	12300	16100	23300	8070	4400	3300	2970	2720
25	---	---	---	20200	11800	15700	23100	7770	4520	3280	2980	2720
26	---	---	---	19500	11200	14900	22900	7520	4660	3280	2980	2710
27	---	---	---	18700	10800	14100	22400	7290	5730	3280	2990	2710
28	---	---	---	17900	10600	13400	21600	7120	5580	3460	3000	2710
29	---	---	---	17400	---	13100	20400	6930	5680	3690	3020	2700
30	---	---	---	17600	---	13100	18600	6700	5760	3780	2960	2690
31	---	---	---	18300	---	12900	---	6460	---	3640	2890	---
TOTAL	---	---	---	---	467600	405260	638800	325720	161940	128790	99490	84020
MEAN	---	---	---	---	16700	13070	21290	10510	5398	4155	3209	2801
MAX	---	---	---	---	19800	16200	25600	16600	6530	6050	3960	2900
MIN	---	---	---	---	10600	9670	11900	6460	4400	3280	2890	2690
AC-FT	---	---	---	---	927500	803800	1267000	646100	321200	255500	197300	166700

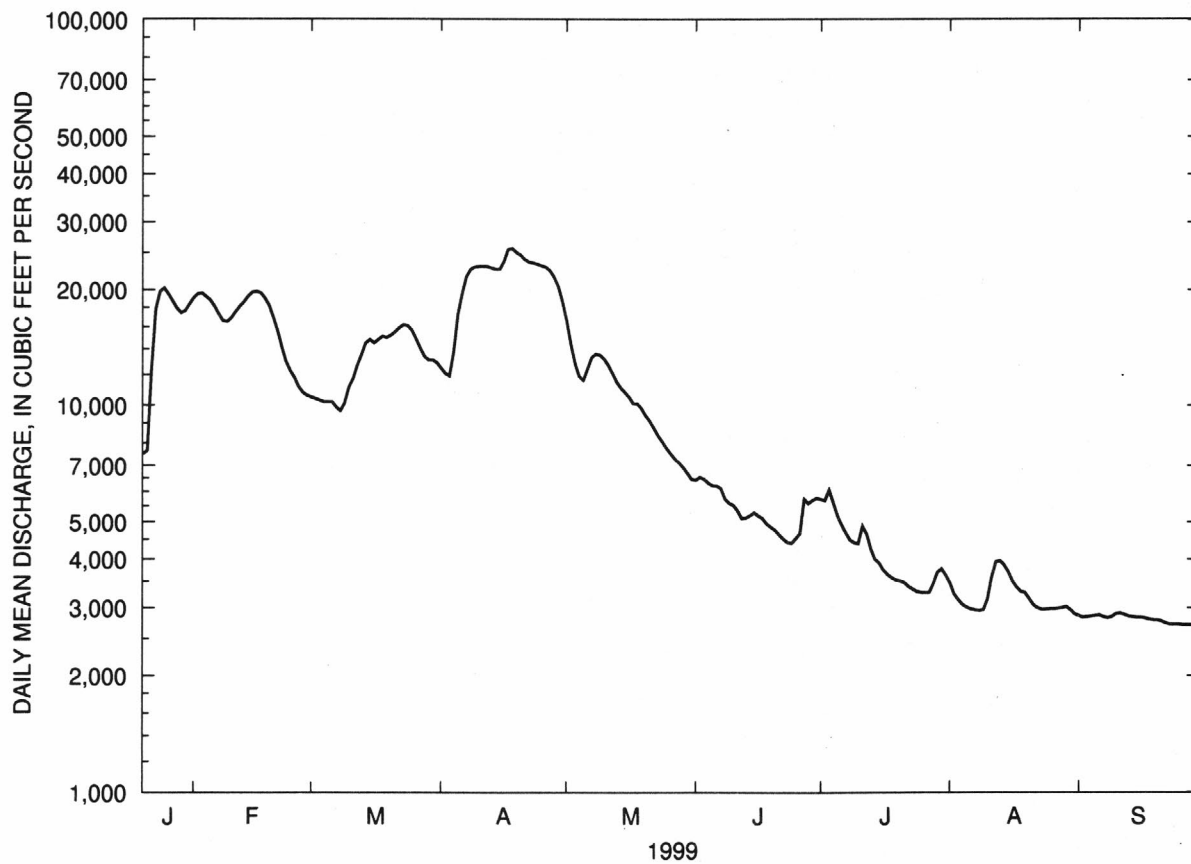
WHITE RIVER BASIN

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07074420 BLACK RIVER AT ELGIN FERRY--CONTINUED

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

MEAN	---	---	---	---	16700	13070	21290	10510	5398	4155	3209	2801
MAX	---	---	---	---	16700	13070	21290	10510	5398	4155	3209	2801
(WY)	---	---	---	---	1999	1999	1999	1999	1999	1999	1999	1999
MIN	---	---	---	---	16700	13070	21290	10510	5398	4155	3209	2801
(WY)	---	---	---	---	1999	1999	1999	1999	1999	1999	1999	1999



WHITE RIVER BASIN

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 257.6.

DRAINAGE AREA.--19,860 mi².

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.--WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 194.09 ft above sea level. 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 Norfork 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.--Maximum stage since at least 1927, that of Apr. 18, 1945. 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 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11700	8430	5720	9180	27100	15100	28300	31600	26500	20600	18800	13500
2	10400	7370	5730	11000	26400	14700	29000	31400	27000	22900	15900	12300
3	8880	6670	5550	16400	27200	18500	29400	30700	26300	26500	14100	13000
4	6820	6940	5490	19000	28100	22100	30500	29800	25500	23700	13300	13600
5	6250	6520	5550	20700	28300	24000	33400	30300	25000	20300	10300	13800
6	8760	6310	6050	27100	30700	23900	39400	31900	25100	20200	9020	13200
7	20900	6390	6310	26900	30500	21300	42600	34700	25000	19900	14100	12300
8	19200	7390	6510	23000	28900	18300	43400	32700	22000	20100	14700	11900
9	16300	7060	7300	23800	32500	17500	45300	30000	22600	21600	12700	12600
10	14600	7290	7590	19300	34800	22900	46100	28000	23100	22500	10100	13200
11	14500	8340	8230	16500	36700	26900	47700	26600	22000	25400	11200	11400
12	13600	8800	8370	14700	35400	30800	48700	25600	19500	24100	14600	9460
13	12200	8560	7470	13600	34400	31700	49100	24900	19000	22100	15100	7250
14	11100	8550	7110	12200	35800	35500	46800	26200	18800	20800	16300	6850
15	10500	8070	8170	12400	36100	35700	44300	27700	16600	20600	13900	8080
16	10600	7470	11100	12900	33900	34200	43800	28000	15400	19000	10300	8740
17	10100	7360	10800	12800	32200	36900	42300	28100	14300	18300	8130	8520
18	9620	7130	10000	11500	34900	37000	41600	29600	13700	18000	12600	8100
19	9430	6680	9250	10900	36200	35700	40800	27900	12700	17400	17100	7500
20	9420	6710	9270	11000	37000	36000	39200	25400	11600	17400	16500	6110
21	9490	6750	8960	12500	36100	34800	38600	26000	9370	17200	15100	7120
22	9930	7080	9380	19300	33100	34800	37700	25500	8560	15700	13100	6470
23	9440	7290	11200	28300	30000	34000	36600	25300	8640	16200	12400	6980
24	8870	6680	15600	30100	29500	36200	35600	25400	13200	16800	11900	5580
25	8710	6290	14600	28600	28400	35000	34900	24800	15400	16500	13300	4850
26	8150	6140	11500	27400	24000	32400	34800	24900	15200	14200	14600	4800
27	8240	6160	9620	26800	20600	30200	34500	25300	19700	14500	15900	4970
28	8300	5990	8850	27000	17800	28700	33900	26100	19900	17700	16900	5030
29	8230	5900	8480	25800	---	29800	33100	26600	18000	16700	17500	7100
30	7590	5810	8510	26400	---	29600	32600	26200	18800	17000	16400	10200
31	8520	---	8760	27200	---	29000	---	25800	---	18700	15300	---
TOTAL	330350	212130	267030	604280	866600	893200	1164000	863000	558470	602600	431150	274510
MEAN	10660	7071	8614	19490	30950	28810	38800	27840	18620	19440	13910	9150
MAX	20900	8800	15600	30100	37000	37000	49100	34700	27000	26500	18800	13800
MIN	6250	5810	5490	9180	17800	14700	28300	24800	8560	14200	8130	4800
AC-FT	655200	420800	529700	1199000	1719000	1772000	2309000	1712000	1108000	1195000	855200	544500

WHITE RIVER BASIN

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07074500 WHITE RIVER AT NEWPORT--CONTINUED

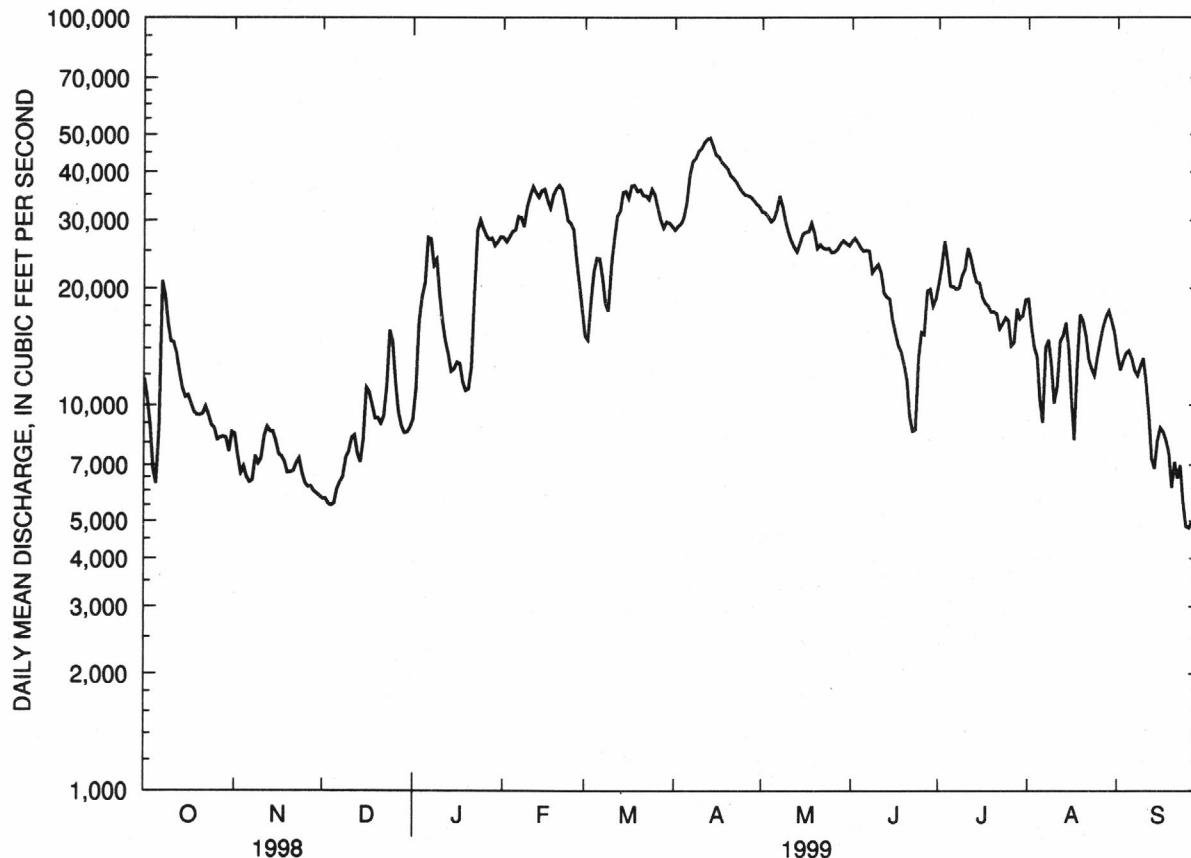
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

MEAN	10530	15700	23300	26450	29060	34840	38830	34690	22250	16560	13110	10920
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	3783	3795	4371	5310	7052	9148	6539	10970	7562	5354	4611	3702
(WY)	1955	1955	1944	1944	1964	1981	1981	1963	1977	1944	1944	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1943 - 1999	
ANNUAL TOTAL	8009110		7067320			
ANNUAL MEAN	21940		19360		^a 22990	
HIGHEST ANNUAL MEAN					46320	
LOWEST ANNUAL MEAN					8073	
HIGHEST DAILY MEAN	59600	Mar 21	49100	Apr 13	340000	Apr 18 1945
LOWEST DAILY MEAN	5490	Dec 4	4800	Sep 26	2870	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	5680	Nov 29	5530	Sep 22	2960	Sep 24 1954
INSTANTANEOUS PEAK FLOW			49500	Apr 13	343000	Apr 17 1945
INSTANTANEOUS PEAK STAGE			21.28	Apr 13	^b 35.19	Apr 18 1945
INSTANTANEOUS LOW FLOW			4690	Sep 25	2870	Sep 27-30 1954
ANNUAL RUNOFF (AC-FT)	15890000		14020000		16650000	
10 PERCENT EXCEEDS	45300		34800		48200	
50 PERCENT EXCEEDS	18800		16900		16000	
90 PERCENT EXCEEDS	7380		7090		6680	

^aPrior to regulation, water years 1928-31, 1938-42, 26,370 ft³/s

^bObserved



WHITE RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1970 to September 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
19...	1201	80513	.00	154	40	6.4	762	22.2	8.0	92	4.90
19...	1202	80513	10.0	154	40	6.4	762	22.2	8.0	92	--
19...	1203	80513	20.0	154	40	6.5	762	22.2	8.0	92	--
19...	1204	80513	30.0	154	39	6.5	762	22.2	8.0	92	--
19...	1205	80513	40.0	154	40	6.5	762	22.2	8.0	92	--
19...	1206	80513	42.0	154	39	5.9	762	21.2	5.3	60	--
19...	1207	80513	43.0	154	39	5.7	762	20.3	3.9	44	--
19...	1208	80513	44.0	154	39	5.6	762	18.7	3.9	41	--
19...	1209	80513	45.0	154	39	5.6	762	17.8	4.0	42	--
19...	1210	80513	46.0	154	39	5.6	762	17.3	4.0	42	--
19...	1211	80513	47.0	154	39	5.6	762	16.7	4.1	42	--
19...	1212	80513	50.0	154	39	5.6	762	15.6	4.2	43	--
19...	1213	80513	55.0	154	39	5.6	762	14.5	4.2	42	--
19...	1214	80513	60.0	154	39	5.6	762	13.8	4.6	44	--
19...	1215	80513	70.0	154	39	5.6	762	12.8	5.1	48	--
19...	1216	80513	80.0	154	39	5.6	762	12.1	5.4	50	--
19...	1217	80513	90.0	154	39	5.6	762	11.3	6.0	55	--
19...	1218	80513	100	154	39	5.6	762	10.7	6.1	55	--
19...	1219	80513	110	154	40	5.6	762	10.1	5.8	52	--
19...	1220	80513	120	154	40	5.6	762	9.8	5.1	45	--
19...	1221	80513	130	154	41	5.5	762	9.6	4.3	37	--
19...	1222	80513	140	154	41	5.5	762	9.4	3.4	30	--
19...	1223	80513	150	154	42	5.5	762	9.2	2.9	25	--
19...	1224	80513	154	154	43	5.5	762	9.3	2.7	23	--
NOV											
25...	1125	80513	.00	147	39	6.2	758	15.9	8.4	86	5.88
25...	1126	80513	10.0	147	39	6.3	758	15.9	8.3	84	--
25...	1127	80513	20.0	147	39	6.3	758	15.8	8.2	83	--
25...	1128	80513	30.0	147	39	6.3	758	15.8	8.1	82	--
25...	1129	80513	40.0	147	39	6.3	758	15.8	7.9	80	--
25...	1130	80513	50.0	147	40	6.2	758	15.6	7.5	76	--
25...	1131	80513	60.0	147	40	6.1	758	15.3	5.9	60	--
25...	1133	80513	62.0	147	40	5.8	758	14.6	3.0	29	--
25...	1134	80513	68.0	147	40	5.8	758	13.6	3.4	33	--
25...	1135	80513	70.0	147	40	5.8	758	13.3	3.6	34	--
25...	1136	80513	80.0	147	40	5.8	758	12.3	4.2	40	--
25...	1137	80513	90.0	147	40	5.8	758	11.7	4.6	43	--
25...	1138	80513	100	147	40	5.9	758	11.0	4.7	43	--
25...	1139	80513	110	147	40	5.9	758	10.5	4.2	38	--
25...	1140	80513	120	147	41	5.8	758	10.1	3.2	28	--
25...	1141	80513	130	147	42	5.7	758	9.9	2.0	17	--
25...	1142	80513	140	147	42	5.7	758	9.8	1.4	13	--
25...	1143	80513	147	147	43	5.7	758	9.7	1.1	10	--
DEC											
10...	1112	80513	.00	147	37	6.7	765	14.9	9.0	88	11.3
10...	1113	80513	10.0	147	37	6.7	765	15.0	8.9	88	--
10...	1114	80513	20.0	147	37	6.7	765	14.9	8.9	87	--
10...	1116	80513	40.0	147	37	6.7	765	15.0	8.8	87	--
10...	1117	80513	50.0	147	37	6.7	765	15.0	8.8	87	--
10...	1118	80513	60.0	147	37	6.5	765	14.8	6.7	66	--
10...	1119	80513	66.0	147	38	6.1	765	13.8	3.3	32	--
10...	1120	80513	70.0	147	38	6.1	765	13.4	3.2	30	--
10...	1121	80513	80.0	147	38	6.1	765	12.5	3.7	35	--
10...	1122	80513	90.0	147	38	6.1	765	11.6	4.2	38	--
10...	1123	80513	100	147	38	6.0	765	11.0	4.2	38	--
10...	1124	80513	110	147	38	6.0	765	10.5	3.5	31	--
10...	1125	80513	120	147	39	5.9	765	10.1	2.3	21	--
10...	1126	80513	130	147	41	5.9	765	9.9	1.2	10	--
10...	1127	80513	140	147	42	5.9	765	9.8	.8	7	--
10...	1128	80513	147	147	42	5.9	765	9.7	.6	5	--

WHITE RIVER BASIN

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07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
MAR											
24...	1034	80513	.00	152	39	7.2	762	10.7	12.3	111	7.90
24...	1036	80513	10.0	152	39	7.3	762	10.5	12.3	111	--
24...	1037	80513	20.0	152	39	7.3	762	10.4	12.4	110	--
24...	1038	80513	30.0	152	39	7.3	762	9.9	12.3	109	--
24...	1039	80513	40.0	152	39	7.3	762	9.4	12.1	106	--
24...	1040	80513	50.0	152	39	7.3	762	9.1	12.0	104	--
24...	1042	80513	60.0	152	39	7.3	762	9.0	11.9	103	--
24...	1043	80513	70.0	152	40	7.2	762	9.0	11.8	102	--
24...	1044	80513	80.0	152	40	7.2	762	8.9	11.7	101	--
24...	1045	80513	90.0	152	40	7.2	762	8.8	11.6	100	--
24...	1047	80513	100	152	40	7.2	762	8.7	11.4	97	--
24...	1048	80513	110	152	40	7.1	762	8.4	10.9	93	--
24...	1049	80513	120	152	41	7.1	762	8.1	10.4	88	--
24...	1050	80513	130	152	42	7.0	762	7.7	9.6	81	--
24...	1052	80513	140	152	42	6.9	762	7.6	9.3	78	--
24...	1053	80513	150	152	42	6.9	762	7.6	9.3	78	--
24...	1054	80513	152	152	42	6.9	762	7.6	9.2	77	--
AUG											
27...	1145	80513	.00	146	41	7.6	761	29.1	8.3	109	5.00
27...	1146	80513	10.0	146	41	7.5	761	28.6	8.5	109	--
27...	1147	80513	20.0	146	41	7.5	761	28.5	8.5	109	--
27...	1148	80513	28.0	146	41	7.5	761	27.4	9.8	124	--
27...	1149	80513	29.0	146	41	7.9	761	26.4	10.9	136	--
27...	1150	80513	30.0	146	40	8.1	761	25.3	10.9	133	--
27...	1151	80513	31.0	146	40	8.1	761	24.4	10.9	131	--
27...	1152	80513	32.0	146	40	8.1	761	23.5	10.7	126	--
27...	1153	80513	33.0	146	39	7.9	761	22.5	10.5	121	--
27...	1154	80513	34.0	146	39	7.8	761	21.5	10.1	115	--
27...	1155	80513	36.0	146	39	7.7	761	20.5	9.3	104	--
27...	1156	80513	37.0	146	39	7.6	761	19.5	8.8	96	--
27...	1157	80513	40.0	146	38	7.5	761	17.9	7.8	83	--
27...	1158	80513	43.0	146	38	7.5	761	17.1	7.5	78	--
27...	1159	80513	46.0	146	38	7.4	761	15.9	7.1	72	--
27...	1200	80513	50.0	146	38	7.4	761	14.9	6.5	64	--
27...	1201	80513	54.0	146	38	7.4	761	14.1	6.1	60	--
27...	1202	80513	60.0	146	39	7.4	761	13.3	5.9	56	--
27...	1203	80513	65.0	146	39	7.3	761	12.5	5.9	55	--
27...	1204	80513	70.0	146	39	7.2	761	12.0	6.0	55	--
27...	1205	80513	80.0	146	40	7.2	761	11.1	6.3	57	--
27...	1206	80513	90.0	146	40	7.2	761	10.4	6.6	59	--
27...	1207	80513	100	146	40	7.1	761	10.0	6.6	58	--
27...	1208	80513	110	146	40	7.1	761	9.7	6.3	56	--
27...	1209	80513	120	146	40	7.0	761	9.5	5.8	51	--
27...	1210	80513	130	146	41	6.9	761	9.3	5.2	46	--
27...	1211	80513	140	146	41	6.9	761	9.2	4.8	42	--
27...	1212	80513	146	146	41	6.8	761	9.3	4.6	40	--
SEP											
21...	1057	80513	.00	150	42	7.4	760	24.9	7.7	93	5.10
21...	1058	80513	10.0	150	42	7.4	760	24.9	7.7	94	--
21...	1059	80513	20.0	150	42	7.4	760	24.9	7.6	93	--
21...	1100	80513	30.0	150	42	7.4	760	24.8	7.7	93	--
21...	1101	80513	36.0	150	42	7.2	760	24.2	7.8	93	--
21...	1102	80513	37.0	150	41	7.0	760	23.0	7.8	91	--
21...	1103	80513	38.0	150	40	6.8	760	20.8	7.6	85	--
21...	1104	80513	40.0	150	40	6.7	760	20.2	7.3	81	--
21...	1106	80513	42.0	150	40	6.5	760	17.9	6.5	69	--
21...	1107	80513	44.0	150	40	6.4	760	16.9	6.0	62	--
21...	1108	80513	46.0	150	40	6.3	760	16.0	5.8	59	--
21...	1109	80513	49.0	150	40	6.2	760	15.1	5.3	53	--
21...	1110	80513	50.0	150	40	6.2	760	14.8	5.3	53	--
21...	1111	80513	54.0	150	40	6.2	760	13.7	5.3	51	--
21...	1112	80513	60.0	150	41	6.2	760	12.7	5.3	50	--
21...	1113	80513	66.0	150	41	6.2	760	11.9	5.3	49	--
21...	1114	80513	70.0	150	41	6.1	760	11.5	5.5	50	--
21...	1115	80513	80.0	150	41	6.2	760	10.6	6.0	54	--
21...	1116	80513	90.0	150	41	6.2	760	10.0	6.2	55	--
21...	1117	80513	100	150	42	6.2	760	9.6	6.2	55	--
21...	1118	80513	110	150	42	6.1	760	9.3	5.9	52	--
21...	1119	80513	120	150	42	6.1	760	9.2	5.5	48	--
21...	1120	80513	130	150	43	6.1	760	9.0	4.9	42	--
21...	1121	80513	140	150	43	6.0	760	9.0	4.4	38	--
21...	1122	80513	150	150	43	6.0	760	8.9	4.1	36	--

WHITE RIVER BASIN

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 mi².

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 June through December.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 19...	1247	80513	41	5.9	766	11.7	9.0	83
NOV 25...	1105	80513	41	5.9	758	12.2	8.7	81

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	STREAM WIDTH (FT) (00004)	SAM-PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET) (81903)	SAMPLE LOC-ATION, CROSS SECTION (FT FM R BK) (72103)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BARO-METRIC PRES-SURE (MM OF HG) (00025)
DEC 10...	1023	80513	300	1.00	2.00	15.0	40	6.2	10.0	4.6	40	770
10...	1024	80513	300	1.00	2.00	45.0	40	6.1	10.0	4.5	39	770
10...	1025	80513	300	2.00	4.00	75.0	40	6.1	10.0	4.4	38	770
10...	1026	80513	300	2.00	4.00	105.0	40	6.1	10.0	4.4	38	770
10...	1027	80513	300	1.00	2.00	135.0	40	6.1	10.1	4.4	39	770
10...	1028	80513	300	1.50	3.00	165.0	40	6.1	10.0	4.6	40	770
10...	1029	80513	300	.60	1.00	195.0	40	6.0	10.0	4.6	41	770
10...	1030	80513	300	1.00	2.00	225.0	40	6.0	10.1	4.7	41	770
10...	1031	80513	300	1.00	2.00	255.0	40	6.0	10.1	4.8	42	770
10...	1032	80513	300	.90	2.00	285.0	40	6.1	10.0	5.1	45	770
10...	1033	80513	--	--	--	--	40	6.1	10.0	5.1	45	770

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR 24...	1011	80513	40	6.8	766	8.7	11.7	100
AUG 27...	1055	80513	41	7.7	765	15.0	11.4	113
SEP 21...	1144	80513	42	7.2	769	14.2	10.7	104

WHITE RIVER BASIN

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07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.4	5.7	7.4	7.6	5.3	6.1	8.1	3.8	6.0	---	---	---
2	8.0	6.0	7.2	8.0	4.7	6.2	7.5	3.8	5.9	---	---	---
3	7.5	6.0	7.0	7.9	4.4	6.2	7.7	3.9	5.9	---	---	---
4	7.7	5.7	6.8	7.6	4.1	5.9	7.7	4.2	6.1	---	---	---
5	9.2	6.8	7.5	9.1	4.3	6.4	6.9	3.9	5.4	---	---	---
6	8.3	5.8	7.5	8.1	4.2	6.6	6.6	3.9	5.1	---	---	---
7	7.9	5.6	7.1	7.6	4.9	6.5	6.8	3.6	5.5	---	---	---
8	8.5	5.5	7.2	7.8	4.3	6.3	7.6	3.8	5.8	---	---	---
9	8.0	5.8	7.0	7.0	4.2	5.9	6.4	3.5	5.5	---	---	---
10	8.2	5.3	7.6	7.4	4.1	6.3	6.0	3.8	5.0	---	---	---
11	8.1	5.2	7.0	7.0	4.2	5.8	6.1	4.1	5.0	---	---	---
12	8.4	5.4	6.9	7.3	4.3	6.2	6.5	4.6	5.3	---	---	---
13	8.4	6.5	7.3	7.6	5.6	6.3	6.3	4.9	5.6	---	---	---
14	8.2	5.3	6.8	7.3	4.3	6.1	7.2	4.0	5.8	---	---	---
15	8.3	5.0	6.3	7.6	5.4	6.4	7.1	4.2	5.8	---	---	---
16	8.2	5.3	6.7	7.2	4.3	5.9	7.5	4.7	6.2	---	---	---
17	7.3	5.9	6.5	7.1	4.1	5.8	7.2	5.0	6.3	---	---	---
18	7.2	5.8	6.6	6.6	5.1	5.8	7.1	4.6	5.5	---	---	---
19	7.8	5.0	6.1	6.7	3.9	5.3	7.1	4.8	5.9	---	---	---
20	7.8	4.7	6.6	6.6	4.1	5.4	6.1	5.1	5.5	---	---	---
21	7.7	4.6	6.3	6.6	5.4	6.0	9.0	4.9	6.6	---	---	---
22	7.6	4.6	6.1	6.8	5.0	5.8	9.2	6.0	7.8	---	---	---
23	7.7	4.5	6.5	6.1	5.0	5.4	6.8	5.8	6.2	---	---	---
24	7.8	4.5	6.1	5.9	5.0	5.4	7.1	5.7	6.3	---	---	---
25	7.4	4.5	6.1	6.1	4.1	5.4	6.1	5.7	5.9	---	---	---
26	---	---	---	6.5	5.0	5.6	8.1	5.6	6.1	---	---	---
27	---	---	---	6.3	4.9	5.5	8.4	5.3	6.4	---	---	---
28	7.9	5.4	6.3	5.7	3.9	5.0	6.2	5.4	5.9	---	---	---
29	7.5	4.3	6.2	6.2	3.9	5.4	8.7	5.6	6.8	---	---	---
30	7.2	5.7	6.2	7.3	4.0	5.8	9.1	6.6	7.8	---	---	---
31	6.7	5.3	6.0	---	---	---	8.3	6.0	6.7	---	---	---
MONTH	---	---	---	9.1	3.9	5.9	9.2	3.5	6.0	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	10.7	8.7	9.5	10.0	8.1	8.8	9.9	7.3	8.0
2	12.3	10.2	11.0	11.0	8.9	9.7	10.8	8.3	9.2	8.3	6.1	7.6
3	11.9	9.4	10.7	11.1	8.9	10.0	9.4	8.3	8.7	8.2	6.0	7.3
4	11.4	9.9	10.4	11.2	9.4	10.1	9.3	8.1	8.6	9.1	7.1	7.7
5	11.6	9.9	10.5	11.0	9.5	10.1	10.0	8.3	9.1	8.9	7.4	8.1
6	12.8	9.4	10.2	10.9	8.5	9.7	10.6	8.5	9.4	8.9	6.9	7.7
7	12.9	10.0	11.4	11.1	9.3	10.1	9.9	8.6	9.0	8.8	6.0	7.3
8	11.4	9.2	10.3	12.0	8.4	9.8	9.3	8.1	8.7	9.0	7.0	7.9
9	10.9	9.1	10.0	12.0	9.3	10.2	9.7	8.2	8.8	8.6	7.4	7.9
10	10.7	9.1	9.8	10.9	8.4	9.5	10.3	7.1	8.8	8.8	7.2	7.9
11	11.2	9.1	10.0	10.8	8.3	9.7	9.8	8.2	8.9	8.8	7.3	7.9
12	11.1	9.5	10.1	10.0	8.2	9.2	9.6	7.0	8.2	9.1	7.3	8.1
13	10.5	9.4	10.0	10.5	8.5	9.1	9.6	6.8	8.4	9.0	7.5	8.1
14	11.3	9.3	10.0	9.9	8.1	8.9	9.6	8.1	8.7	8.8	6.8	8.0
15	11.2	9.6	10.2	10.6	8.5	9.4	9.8	8.0	8.8	9.0	7.5	7.9
16	10.8	9.6	10.0	10.3	8.1	9.0	9.9	6.9	8.5	9.4	7.5	8.1
17	11.1	9.6	10.2	10.6	8.2	9.2	9.6	6.8	8.5	9.3	7.5	8.1
18	11.2	9.6	10.0	10.1	8.2	9.0	9.7	6.8	8.5	9.5	7.7	8.3
19	11.0	9.8	10.2	10.6	7.8	9.0	9.7	6.7	8.5	8.6	6.6	7.7
20	11.4	9.6	10.2	9.8	8.1	8.8	9.7	6.7	8.3	9.5	7.4	8.2
21	11.1	8.9	10.0	10.3	7.8	8.5	9.6	8.1	8.7	8.6	6.4	8.0
22	10.4	8.8	9.8	10.2	7.8	8.4	9.1	6.9	8.3	9.3	7.4	8.1
23	9.9	8.9	9.5	9.9	7.6	8.4	9.2	6.7	7.7	9.3	7.4	7.8
24	10.9	8.8	9.7	9.4	8.1	8.7	9.4	6.6	7.9	9.0	7.5	8.1
25	11.3	8.8	10.1	11.8	8.1	9.1	9.9	6.6	8.1	8.8	6.2	7.7
26	11.1	9.4	9.9	9.5	7.6	8.3	10.6	6.5	8.1	8.5	6.0	7.3
27	10.0	8.8	9.6	9.9	7.5	8.4	9.4	6.4	7.8	9.0	6.8	7.7
28	10.2	8.7	9.4	10.0	7.4	8.6	9.4	6.6	7.8	9.2	5.7	7.2
29	11.6	9.2	9.9	9.8	7.4	8.4	9.3	7.3	7.8	8.8	7.3	8.0
30	10.7	8.6	9.6	10.0	7.4	8.6	9.3	6.4	7.9	9.0	7.3	8.0
31	---	---	---	10.9	8.0	9.0	8.8	6.3	7.5	---	---	---
MONTH	---	---	---	12.0	7.4	9.2	10.8	6.3	8.5	9.9	5.7	7.9

WHITE RIVER BASIN

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.8	9.9	10.5	11.4	9.9	10.5	11.8	10.0	11.1	---	---	---
2	11.2	9.6	10.2	11.0	10.1	10.5	11.7	10.7	11.1	---	---	---
3	11.3	10.1	10.5	11.1	9.9	10.7	11.4	10.2	10.8	---	---	---
4	11.9	9.8	10.3	10.9	9.8	10.5	11.0	10.1	10.6	---	---	---
5	10.8	10.1	10.4	11.0	9.5	10.5	11.3	10.3	10.7	---	---	---
6	11.3	10.2	10.8	11.4	9.4	10.6	11.2	10.4	10.9	---	---	---
7	12.3	9.9	10.5	10.9	9.7	10.3	11.3	10.0	10.9	---	---	---
8	13.8	9.6	10.6	11.0	9.7	10.4	11.5	9.9	10.9	---	---	---
9	12.5	9.9	10.6	11.0	9.9	10.4	11.1	9.5	10.4	---	---	---
10	12.6	9.8	10.9	11.5	10.1	10.9	11.3	9.8	10.2	---	---	---
11	12.6	9.8	11.0	11.5	9.4	10.7	10.9	9.6	9.9	---	---	---
12	12.3	9.6	10.4	11.2	9.8	10.8	10.8	9.7	9.9	---	---	---
13	12.1	9.6	10.3	10.7	9.9	10.2	10.8	9.5	9.9	---	---	---
14	10.5	9.5	10.1	11.1	9.9	10.5	11.3	9.3	10.4	---	---	---
15	10.5	9.7	10.2	11.6	9.7	10.5	11.1	9.5	10.3	---	---	---
16	10.4	9.8	10.1	11.5	9.6	10.4	11.4	9.7	10.4	---	---	---
17	11.8	10.0	10.6	11.2	9.7	10.8	11.5	9.4	10.3	---	---	---
18	11.1	10.0	10.6	10.9	9.7	10.4	11.2	9.6	10.8	---	---	---
19	10.6	9.7	10.3	11.0	10.1	10.5	11.1	10.1	10.7	---	---	---
20	10.6	9.5	10.3	11.1	9.6	10.6	10.1	10.0	10.1	---	---	---
21	10.9	10.0	10.5	11.8	9.8	10.5	11.2	10.0	10.4	---	---	---
22	10.9	9.6	10.5	11.5	9.5	10.2	11.2	8.9	9.7	---	---	---
23	10.8	9.8	10.5	11.2	9.6	10.2	9.1	8.7	8.9	---	---	---
24	10.8	10.1	10.7	10.8	9.9	10.3	9.6	8.8	9.0	---	---	---
25	10.8	9.7	10.5	11.8	10.0	10.7	10.3	8.7	9.2	---	---	---
26	---	---	---	11.5	9.7	10.4	10.4	8.8	9.4	---	---	---
27	---	---	---	11.4	9.6	10.2	10.2	9.3	9.5	---	---	---
28	12.2	9.8	10.6	11.3	9.8	10.4	10.6	9.2	9.6	---	---	---
29	11.7	9.9	10.6	11.4	10.3	10.8	10.4	9.2	9.7	---	---	---
30	12.1	10.0	10.7	11.5	10.0	10.9	10.4	8.8	9.8	---	---	---
31	12.1	9.9	10.6	---	---	---	10.3	8.9	9.5	---	---	---
MONTH	---	---	---	11.8	9.4	10.5	11.8	8.7	10.2	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	12.4	9.3	10.1	12.6	9.6	10.7	12.6	9.6	10.2
2	12.0	9.1	9.7	12.6	9.2	9.9	12.9	9.6	10.7	13.0	9.6	10.3
3	12.1	9.0	9.7	13.1	9.2	10.3	13.9	9.7	11.1	13.1	9.6	10.3
4	12.6	9.1	10.1	12.8	9.3	10.2	13.1	9.4	11.2	12.7	9.5	10.5
5	11.7	9.2	10.1	11.5	9.3	9.6	12.6	9.4	10.9	11.7	9.6	10.2
6	13.1	9.1	10.5	12.2	9.3	9.9	12.6	9.5	10.4	12.2	9.6	10.3
7	11.7	9.0	9.6	11.7	9.3	9.7	13.0	9.6	10.7	12.5	9.4	10.1
8	11.7	9.1	9.7	12.6	9.3	9.9	12.9	9.5	10.6	10.5	9.6	9.9
9	12.8	9.2	9.9	11.7	9.3	9.8	12.3	9.5	10.4	12.5	9.4	10.1
10	12.9	9.2	10.1	12.3	9.3	10.5	11.8	9.6	10.0	12.6	9.2	10.1
11	11.9	9.2	9.8	11.7	9.3	10.1	10.1	9.6	9.8	10.2	9.6	9.8
12	12.0	9.2	9.9	12.1	9.2	10.1	11.6	9.6	10.0	11.2	9.4	9.9
13	12.1	9.2	10.4	13.0	9.2	10.2	11.7	9.6	10.0	12.5	9.4	10.1
14	12.0	9.2	10.3	12.5	9.2	9.9	13.5	9.6	10.5	14.1	9.1	10.5
15	12.6	9.2	10.1	12.3	9.3	10.0	12.0	9.6	10.0	12.6	9.6	10.1
16	11.7	9.2	10.1	13.2	9.3	10.8	12.4	9.6	10.1	12.2	9.5	10.1
17	13.0	9.2	10.2	13.3	9.3	10.6	13.0	9.5	10.1	12.4	9.3	10.0
18	13.0	9.2	10.5	13.3	9.4	10.7	12.2	9.5	10.1	11.3	9.4	9.9
19	12.9	9.1	10.4	11.9	9.4	10.0	12.8	9.6	10.2	12.6	9.3	10.0
20	12.0	9.2	9.9	12.2	9.4	10.1	13.1	9.6	10.2	10.8	9.5	9.9
21	11.8	9.2	9.7	12.8	9.4	10.3	12.5	9.6	10.4	12.3	9.5	10.4
22	12.0	9.2	9.7	12.4	9.5	10.4	12.0	9.5	10.5	11.9	9.2	9.9
23	10.4	9.3	9.6	12.6	9.5	10.2	10.7	9.6	10.0	12.6	9.0	10.2
24	11.2	9.2	9.6	13.0	9.5	10.7	13.1	9.7	10.6	12.6	9.2	10.0
25	10.6	9.2	9.5	12.4	9.5	10.4	12.6	9.6	10.1	12.5	9.2	10.0
26	14.5	9.3	10.4	12.2	9.6	10.1	12.2	9.6	10.2	12.4	9.3	9.9
27	12.6	9.3	10.7	11.4	9.6	9.9	12.7	9.7	10.3	12.5	9.4	10.0
28	11.9	9.4	10.1	11.8	9.5	10.0	13.0	9.6	10.3	11.4	9.4	9.9
29	12.8	9.2	10.1	11.2	9.6	10.0	12.5	9.5	10.1	12.1	9.3	10.1
30	10.7	9.3	9.7	12.2	9.6	10.4	12.4	9.6	10.1	11.9	8.9	9.7
31	---	---	---	12.4	9.6	10.5	12.5	9.4	10.2	---	---	---
MONTH	---	---	---	13.3	9.2	10.2	13.9	9.4	10.3	14.1	8.9	10.1

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LOCATION.--Lat 35°26'16", long 91°44'45", in SW1/4NW1/4 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.

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

DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1999, BY WATER YEAR (WY)[illegible]

WHITE RIVER BASIN

07076517 LITTLE RED RIVER NEAR DEWEY--CONTINUED

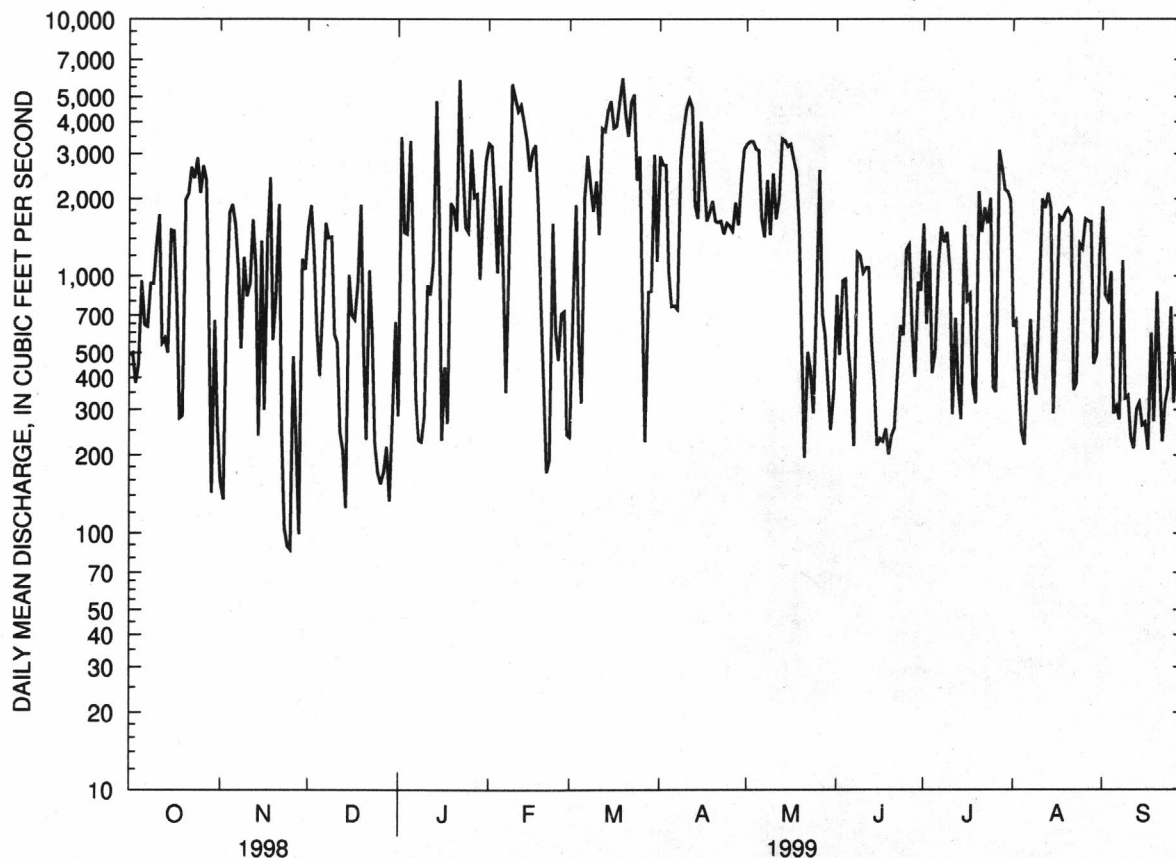
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1997 - 1999

ANNUAL TOTAL	633438		506665			
ANNUAL MEAN	1735		1388		1487	
HIGHEST ANNUAL MEAN					1576	1998
LOWEST ANNUAL MEAN					1397	1999
HIGHEST DAILY MEAN	6740	Mar 8	5920	Mar 19	21300	Apr 5 1997
LOWEST DAILY MEAN	86	Nov 25	86	Nov 25	96	Oct 19 1997
ANNUAL SEVEN-DAY MINIMUM	192	Dec 24	192	Dec 24	103	Nov 2 1997
INSTANTANEOUS PEAK FLOW			6980	Jan 22	^a 25300	Apr 5 1997
INSTANTANEOUS PEAK STAGE			13.22	Jan 22	28.25	Apr 5 1997
INSTANTANEOUS LOW FLOW			84	Nov 25, 26	84	Nov 25, 26 1998
ANNUAL RUNOFF (AC-FT)	1256000		1005000		1077000	
10 PERCENT EXCEEDS	4360		3200		4940	
50 PERCENT EXCEEDS	1190		1030		1300	
90 PERCENT EXCEEDS	277		239		258	

^aFrom rating curve extended above 12,000 ft³/s

WHITE RIVER BASIN

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07077000 WHITE RIVER AT DEVALLS BLUFF

LOCATION.--Lat 34°47'25", long 91°26'45", in SE1/4 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 mi².

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 sea level. Prior to Dec. 22, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Some regulation since 1943 by Norfork 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 ft³/s by current-meter measurement, furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13100	10500	6960	10600	35500	27500	36600	44200	24900	20800	17600	16000
2	13300	10300	7190	11900	35900	24100	36000	43600	25200	20900	17700	15900
3	13300	10200	7420	15600	36100	21200	35700	42700	25600	21200	17500	15300
4	13000	9910	7610	18400	35900	19700	36900	41800	25800	22500	16700	14400
5	12300	9850	7430	19600	35300	19600	37600	41300	25800	23900	15600	14000
6	11400	9940	7010	21700	34900	20600	37800	41100	25400	23700	14700	14000
7	11000	9770	6920	24100	35000	22100	38100	40400	25100	22700	13500	13900
8	11600	9450	7530	26500	35100	23100	38800	39900	24700	21900	12500	13800
9	15000	9030	8190	27100	35100	23100	39800	39700	24400	21300	12800	13500
10	17300	8900	8490	26300	35800	22000	41100	39100	23800	21200	13500	13300
11	17500	9120	8760	25000	37400	22000	42300	e38100	23400	21900	13700	13100
12	17100	9270	8870	22900	38500	23100	43300	36900	23300	23100	13400	13200
13	16600	9640	9120	20900	39400	28900	44000	e35800	22800	24100	13400	12900
14	15800	10400	9250	18900	39700	35500	44900	e34800	22700	24200	14200	12100
15	15100	10400	9010	18000	39900	38300	46000	e33700	22200	23400	15100	10900
16	14500	10100	8730	17300	39800	40200	46800	32900	21100	22600	15300	9870
17	14200	10000	9080	16000	39800	41400	47700	e32700	19700	21700	14800	9400
18	13900	9530	10100	15200	39700	42200	48500	32500	18100	20500	13900	9550
19	13500	9680	10800	14600	39400	42800	49200	32600	16900	19400	12900	9690
20	13000	9620	11200	14200	39000	43500	49500	32400	16000	18400	13100	9720
21	13100	8900	11200	14100	38800	43800	49600	31300	15300	18100	14600	9440
22	13500	8670	10900	14500	38500	43600	49200	29600	14500	18000	15600	9000
23	13800	8640	11200	18600	38300	43300	48700	28200	13700	17800	15500	8570
24	13800	8220	11700	24300	37700	43200	47900	27200	13100	17300	14700	8270
25	13700	7950	12300	27800	36800	42900	47100	26200	13200	17100	14100	8130
26	13500	7670	13500	29700	35500	42500	46800	25700	14800	16900	13800	7860
27	13000	7320	13900	31200	33700	41700	47000	25800	16800	16300	14000	7430
28	12800	7110	13300	31900	31000	40300	46400	25500	18500	16100	14600	6860
29	12300	6910	12300	32700	---	39100	45600	25100	20000	16500	15300	6530
30	11500	6750	11500	33700	---	38000	44900	25000	20900	17100	15800	6430
31	10900	---	10800	34800	---	37400	---	25000	---	17300	16000	---
TOTAL	424400	273750	302270	678100	1037500	1036700	1313800	1050800	617700	627900	455900	333050
MEAN	13690	9125	9751	21870	37050	33440	43790	33900	20590	20250	14710	11100
MAX	17500	10500	13900	34800	39900	43800	49600	44200	25800	24200	17700	16000
MIN	10900	6750	6920	10600	31000	19600	35700	25000	13100	16100	12500	6430
AC-FT	841800	543000	599600	1345000	2058000	2056000	2606000	2084000	1225000	1245000	904300	660600

WHITE RIVER BASIN

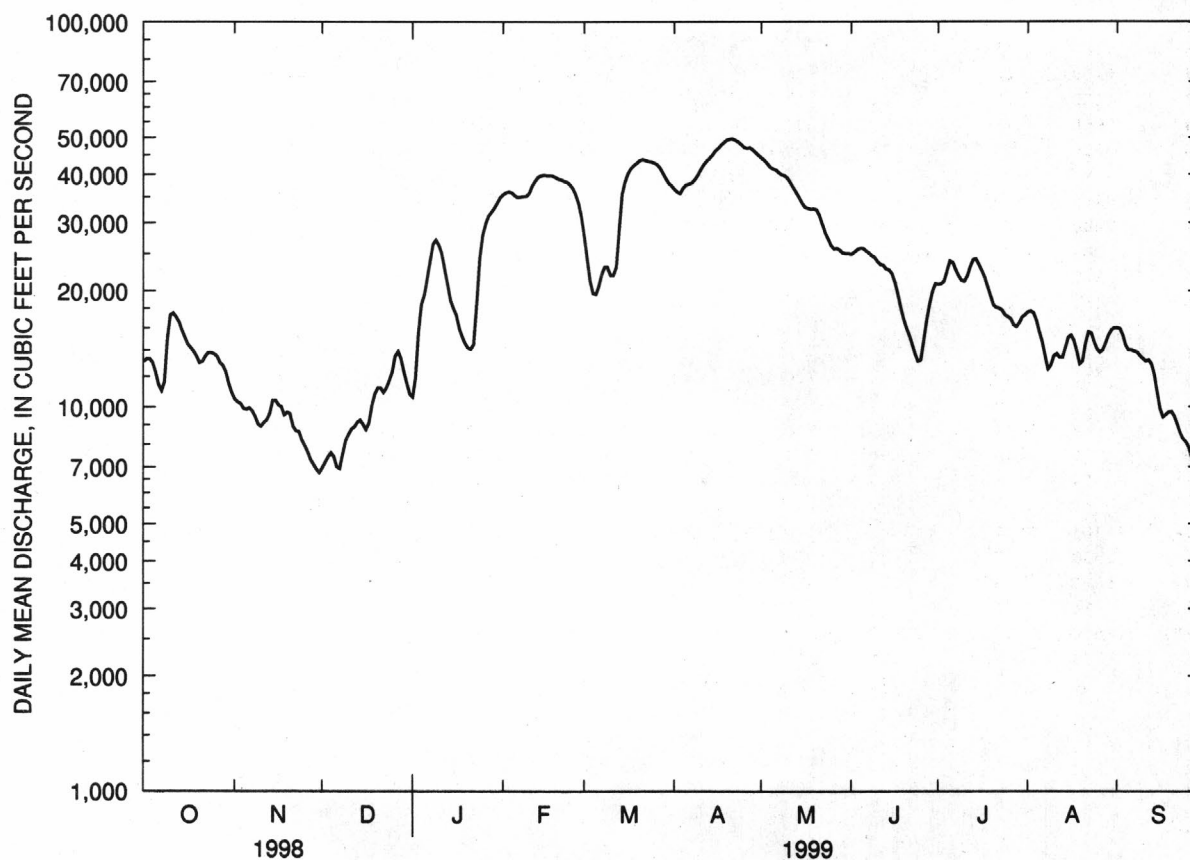
07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1999, BY WATER YEAR (WY)

MEAN	12220	16390	24480	31540	37140	41150	43620	42840	26610	19880	16170	12940
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	10840	10110	7822	7112	4276
(WY)	1955	1955	1955	1964	1964	1996	1963	1963	1964	1954	1954	1954

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1950-70, 1989-99

ANNUAL TOTAL	9114360		8151870				
ANNUAL MEAN	24970		22330			27030	
HIGHEST ANNUAL MEAN						51270	1950
LOWEST ANNUAL MEAN						12230	1963
HIGHEST DAILY MEAN	60400	Mar 25	49600	Apr 21	154000	Jan 19	1950
LOWEST DAILY MEAN	6750	Nov 30	6430	Sep 30	3230	Sep 29	1954
ANNUAL SEVEN-DAY MINIMUM	7090	Nov 27	7090	Nov 27	3290	Sep 26	1954
INSTANTANEOUS PEAK FLOW			49700	Apr 20,21	154000	Jan 19	1950
INSTANTANEOUS PEAK STAGE			20.80	Apr 20,21	28.42	Jan 20	1950
INSTANTANEOUS LOW FLOW			6400	Sep 30	3230	^a Sep 29	1954
ANNUAL RUNOFF (AC-FT)	18080000		16170000			19580000	
10 PERCENT EXCEEDS	52500		41200			54900	
50 PERCENT EXCEEDS	19500		18000			20100	
90 PERCENT EXCEEDS	9630		9100			8060	

^aAlso Sept. 30 to Oct. 1, and Oct. 29, 1954^eEstimated

WHITE RIVER BASIN

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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 mi².

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.--WRD Ark. 1972: 1966. WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 222.99 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	28	105	4010	231	130	161	926	2860	449	360
2	20	19	15	2310	3850	139	94	139	977	2490	415	377
3	16	14	14	3630	3600	97	88	123	1020	1420	380	411
4	16	12	19	3640	3230	91	1700	110	795	608	335	422
5	16	10	178	3470	2700	79	2540	383	582	388	346	400
6	2510	9.8	415	3060	2010	213	3420	576	362	288	377	333
7	4030	7.6	409	2370	1370	379	3530	546	313	247	410	264
8	4290	6.9	214	1440	1010	421	3380	445	395	250	422	218
9	4440	18	111	742	800	1460	3250	314	304	289	842	321
10	4550	137	61	450	596	1570	3040	204	211	311	1350	368
11	4620	477	41	392	407	967	2240	159	220	511	1210	326
12	4620	420	36	563	329	374	1080	140	460	497	856	288
13	4590	215	54	914	289	576	503	126	738	424	615	253
14	4520	107	43	1070	238	1820	470	103	1170	367	504	226
15	4440	61	36	843	175	2650	2610	92	1780	334	444	229
16	4340	38	30	512	146	2540	3110	108	1650	339	399	199
17	4200	26	25	388	144	2030	3030	145	1090	361	362	168
18	4080	17	20	790	145	1100	2840	477	621	387	368	150
19	3950	10	17	1010	142	465	2530	564	393	387	409	139
20	3750	20	18	814	124	241	1830	403	305	364	445	109
21	3410	29	631	535	114	239	957	265	264	344	459	99
22	2640	56	2780	2780	81	285	478	179	213	356	438	104
23	1480	86	2800	3870	71	212	292	141	256	377	434	98
24	805	59	2410	4030	68	157	216	113	569	377	443	86
25	427	41	1470	4060	52	120	178	94	819	390	469	89
26	249	30	564	4030	47	92	174	83	897	407	468	86
27	163	22	289	3950	39	88	338	78	1130	415	497	72
28	83	18	243	3880	114	92	615	79	2130	673	506	67
29	48	14	227	3880	---	118	368	106	2660	711	464	61
30	28	14	199	3970	---	309	214	109	2940	601	419	52
31	24	---	146	4050	---	220	---	433	---	513	374	---
TOTAL	72381	2017.3	13543	67548	25901	19375	45245	6998	26190	18286	15909	6375
MEAN	2335	67.2	437	2179	925	625	1508	226	873	590	513	212
MAX	4620	477	2800	4060	4010	2650	3530	576	2940	2860	1350	422
MIN	16	6.9	14	105	39	79	88	78	211	247	335	52
AC-FT	143600	4000	26860	134000	51370	38430	89740	13880	51950	36270	31560	12640
CFSM	3.33	.10	.62	3.11	1.32	.89	2.15	.32	1.25	.84	.73	.30
IN.	3.84	.11	.72	3.58	1.37	1.03	2.40	.37	1.39	.97	.84	.34

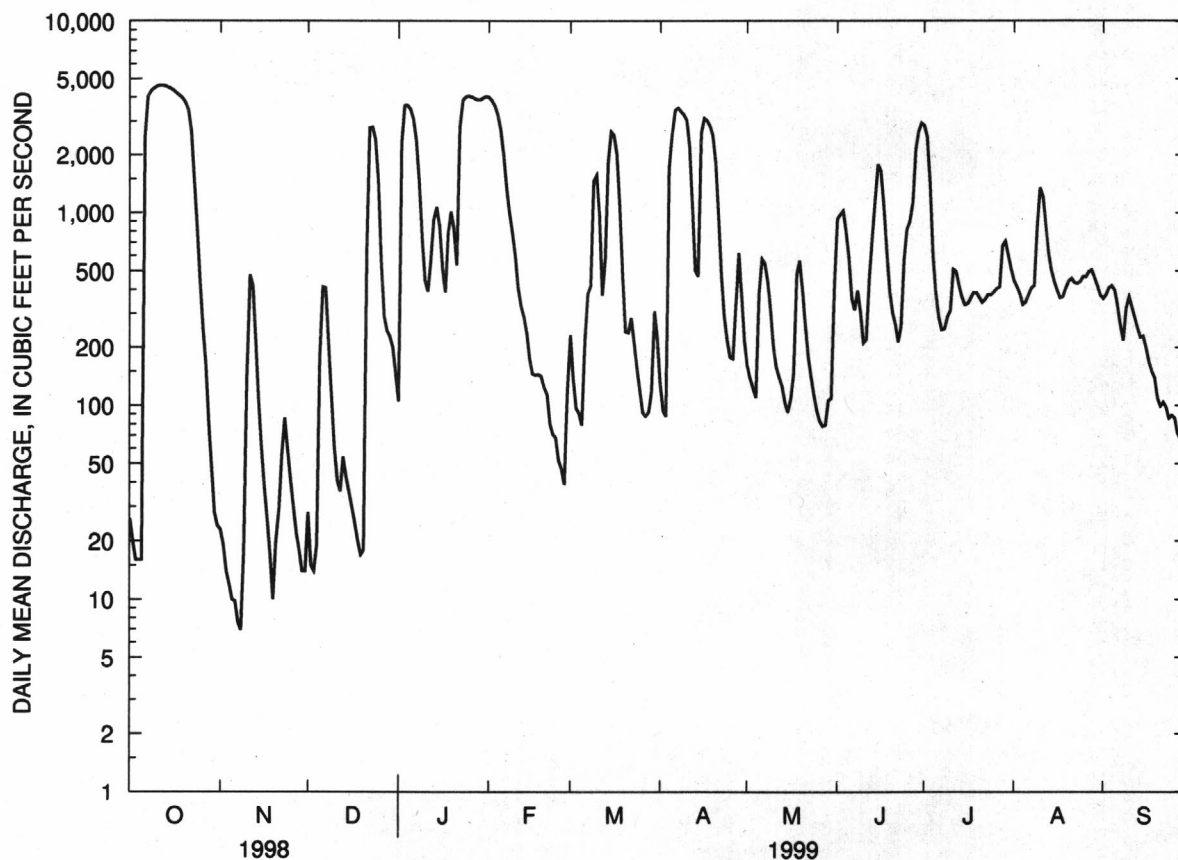
WHITE RIVER BASIN

07077380 CACHE RIVER AT EGYPT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	394	789	1289	1314	1259	1214	1290	1093	469	419	418	439
MAX	2437	2942	3547	4249	3552	3543	4759	4256	1177	1528	2068	1637
(WY)	1985	1997	1983	1991	1989	1997	1979	1973	1989	1976	1998	1965
MIN	12.5	8.23	45.0	11.8	87.4	216	75.2	84.9	29.2	102	85.8	75.1
(WY)	1995	1990	1977	1981	1996	1996	1981	1987	1988	1968	1968	1971

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	375003.3		319768.3			
ANNUAL MEAN	1027		876		864	
HIGHEST ANNUAL MEAN					1762	1973
LOWEST ANNUAL MEAN					299	1972
HIGHEST DAILY MEAN	4620	Oct 11	4620	Oct 11	7940	Apr 25 1973
LOWEST DAILY MEAN	6.9	Nov 8	6.9	Nov 8	.00	Nov 6 1982
ANNUAL SEVEN-DAY MINIMUM	11	Nov 3	11	Nov 3	.00	Oct 14 1991
INSTANTANEOUS PEAK FLOW			4630	Oct 11,12	8490	Jan 6 1966
INSTANTANEOUS PEAK STAGE			18.97	Oct 11,12	21.88	Jan 6 1966
INSTANTANEOUS LOW FLOW			5.5	Dec 2	.00	at times
ANNUAL RUNOFF (AC-FT)	743800		634300		625800	
ANNUAL RUNOFF (CFSM)	1.47		1.25		1.23	
ANNUAL RUNOFF (INCHES)	19.90		16.97		16.74	
10 PERCENT EXCEEDS	3220		3080		2740	
50 PERCENT EXCEEDS	305		374		297	
90 PERCENT EXCEEDS	35		36		40	



WHITE RIVER BASIN

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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 mi².

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 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 sea level. 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 present datum; 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.--No estimated daily discharges. Water-discharge records fair except those below 100 ft³/s, which are poor. 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 ft³/s, due to break in White River levee.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	443	72	864	3950	177	251	836	53	1600	524	410
2	61	308	63	871	3710	161	243	699	50	1620	627	402
3	56	221	56	1310	3520	146	280	560	64	1700	661	382
4	49	159	53	1540	3410	148	382	420	120	1780	621	361
5	42	119	76	1560	3320	177	436	345	245	1800	543	337
6	47	92	124	1860	3250	198	438	603	395	1700	475	324
7	56	74	176	2610	3200	194	656	1210	614	1420	423	320
8	117	61	263	2980	3050	188	1410	1220	664	1080	388	321
9	356	50	354	2920	2820	212	2140	940	578	798	366	316
10	1010	48	436	2810	2480	272	2470	727	463	636	360	297
11	2170	44	492	2570	2150	492	2560	580	365	548	375	266
12	2710	40	490	2090	1870	941	2550	458	310	565	412	243
13	2890	42	438	1580	1610	1620	2520	353	288	686	518	240
14	2920	115	380	1210	1380	2130	2470	272	349	727	680	256
15	2900	252	318	997	1190	2190	2260	209	513	685	800	259
16	2900	352	259	933	1020	2030	1780	160	591	616	831	242
17	2880	376	205	973	879	2050	1410	128	615	535	779	216
18	2990	334	161	1040	747	2190	1500	168	703	455	685	191
19	3070	269	131	1030	631	2250	1930	288	866	391	591	169
20	3090	206	110	978	523	2230	2220	298	969	349	508	152
21	3110	152	102	1010	435	2040	2320	237	906	325	447	131
22	3090	117	173	1360	366	1670	2320	207	720	312	398	112
23	3050	96	348	1980	317	1270	2220	225	581	309	371	97
24	3000	81	491	2140	283	963	1930	231	533	306	372	82
25	2880	71	746	2110	259	765	1500	208	549	297	395	69
26	2660	63	1350	2350	240	651	1230	176	840	291	415	59
27	2210	63	1930	2630	227	554	1150	140	1440	297	413	53
28	1680	71	2100	2840	203	460	1130	112	1730	307	408	48
29	1230	77	1930	3200	---	383	1100	90	1750	324	408	44
30	887	78	1550	3790	---	322	979	73	1700	353	409	38
31	636	---	1150	4090	---	279	---	61	---	414	409	---
TOTAL	54815	4474	16527	60226	47040	29353	45785	12234	19564	23226	15612	6437
MEAN	1768	149	533	1943	1680	947	1526	395	652	749	504	215
MAX	3110	443	2100	4090	3950	2250	2560	1220	1750	1800	831	410
MIN	42	40	53	864	203	146	243	61	50	291	360	38
AC-FT	108700	8870	32780	119500	93300	58220	90810	24270	38810	46070	30970	12770

WHITE RIVER BASIN

07077500 CACHE RIVER AT PATTERSON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1999, BY WATER YEAR (WY)

MEAN	396	744	1487	1999	2210	2275	2073	1615	891	479	440	414
MAX	3100	5297	6168	8809	8817	5770	7586	6075	5890	2093	3009	2210
(WY)	1985	1958	1958	1950	1950	1945	1979	1973	1928	1945	1998	1965
MIN	8.32	16.3	67.3	37.8	68.6	168	133	150	67.7	57.6	47.1	45.5
(WY)	1988	1972	1954	1964	1963	1941	1981	1941	1941	1954	1944	1943

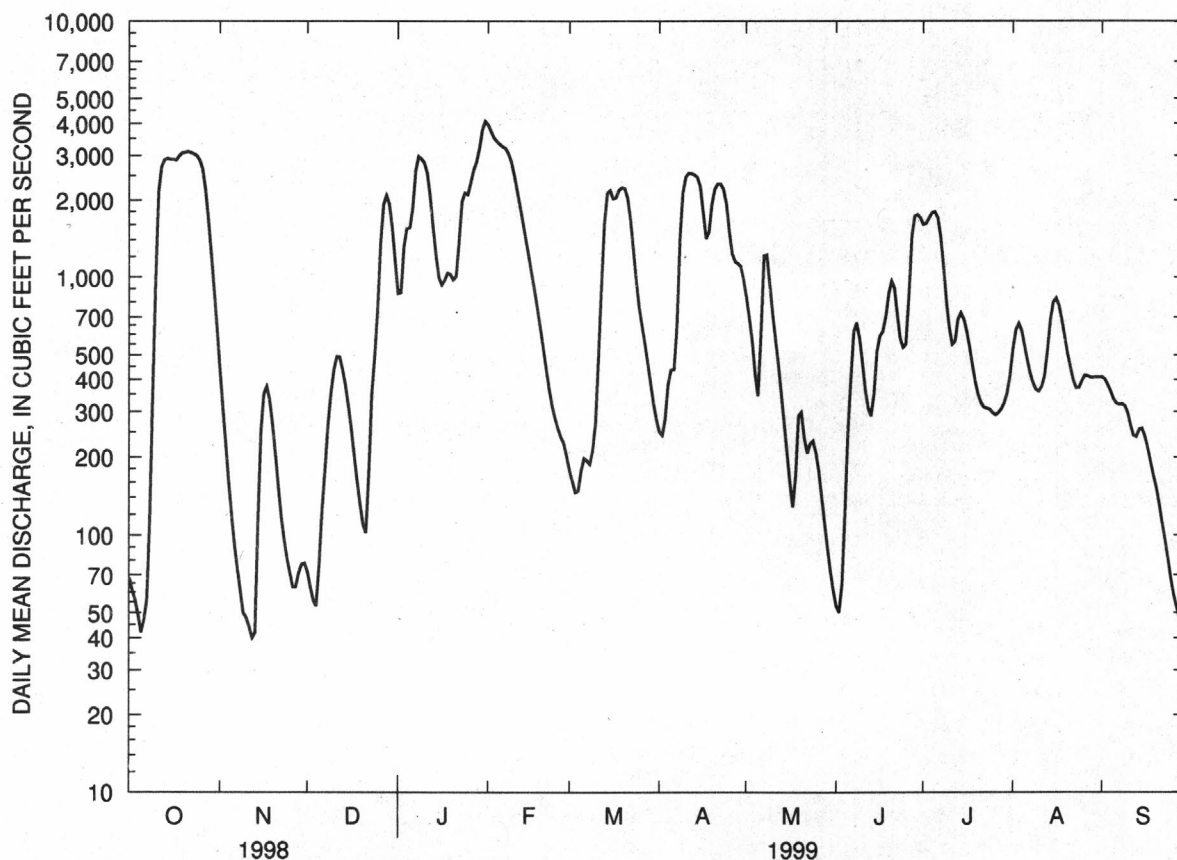
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1928-31, 1938-77,
1998-99

ANNUAL TOTAL	497549		335293									
ANNUAL MEAN	1363		919						1254			
HIGHEST ANNUAL MEAN									2984		1950	
LOWEST ANNUAL MEAN									308		1931	
HIGHEST DAILY MEAN	4560	Mar 11	4090	Jan 31	12100	Jun 27	1928					
LOWEST DAILY MEAN	40	Nov 12	38	Sep 30	.00	Oct 27	1956					
ANNUAL SEVEN-DAY MINIMUM	51	Nov 7	51	Nov 7	.00	Oct 24	1978					
INSTANTANEOUS PEAK FLOW			4110	Jan 31	13200	Jan 24	1937					
INSTANTANEOUS PEAK STAGE			10.43	Jan 31	^a 13.21	Jan 24	1937					
INSTANTANEOUS LOW FLOW			37	Sep 30	.00	Oct 27-30	1956					
ANNUAL RUNOFF (AC-FT)	986900		665100		908500							
10 PERCENT EXCEEDS	3470		2530		3690							
50 PERCENT EXCEEDS	765		475		431							
90 PERCENT EXCEEDS	117		80		67							

^aAt present datum

WHITE RIVER BASIN

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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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	
OCT 15...	0910	80513	81213	3750	111	6.9	758	15.0	9.6	96	290	
DEC 02...	1045	80513	81213	55	198	7.6	769	13.6	4.0	38	54	
MAR 02...	1015	80513	81213	168	124	7.2	758	12.4	8.0	75	K53	
APR 28...	1200	80513	81213	1130	81	7.3	764	19.5	5.9	64	120	
JUN 23...	1150	80513	81213	601	211	7.7	765	25.0	5.6	68	170	
AUG 10...	1115	80513	81213	362	451	8.2	764	28.8	4.8	62	70	
DATE		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
OCT 15...	--	470	33	8.2	3.0	5.4	23	.4	5.4	25	7.8	
DEC 02...	--	42	64	16	5.8	9.7	23	.5	6.8	60	13	
MAR 02...	--	K36	40	9.9	3.7	7.2	26	.5	3.7	36	7.2	
APR 28...	--	K120	25	6.2	2.4	4.0	23	.3	2.7	27	5.4	
JUN 23...	K60	580	73	18	6.8	13	27	.7	3.9	72	17	
AUG 10...	160	130	190	50	16	23	20	.7	3.2	189	26	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)
OCT 15...	5.6	<.10	9.9	80	61	.11	810	--	--	<.010	--	--
DEC 02...	11	.13	14	128	114	.17	19.0	--	--	<.010	--	--
MAR 02...	6.0	.11	9.3	87	71	.12	39.5	.439	1.9	.011	.04	.04
APR 28...	2.6	<.10	6.2	61	48	.08	186	.300	1.3	.010	.03	.03
JUN 23...	8.0	--	--	138	114	.19	224	.980	4.3	.020	.07	.07
AUG 10...	12	--	--	286	245	.39	280	--	--	<.010	--	--
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 15...	.050	.010	.01	--	.37	--	.38	--	.43	--	--	--
DEC 02...	.220	.034	.04	--	.44	--	.47	--	.69	--	--	--
MAR 02...	.450	.097	.12	--	.33	--	.43	--	.88	--	--	--
APR 28...	.310	.070	.09	--	--	--	E.40	--	--	--	--	--
JUN 23...	1.00	.020	.03	1.1	--	1.1	--	2.1	--	.130	E.030	E.030
AUG 10...	.280	.040	.05	.65	--	.69	--	.97	--	.170	.110	.110

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 15...	.080	.25	32	44	<.50	<.50	<1.0	<1.0	<1.0	63	<1.0
DEC 02...	.040	.12	35	67	<.50	<.50	<1.0	<1.0	<1.0	24	<1.0
MAR 02...	.040	.12	26	46	<.50	<.50	<1.0	<1.0	2.0	19	<1.0
APR 28...	.060	.18	21	36	<.50	.70	<1.0	<1.0	2.1	79	<1.0
JUN 23...	.040	.12	--	--	--	--	--	--	--	--	--
AUG 10...	.100	.31	--	--	--	--	--	--	--	--	--
DATE	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 15...	<4	8.6	<2.0	1.2	<1.0	44	2	2.0	40	405	97
DEC 02...	<4	82	<2.0	1.7	<1.0	81	<1	1.5	113	17	96
MAR 02...	<4	21	<2.0	1.8	<1.0	53	1	1.9	217	98	99
APR 28...	1	8.6	<2.0	1.3	<1.0	35	1	2.5	206	629	99
JUN 23...	--	--	--	--	--	--	--	--	122	198	99
AUG 10...	--	--	--	--	--	--	--	--	93	91	99

WHITE RIVER BASIN

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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 mi², of which an estimated 20 mi² is probably noncontributing.

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

REVISED RECORDS.--WRD ARKANSAS 1989: 1988(M).

GAGE.--Water-stage recorder. Datum of gage is 164.17 ft above sea level. Nonrecording gage Oct. 10, 1989 to Sept. 27, 1990 at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	2380	126	1570	3190	504	1020	1930	195	1420	416	435
2	104	2180	127	1710	3600	457	815	1830	183	1530	438	434
3	98	1980	122	1750	3830	378	648	1710	183	1590	470	439
4	90	1810	122	1750	3930	314	701	1600	177	1660	513	441
5	85	1600	140	1710	3950	284	829	1530	178	1700	552	433
6	107	e1450	138	1670	3930	283	895	1420	214	1740	577	422
7	147	e1350	191	1710	3970	281	848	1280	290	1780	577	407
8	123	e1050	298	1780	3950	296	833	1160	390	1810	560	389
9	106	e800	344	1910	3890	334	818	1160	512	1810	525	377
10	143	e550	381	2090	3810	351	912	1240	610	1770	475	369
11	240	e350	440	2250	3700	358	1190	1280	651	1730	441	365
12	385	e180	499	2390	3550	370	1470	1250	637	1650	418	357
13	635	147	564	2490	3320	751	1710	1160	588	1540	415	348
14	986	132	604	2520	3030	1200	1870	1030	530	1380	444	330
15	1330	126	606	2470	2760	1480	2040	887	481	1220	487	307
16	1640	157	575	2370	2580	1710	2120	737	481	1090	538	299
17	1850	226	517	2250	2440	1870	2160	582	542	989	591	295
18	2010	299	444	2120	2290	1960	2140	520	609	911	629	283
19	2150	355	371	2010	2140	2020	2090	449	646	840	646	262
20	2280	384	305	1910	2010	2080	2030	398	688	762	651	236
21	2410	384	260	1820	1880	2140	1990	415	729	685	640	209
22	2520	345	260	1790	1740	2190	1990	438	775	596	617	185
23	2640	282	248	1810	1580	2210	2020	422	851	517	572	163
24	2760	221	268	1860	1410	2190	2070	387	934	465	528	143
25	2890	180	339	1940	1170	2120	2100	361	993	437	500	125
26	3010	153	432	2040	956	2020	2190	362	982	422	466	109
27	3060	137	540	2110	787	1900	2290	345	960	402	449	95
28	3050	126	693	2190	634	1760	2210	308	952	392	450	83
29	2940	122	919	2330	---	1630	2120	272	1060	390	456	78
30	2740	123	1200	2500	---	1480	2030	231	1250	390	453	67
31	2550	---	1440	2760	---	1240	---	213	---	395	440	---
TOTAL	45195	19579	13513	63580	76027	38161	48149	26907	18271	34013	15934	8485
MEAN	1458	653	436	2051	2715	1231	1605	868	609	1097	514	283
MAX	3060	2380	1440	2760	3970	2210	2290	1930	1250	1810	651	441
MIN	85	122	122	1570	634	281	648	213	177	390	415	67
AC-FT	89640	38830	26800	126100	150800	75690	95500	53370	36240	67460	31610	16830
CFSM	1.24	.56	.37	1.75	2.32	1.05	1.37	.74	.52	.94	.44	.24
IN.	1.43	.62	.43	2.02	2.41	1.21	1.53	.85	.58	1.08	.51	.27

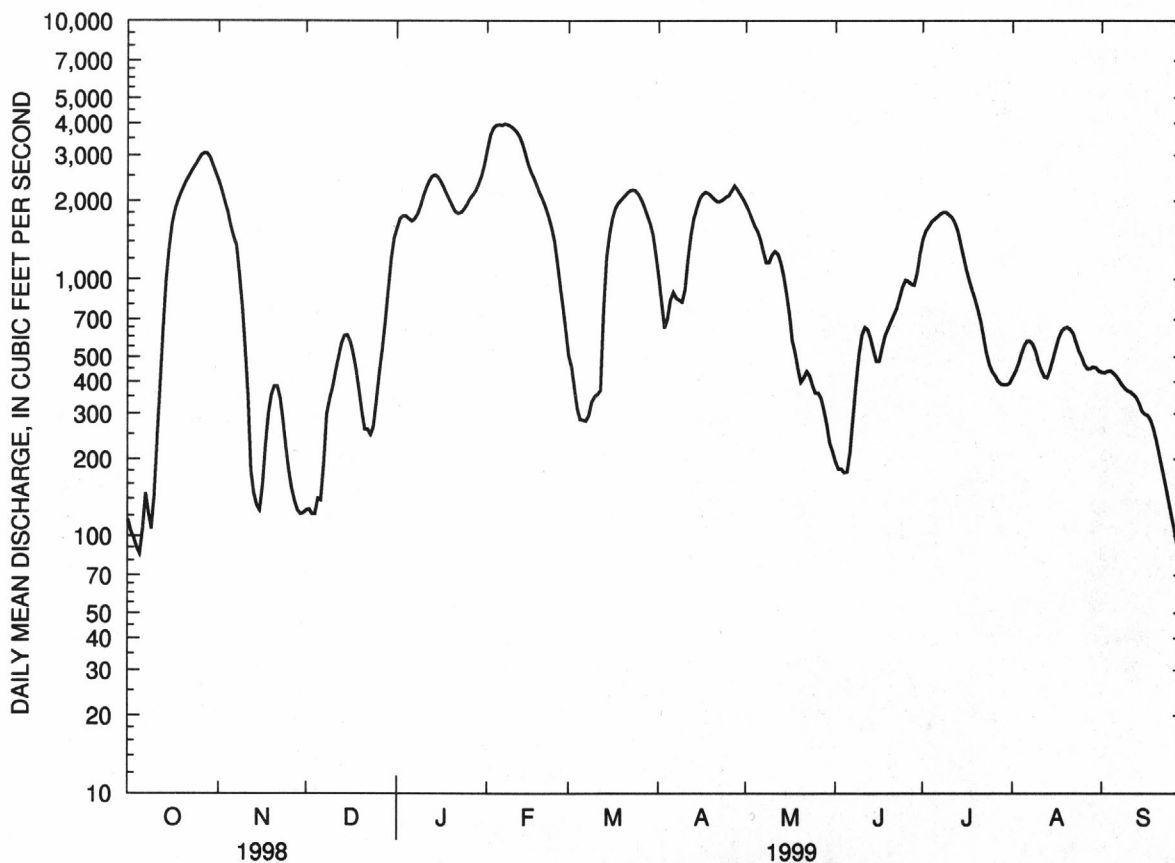
WHITE RIVER BASIN

07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1999, BY WATER YEAR (WY)

MEAN	620	1164	2217	2433	2533	2396	1898	1299	658	706	726	464
MAX	2067	3211	4762	6779	5238	5759	3585	3595	1342	1413	2591	748
(WY)	1991	1997	1994	1991	1989	1989	1997	1991	1989	1994	1998	1991
MIN	55.9	86.8	44.9	744	540	303	515	217	116	274	348	201
(WY)	1988	1990	1990	1990	1996	1996	1995	1987	1988	1990	1990	1987

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1987 - 1999		
ANNUAL TOTAL	523320			407814					
ANNUAL MEAN	1434			1117			1435		
HIGHEST ANNUAL MEAN							2356		
LOWEST ANNUAL MEAN							560		
HIGHEST DAILY MEAN	3960	Mar 17		3970	Feb 7		9770	Dec 28 1987	
LOWEST DAILY MEAN	85	Oct 5		67	Sep 30		25	Oct 22 1987	
ANNUAL SEVEN-DAY MINIMUM	101	Sep 30		100	Sep 24		26	Oct 19 1987	
INSTANTANEOUS PEAK FLOW				3980	Feb 7,8		9950	Dec 28 1987	
INSTANTANEOUS PEAK STAGE				17.87	Feb 7,8		^a 20.22	Dec 28 1987	
INSTANTANEOUS LOW FLOW				63	Sep 30		25	Oct 22 1987	
ANNUAL RUNOFF (AC-FT)	1038000			808900			1040000		
ANNUAL RUNOFF (CFSM)	1.22			.95			1.22		
ANNUAL RUNOFF (INCHES)	16.61			12.94			16.64		
10 PERCENT EXCEEDS	3210			2350			3450		
50 PERCENT EXCEEDS	1150			693			772		
90 PERCENT EXCEEDS	180			180			148		

^aFrom floodmark^eEstimated

WHITE RIVER BASIN

175

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to May 1973, August 1973 to September 1977, October 1997 to current year in reports of 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.--WRD ARKANSAS 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 187.71 ft above sea level. Nonrecording gage prior to Nov. 8, 1949. At datum 0.26 ft below sea level prior to Jan. 1, 1952.

REMARKS.--No estimated daily discharges. Water-discharge records good except those below 10 ft³/s, which are poor. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	2.2	11	61	1990	103	47	180	.00	1160	29	34
2	2.9	.58	9.4	577	1910	98	42	95	16	714	32	24
3	2.8	.00	8.5	1100	1810	77	39	55	50	406	29	20
4	2.6	.00	11	1330	1720	94	409	34	18	232	14	17
5	2.3	.00	157	1460	1600	72	701	101	7.3	110	6.2	13
6	10	.00	359	1550	1370	59	858	807	4.9	38	4.3	10
7	365	.00	393	1520	1120	281	854	1120	2.9	12	5.1	9.6
8	662	.00	524	1390	900	340	798	1280	1.4	4.1	7.1	13
9	678	.00	547	1180	725	333	576	1230	.10	.28	19	18
10	559	.00	430	898	633	577	396	873	.00	9.8	32	16
11	381	.00	307	663	560	665	282	458	.00	135	39	11
12	252	.00	226	535	470	539	186	236	.00	194	36	6.2
13	148	.56	278	477	401	786	111	107	68	194	35	5.0
14	80	1.0	298	439	313	1270	88	42	421	141	35	9.0
15	45	1.3	240	377	225	1550	299	21	599	73	36	13
16	31	.33	156	310	166	1610	582	12	545	35	30	10
17	24	.00	86	239	129	1580	637	14	323	19	22	7.7
18	20	.00	42	325	96	1440	457	128	157	15	20	5.4
19	25	.00	25	627	77	1100	286	252	52	16	16	4.1
20	58	.00	16	772	69	750	167	174	15	16	12	3.2
21	69	.00	21	784	64	576	90	73	4.6	13	15	1.5
22	49	1.8	391	1370	66	432	57	24	1.4	8.3	27	.01
23	31	6.3	725	1950	61	312	36	11	3.8	6.4	33	.00
24	20	7.7	877	2170	59	224	26	5.6	215	7.1	49	.00
25	15	6.6	806	2180	64	152	21	1.3	724	8.8	63	.00
26	13	6.5	515	2120	70	103	119	.00	1050	9.2	70	.00
27	11	7.9	338	2040	84	80	507	.00	1300	12	81	.00
28	9.4	8.9	241	1960	88	68	581	.00	1440	18	80	.00
29	7.3	9.4	176	1970	---	62	482	.00	1500	31	80	.00
30	5.6	10	127	2040	---	57	308	.00	1420	51	66	.00
31	3.8	---	87	2050	---	52	---	.00	---	44	48	---
TOTAL	3586.6	71.07	8427.9	36464	16840	15442	10042	7333.90	9939.40	3732.98	1070.7	250.71
MEAN	116	2.37	272	1176	601	498	335	237	331	120	34.5	8.36
MAX	678	10	877	2180	1990	1610	858	1280	1500	1160	81	34
MIN	2.3	.00	8.5	61	59	52	21	.00	.00	.28	4.3	.00
AC-FT	7110	141	16720	72330	33400	30630	19920	14550	19710	7400	2120	497
CFSM	.27	.01	.65	2.79	1.43	1.18	.80	.56	.79	.29	.08	.02
IN.	.32	.01	.74	3.22	1.49	1.36	.89	.65	.88	.33	.09	.02

WHITE RIVER BASIN

07077700 BAYOU DEVIEU NEAR MORTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	113	303	537	775	747	725	643	645	278	187	340	269
MAX	454	2076	2175	2162	1665	1490	1694	2145	1116	682	1020	617
(WY)	1973	1973	1974	1974	1969	1975	1973	1973	1976	1967	1966	1975
MIN	15.3	2.37	19.4	120	71.1	165	127	11.7	26.0	41.1	34.5	8.36
(WY)	1970	1999	1977	1977	1972	1972	1971	1977	1998	1970	1999	1999

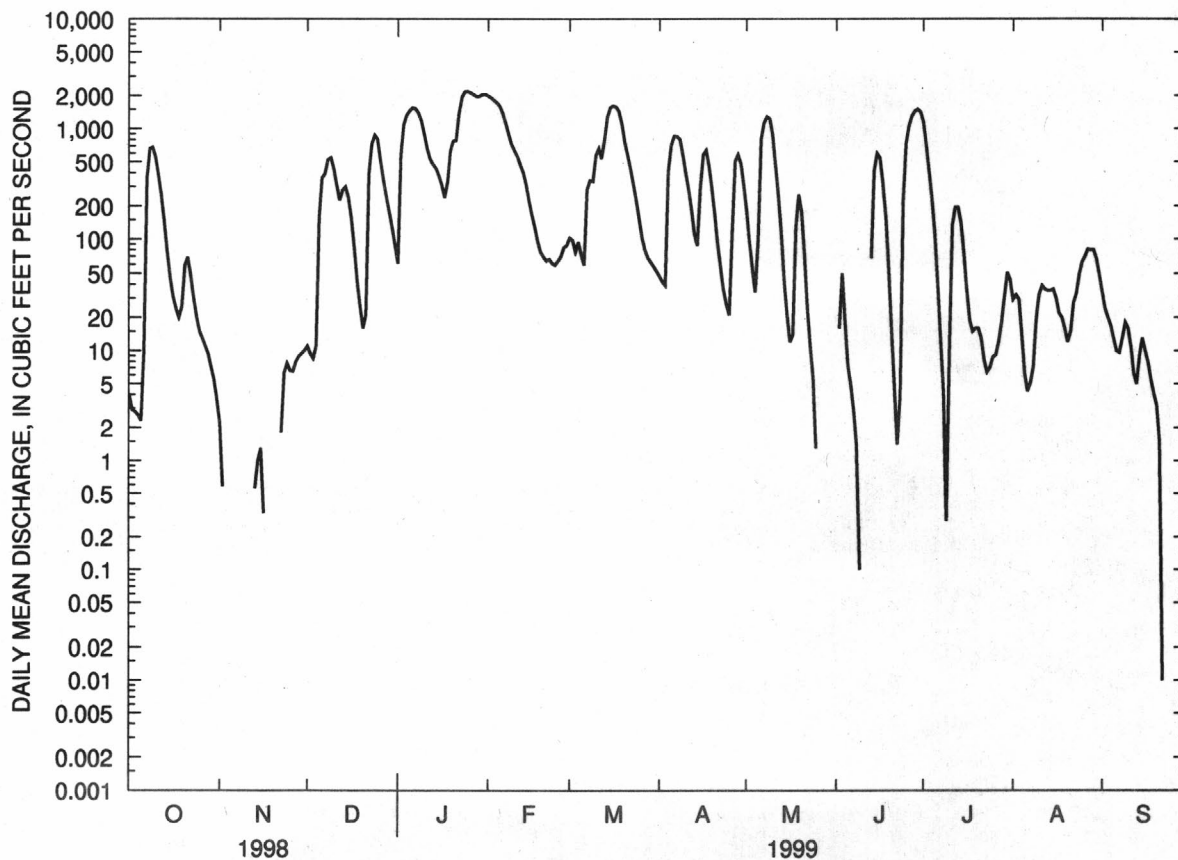
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1939-77, 1998-99

ANNUAL TOTAL	132914.90	113201.26	
ANNUAL MEAN	364	310	506
HIGHEST ANNUAL MEAN			1312
LOWEST ANNUAL MEAN			141
HIGHEST DAILY MEAN	1950 Mar 10	2180 Jan 25	6640 Nov 23 1957
LOWEST DAILY MEAN	.00 Jun 17	.00 Nov 3	.00 Aug 7 1943
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 17	.00 Nov 3	.00 Aug 7 1943
INSTANTANEOUS PEAK FLOW		2210 Jan 24	6700 Nov 23 1957
INSTANTANEOUS PEAK STAGE		17.94 Jan 24	18.75 May 2 1973
INSTANTANEOUS LOW FLOW		.00 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	263600	224500	366700
ANNUAL RUNOFF (CFSM)	.86	.74	1.20
ANNUAL RUNOFF (INCHES)	11.74	10.00	16.34
10 PERCENT EXCEEDS	1040	1110	1800
50 PERCENT EXCEEDS	160	62	113
90 PERCENT EXCEEDS	.00	.31	.00



WHITE RIVER BASIN

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07077700 BAYOU DEVIEU AT MORTON--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	
OCT 14...	1000	80513	81213	84	240	6.9	760	16.0	7.4	75	220	
DEC 02...	1115	80513	81213	8.0	286	7.5	769	13.7	2.8	27	57	
MAR 02...	1130	80513	81213	9.7	188	7.1	758	13.6	6.8	66	2000	
APR 28...	1300	80513	81213	587	115	7.1	764	20.5	4.8	53	330	
JUN 23...	1245	80513	81213	.30	265	7.5	765	25.0	4.0	48	K740	
AUG 10...	1030	80513	81213	31	526	8.1	764	28.6	3.8	49	70	
DATE		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
OCT 14...	--	210	75	19	6.7	10	20	.5	11	56	25	
DEC 02...	--	43	97	25	8.3	13	21	.6	9.1	76	25	
MAR 02...	--	2500	67	17	5.9	9.9	22	.5	5.9	58	9.7	
APR 28...	--	200	32	8.3	2.8	5.9	26	.5	3.8	25	13	
JUN 23...	K280	640	93	24	8.0	12	21	.5	4.6	83	26	
AUG 10...	K500	350	240	65	18	20	15	.6	2.5	201	56	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)
OCT 14...	14	.12	14	162	135	.22	36.7	.205	.91	.015	.05	
DEC 02...	20	.15	13	176	160	.24	3.80	--	--	<.010	--	
MAR 02...	9.2	.15	8.8	130	103	.18	3.40	--	--	<.010	--	
APR 28...	6.0	.16	8.6	84	66	.11	133	.420	1.9	.020	.07	
JUN 23...	11	--	--	164	137	.22	.13	.270	1.2	.080	.26	
AUG 10...	14	--	--	371	297	.50	31.1	.050	.22	.010	.03	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 14...	.220	.096	.12	--	.63	--	.73	--	.95	--	--	
DEC 02...	<.020	<.010	--	--	--	--	.41	--	--	--	--	
MAR 02...	.270	.130	.17	--	.47	--	.60	--	.87	--	--	
APR 28...	.440	.200	.26	--	--	--	E.52	--	--	--	--	
JUN 23...	.350	.200	.26	1.6	--	1.8	--	2.2	--	.130	E.020	
AUG 10...	.060	.090	.12	.75	--	.84	--	.90	--	.180	.080	

WHITE RIVER BASIN

07077700 BAYOU DEVUE AT MORTON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 14...	.110	.34	38	67	<.50	<.50	<1.0	<1.0	2.6	58	<1.0
DEC 02...	.020	.06	42	77	<.50	<.50	<1.0	<1.0	1.2	7.2	<1.0
MAR 02...	.050	.15	30	56	<.50	<.50	<1.0	<1.0	1.8	31	<1.0
APR 28...	.100	.31	27	37	<.50	<.50	<1.0	<1.0	2.5	48	<1.0
JUN 23...	.030	.09	--	--	--	--	--	--	--	--	--
AUG 10...	.070	.21	--	--	--	--	--	--	--	--	--

DATE	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)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 14...	<4	150	<2.0	1.8	<1.0	82	2	1.9	85	19	98
DEC 02...	<4	130	<2.0	1.8	<1.0	100	<1	1.4	75	1.6	95
MAR 02...	<4	100	<2.0	1.7	<1.0	70	2	1.6	158	4.1	99
APR 28...	1	16	<2.0	1.3	<1.0	38	2	2.1	397	629	100
JUN 23...	--	--	--	--	--	--	--	--	101	.08	99
AUG 10...	--	--	--	--	--	--	--	--	127	11	98

ARKANSAS RIVER BASIN

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07194800 ILLINOIS RIVER AT SAVOY

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

DRAINAGE AREA.--167 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 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.

GAGE.--Water-stage recorder. Datum of gage is 1,017.90 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	41	307	75	356	42	153	144	315	1100	25	15
2	15	58	199	225	271	40	145	129	224	606	25	14
3	18	67	155	175	217	37	1030	118	185	394	25	14
4	20	57	241	125	178	34	975	1860	167	276	25	14
5	1560	51	268	111	148	33	842	1460	156	209	26	23
6	1540	46	203	108	229	30	636	536	144	170	25	20
7	626	49	189	111	2040	28	380	299	136	150	25	16
8	368	98	150	108	591	346	283	202	130	129	24	22
9	193	94	120	98	394	405	236	162	123	113	23	19
10	132	387	104	87	309	203	197	572	124	138	24	16
11	99	250	92	83	316	149	168	617	150	113	23	17
12	80	162	244	83	310	839	150	1230	130	93	22	29
13	69	119	592	82	238	2160	140	647	121	81	21	21
14	61	99	318	75	203	1190	187	362	119	71	20	17
15	55	87	232	70	176	804	187	246	116	64	20	15
16	52	77	190	68	153	549	154	191	116	57	20	14
17	53	69	156	67	135	394	140	376	114	53	19	13
18	69	63	135	69	121	314	131	355	107	48	19	13
19	67	64	133	64	110	295	123	216	112	45	18	13
20	58	82	122	61	98	874	116	171	125	43	18	14
21	51	72	119	60	86	544	111	297	126	39	18	14
22	47	64	107	60	75	366	106	493	119	38	18	13
23	43	59	95	64	69	298	224	1490	164	36	18	12
24	41	55	89	66	62	259	166	705	256	33	17	12
25	38	52	83	64	57	228	154	660	369	32	16	11
26	37	50	79	61	54	201	529	964	215	31	16	11
27	35	47	77	60	51	187	591	465	172	30	17	11
28	33	46	76	60	46	176	281	316	197	29	16	10
29	33	45	73	255	---	183	200	248	314	28	15	10
30	32	534	69	302	---	174	166	214	4380	27	15	10
31	38	---	66	649	---	160	---	330	---	26	15	---
TOTAL	5575	3044	5083	3646	7093	11542	8901	16075	9226	4302	628	453
MEAN	180	101	164	118	253	372	297	519	308	139	20.3	15.1
MAX	1560	534	592	649	2040	2160	1030	1860	4380	1100	26	29
MIN	12	41	66	60	46	28	106	118	107	26	15	10
AC-FT	11060	6040	10080	7230	14070	22890	17660	31880	18300	8530	1250	899
CFSM	1.08	.61	.98	.70	1.52	2.23	1.78	3.11	1.84	.83	.12	.09
IN.	1.24	.68	1.13	.81	1.58	2.57	1.98	3.58	2.06	.96	.14	.10

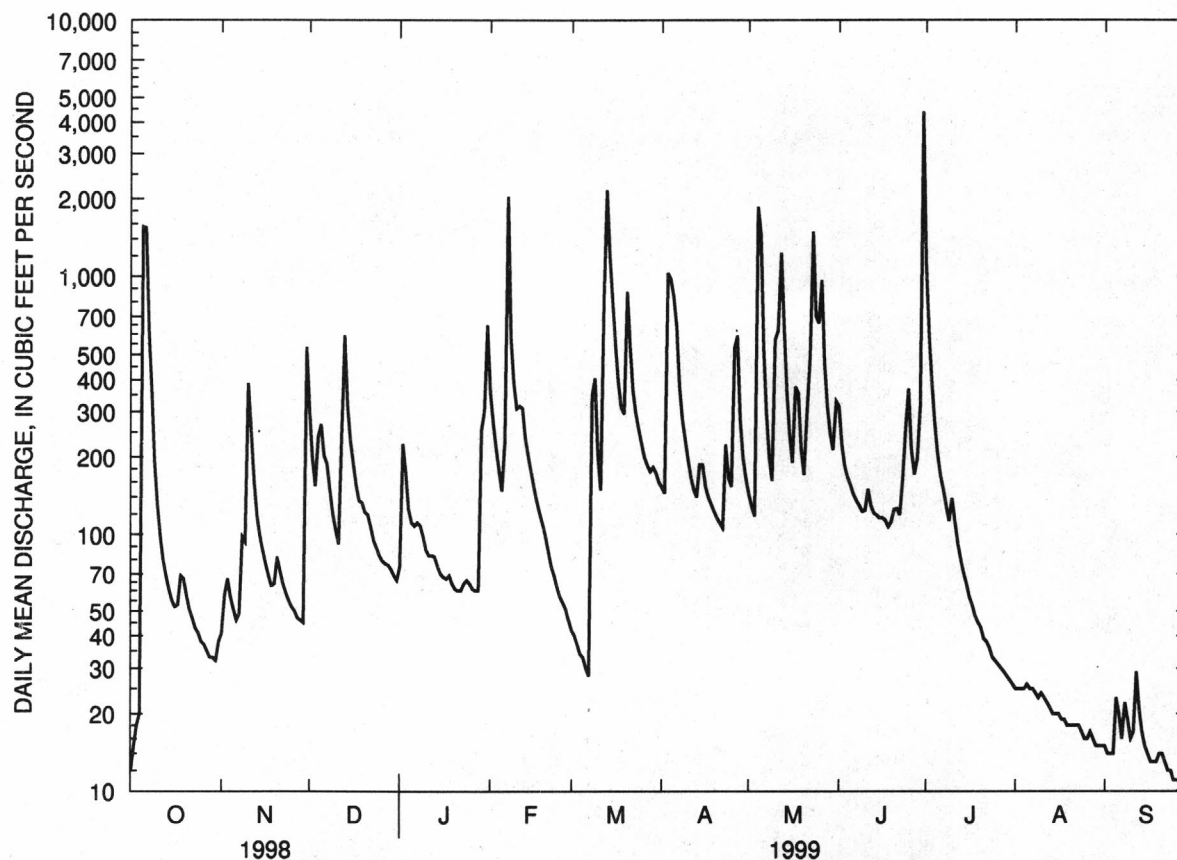
ARKANSAS RIVER BASIN

07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

MEAN	60.4	232	126	167	173	236	248	194	121	41.7	26.8	76.0
MAX	180	960	349	764	435	608	533	506	305	137	62.3	332
(WY)	1999	1997	1986	1998	1997	1998	1986	1999	1999	1999	1981	1986
MIN	11.6	13.7	12.0	6.68	18.3	44.6	53.8	32.7	24.3	5.43	2.23	3.73
(WY)	1981	1980	1980	1981	1980	1996	1980	1997	1998	1980	1980	1980

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1980 - 1999	
ANNUAL TOTAL	73859.4		75568			
ANNUAL MEAN	202		207		145	
HIGHEST ANNUAL MEAN					222	
LOWEST ANNUAL MEAN					33.7	
HIGHEST DAILY MEAN	4860	Jan 4	4380	Jun 30	7510	Oct 1 1986
LOWEST DAILY MEAN	5.0	Aug 29	10	Sep 28	1.8	Aug 10 1980
ANNUAL SEVEN-DAY MINIMUM	5.7	Aug 25	11	Sep 24	1.9	Aug 22 1980
INSTANTANEOUS PEAK FLOW			^a 8820	Jun 30	^a 10900	Jan 4 1998
INSTANTANEOUS PEAK STAGE			16.25	Jun 30	18.42	Nov 19 1985
INSTANTANEOUS LOW FLOW			10	Sep 28	1.6	Aug 11 1980
ANNUAL RUNOFF (AC-FT)	146500		149900		105200	
ANNUAL RUNOFF (CFSM)	1.21		1.24		.87	
ANNUAL RUNOFF (INCHES)	16.45		16.83		11.81	
10 PERCENT EXCEEDS	387		476		306	
50 PERCENT EXCEEDS	77		108		34	
90 PERCENT EXCEEDS	9.9		18		8.9	

^aFrom rating curve extended above 4,300 ft³/s

ARKANSAS RIVER BASIN

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07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 07...	1330	80513	81213	606	126	8.0	739	18.5	8.0	88
NOV 24...	0830	80513	81213	54	249	7.9	739	11.5	8.7	82
FEB 04...	1200	80513	81213	174	270	7.9	742	9.0	10.3	92
APR 12...	1100	80513	81213	149	236	8.6	742	15.7	9.6	99
JUN 03...	1030	80513	81213	180	210	8.1	736	21.0	7.4	87
AUG 11...	1000	80513	81213	23	282	7.4	733	26.4	5.8	75

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 07...	5100	4500	7100	60	20	2.4	3.0	9	.2	4.1
NOV 24...	140	190	160	120	44	2.8	5.0	8	.2	2.9
FEB 04...	270	220	120	100	36	2.7	4.7	9	.2	2.3
APR 12...	290	260	44	100	37	2.3	4.2	8	.2	2.1
JUN 03...	400	400	330	94	34	2.2	4.0	8	.2	2.6
AUG 11...	200	130	200	130	50	2.3	6.6	9	.2	3.2

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 07...	9.2	4.5	110	3.08	14	.018	.06	3.10	.160	.21
NOV 24...	15	7.6	160	--	--	<.010	--	2.00	<.010	--
FEB 04...	15	6.8	153	3.19	14	.010	.03	3.20	--	--
APR 12...	11	5.8	136	2.38	11	.020	.07	2.40	.090	.12
JUN 03...	9.5	5.7	147	2.39	11	.010	.03	2.40	.040	.05
AUG 11...	5.2	8.9	185	2.28	10	.020	.07	2.30	<.010	--

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 07...	.84	1.0	4.1	.220	.140	.110	.34	70	115	94
NOV 24...	--	.23	2.2	.050	.050	.020	.06	31	4.5	93
FEB 04...	--	.33	3.5	.080	.050	.010	.03	63	30	94
APR 12...	--	<.20	--	.040	E.030	.020	.06	56	23	94
JUN 03...	.40	.44	2.8	.060	E.050	.030	.09	46	22	98
AUG 11...	--	.27	2.6	.050	.040	.020	.06	62	3.8	99

ARKANSAS RIVER BASIN

07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE

LOCATION.--Lat 36°05'36", long 94°08'13", 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 mi².

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

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e5.8	e.50	1.9	1.7	.48	.66	.16	.51	1.8	.00	.18
2	.01	e.80	e.50	1.6	1.2	.47	.67	.13	.52	.76	.00	.08
3	.00	e.50	e.50	.77	.91	.40	7.0	.13	.44	.46	.00	.00
4	.00	e.50	e2.5	.62	.75	.41	1.7	7.6	.34	.33	.02	.00
5	61	e.50	e.50	.59	.69	.46	1.5	1.4	.27	.24	.00	.94
6	10	e.50	e.30	.67	9.0	.39	.59	.48	.23	.49	.00	.11
7	4.6	e3.5	e.30	.63	4.7	.36	.44	.35	.21	.31	.00	.01
8	3.4	e.60	e.30	.61	1.7	4.8	.53	.29	.20	.21	.00	.62
9	2.7	e.50	e.30	.49	1.2	1.2	.38	.25	.18	.15	.00	.01
10	2.3	e3.7	e.30	.45	1.0	.76	.29	9.0	.56	.97	.00	.00
11	1.8	e.50	e.30	.48	1.9	.64	.23	1.9	.30	.21	.00	.05
12	1.6	e.40	e10	.57	.97	8.0	.20	9.3	.30	.14	.00	1.5
13	1.6	e.40	e3.0	.51	.76	5.9	.17	1.5	.32	.12	.00	.11
14	e1.2	e.40	e1.6	.46	.71	4.2	1.5	.80	.28	.12	.00	.02
15	e.90	e.40	e1.0	.45	.75	3.0	.35	.66	.23	.11	.00	.00
16	e1.2	e.20	e.50	.45	.71	2.0	.24	.59	1.4	.07	.00	.00
17	e2.5	e.20	e.50	.68	.64	1.3	.21	3.0	.24	.08	.00	.00
18	e.50	e.20	e1.6	.44	.61	1.0	.23	.77	.17	.05	.00	.00
19	e.00	e2.5	e1.0	.47	.53	1.7	.21	.58	.88	.04	.00	.00
20	e.00	e.30	e.90	.52	.53	2.9	.22	.52	.59	.08	.00	.07
21	e.00	e.30	.72	.57	.45	1.4	.14	1.3	1.5	.08	.00	.00
22	e.00	e.30	.53	.63	.42	1.0	.24	.59	.44	.10	.00	.00
23	e.00	e.30	.51	1.0	.49	.88	.21	4.1	.75	.07	.00	.00
24	e.00	e.30	.44	.72	.50	.75	.17	.89	1.8	.08	.00	.00
25	e.00	e.30	.42	.66	.50	.69	.86	2.9	1.9	.03	.00	.00
26	e.00	e.30	.47	.60	.57	.64	2.1	1.4	.75	.04	.13	.00
27	e.00	e.30	.46	.58	.56	.65	.56	.73	.53	.03	.73	.00
28	e.00	e.30	.45	.60	.49	.94	.38	.59	1.1	.06	.27	.00
29	e.00	e.30	.43	4.4	---	.98	.30	.62	3.2	.00	.24	.00
30	e.00	e10	.38	4.6	---	.76	.24	.63	36	.00	.23	.00
31	e.00	---	.35	3.3	---	.72	---	1.3	---	.00	.22	---
TOTAL	95.31	35.10	31.56	31.02	34.94	49.78	22.52	54.46	56.14	7.23	1.84	3.70
MEAN	3.07	1.17	1.02	1.00	1.25	1.61	.75	1.76	1.87	.23	.059	.12
MAX	61	10	10	4.6	9.0	8.0	7.0	9.3	36	1.8	.73	1.5
MIN	.00	.20	.30	.44	.42	.36	.14	.13	.17	.00	.00	.00
AC-FT	189	70	63	62	69	99	45	108	111	14	3.6	7.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

	1996	1997	1998	1999	1996	1997	1998	1999	1996	1997	1998	1999
MEAN	1.40	2.11	.68	2.61	2.37	4.25	1.77	1.25	1.24	.17	.29	.68
MAX	3.07	4.92	1.02	6.53	3.68	7.02	3.03	1.76	1.87	.23	.61	1.08
(WY)	1999	1997	1999	1998	1997	1998	1997	1999	1999	1999	1997	1998
MIN	.43	.24	.11	.31	1.25	1.61	.75	.78	.23	.073	.059	.12
(WY)	1997	1998	1997	1997	1999	1999	1999	1997	1998	1998	1999	1999

ARKANSAS RIVER BASIN

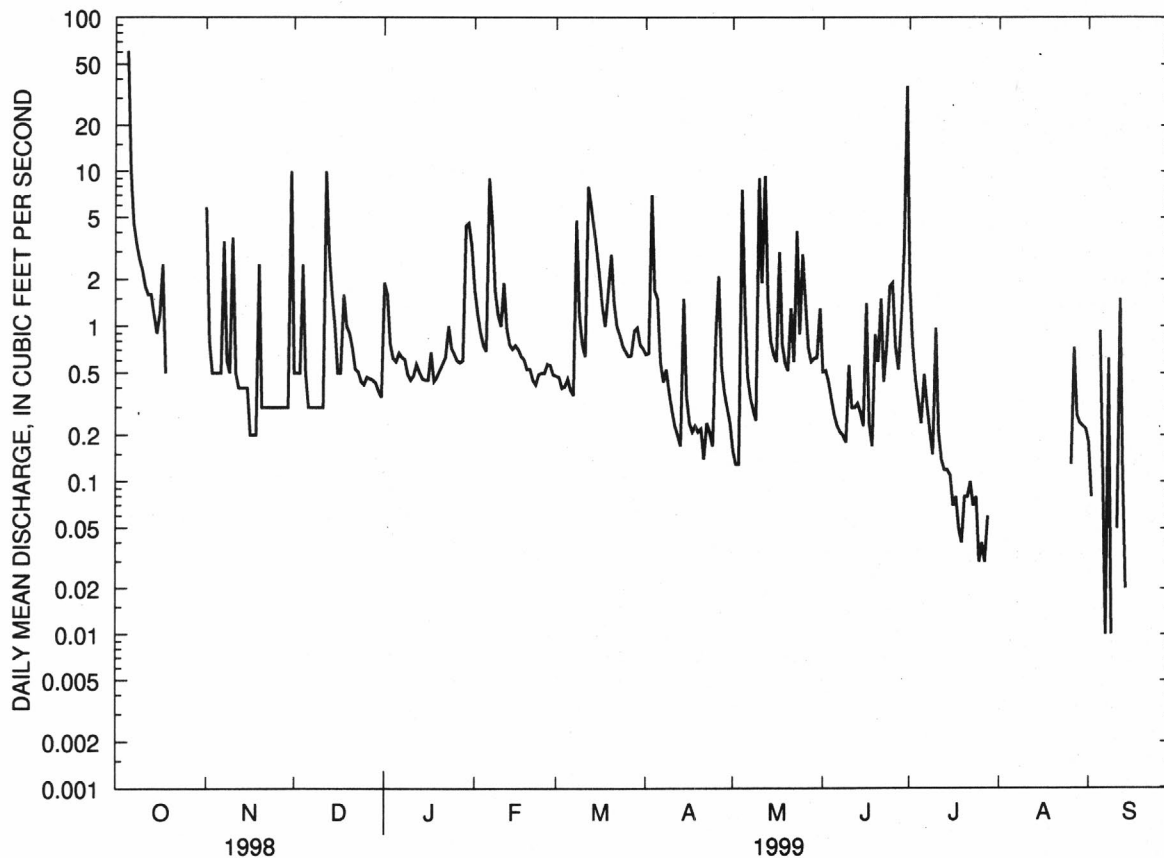
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07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	774.37		423.60			
ANNUAL MEAN	2.12		1.16		1.56	
HIGHEST ANNUAL MEAN					1.83	
LOWEST ANNUAL MEAN					1.16	
HIGHEST DAILY MEAN	80	Jan 4	61	Oct 5	80	Jan 4 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Sep 19 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 3	.00	Oct 19	.00	Sep 28 1996
INSTANTANEOUS PEAK FLOW			^a 553		^a 553	
INSTANTANEOUS PEAK STAGE			4.54		4.54	
INSTANTANEOUS LOW FLOW			.00		.00	
ANNUAL RUNOFF (AC-FT)	1540		840		1130	
10 PERCENT EXCEEDS	4.8		2.0		3.5	
50 PERCENT EXCEEDS	.37		.46		.30	
90 PERCENT EXCEEDS	.00		.00		.00	

^aFrom rating curve extended above 100 ft³/s on basis of slope-area measurement of peak flow

^eEstimated



ARKANSAS RIVER BASIN

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 mi².

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.--WRD Ark.1970: Drainage area. WRD 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 northwest Arkansas sewage treatment plant. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	45	115	77	87	72	163	182	243	1640	130	87
2	52	158	104	171	84	71	155	168	229	983	133	86
3	47	88	94	113	79	69	511	161	203	610	136	86
4	39	79	98	105	77	69	457	1930	185	492	137	83
5	269	70	89	98	76	70	389	1300	179	415	134	119
6	366	63	77	94	286	62	341	503	161	371	130	91
7	143	89	89	88	933	56	261	390	163	345	123	91
8	109	119	85	84	293	307	235	329	162	313	116	103
9	88	90	80	76	229	218	224	292	154	291	118	96
10	75	253	75	68	204	144	198	602	275	391	120	90
11	67	142	71	72	176	123	179	586	850	285	117	87
12	61	112	103	77	165	279	174	1270	437	259	114	191
13	63	111	138	73	145	663	169	637	283	248	112	115
14	60	88	109	71	128	456	236	450	293	237	107	99
15	57	75	104	70	125	428	235	371	217	226	101	94
16	59	75	96	61	121	465	183	334	344	216	103	94
17	72	75	90	54	120	373	166	384	288	203	104	88
18	99	74	87	59	109	288	151	329	218	192	101	78
19	70	74	89	63	105	264	151	279	280	191	101	72
20	67	86	77	62	94	369	149	257	262	190	101	82
21	67	72	77	63	85	294	143	302	231	185	96	84
22	63	61	77	58	89	254	147	339	220	180	87	80
23	59	64	74	56	88	237	244	707	400	175	96	77
24	50	67	68	52	89	223	157	434	1490	169	100	74
25	44	64	59	52	88	207	212	350	863	156	96	68
26	46	55	54	58	84	204	469	312	672	154	96	62
27	52	49	54	55	76	187	383	281	399	155	113	66
28	54	48	60	65	67	173	255	257	361	153	95	70
29	53	45	62	64	---	178	221	236	360	148	85	70
30	53	197	62	71	---	169	201	225	3400	144	88	71
31	46	---	60	99	---	165	---	276	---	140	89	---
TOTAL	2502	2688	2577	2329	4302	7137	7159	14473	13822	9857	3379	2654
MEAN	80.7	89.6	83.1	75.1	154	230	239	467	461	318	109	88.5
MAX	366	253	138	171	933	663	511	1930	3400	1640	137	191
MIN	39	45	54	52	67	56	143	161	154	140	85	62
AC-FT	4960	5330	5110	4620	8530	14160	14200	28710	27420	19550	6700	5260
CFSM	.62	.69	.64	.58	1.18	1.77	1.84	3.59	3.54	2.45	.84	.68
IN.	.72	.77	.74	.67	1.23	2.04	2.05	4.14	3.96	2.82	.97	.76

ARKANSAS RIVER BASIN

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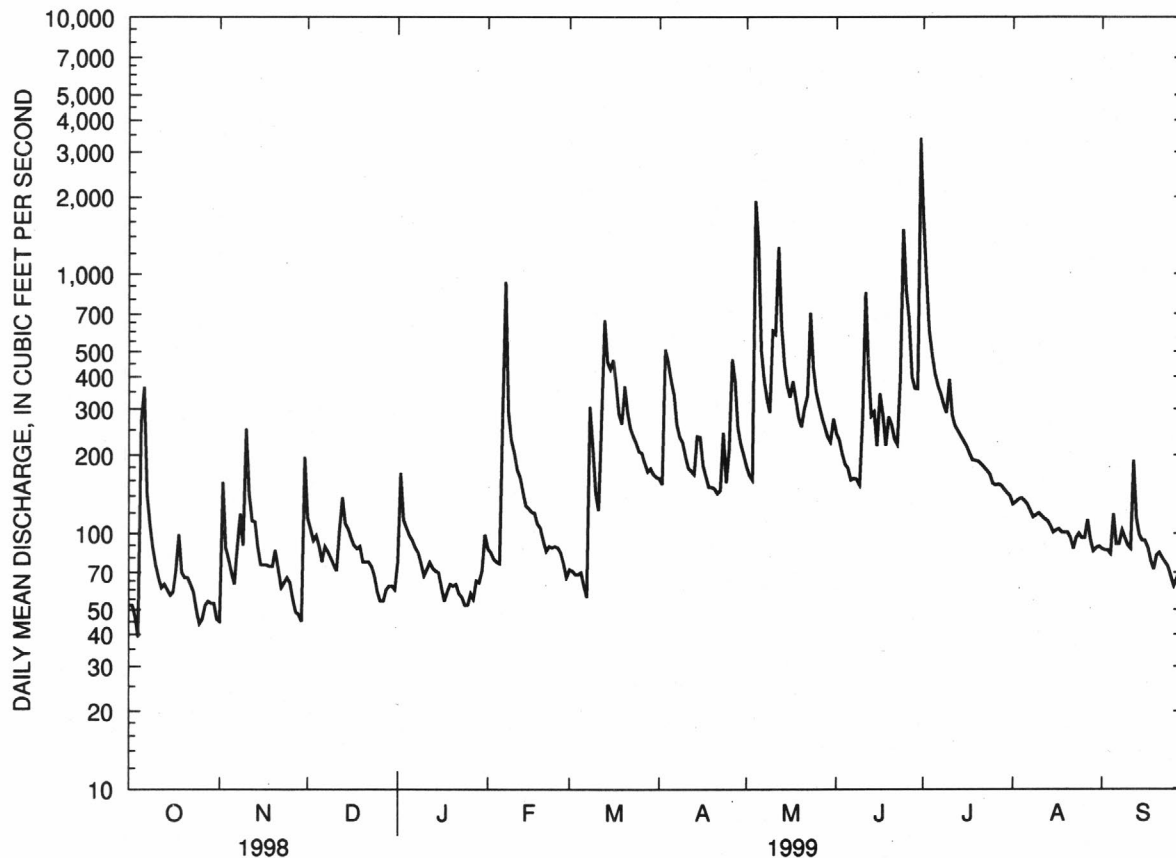
07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	74.0	121	99.4	104	133	165	167	199	157	104	68.2	65.1
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 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951-75, 1996-99	
ANNUAL TOTAL	58003		72879			
ANNUAL MEAN	159		200		121	
HIGHEST ANNUAL MEAN					236	
LOWEST ANNUAL MEAN					29.1	
HIGHEST DAILY MEAN	2200	Jan 4	3400	Jun 30	6540	May 19 1961
LOWEST DAILY MEAN	38	Sep 6	39	Oct 4	5.3	Sep 5 1954
ANNUAL SEVEN-DAY MINIMUM	44	Sep 5	50	Oct 25	6.1	Aug 31 1954
INSTANTANEOUS PEAK FLOW			9320	Jun 30	^a 22500	May 19 1961
INSTANTANEOUS PEAK STAGE			13.37	Jun 30	16.66	May 19 1961
INSTANTANEOUS LOW FLOW			35	Oct 4, Nov 1	4.7	Sep 4 1954
ANNUAL RUNOFF (AC-FT)	115000		144600		87790	
ANNUAL RUNOFF (CFSM)	1.22		1.54		.93	
ANNUAL RUNOFF (INCHES)	16.60		20.85		12.67	
10 PERCENT EXCEEDS	280		377		219	
50 PERCENT EXCEEDS	99		115		72	
90 PERCENT EXCEEDS	53		61		26	

^aFrom rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow



ARKANSAS RIVER BASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

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

DRAINAGE AREA.--130 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 08...	1115	80513	81213	103	385	8.0	741	15.5	9.0	93
NOV 23...	0930	80513	81213	60	380	8.2	735	12.0	9.3	90
FEB 04...	1400	80513	81213	83	432	8.2	740	10.4	13.4	123
APR 12...	1330	80513	81213	169	320	8.6	741	15.8	14.4	150
JUN 03...	1300	80513	81213	202	288	8.0	735	20.0	9.1	104
AUG 11...	1200	80513	81213	116	362	7.3	732	23.3	8.3	102
DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
OCT 08...	380	430	350	120	47	1.8	26	30	1	6.2
NOV 23...	77	120	99	140	53	1.8	26	28	1	6.0
FEB 04...	K29	K12	K36	120	46	1.8	6.5	10	.3	3.1
APR 12...	67	44	K26	120	46	1.8	13	18	.5	3.7
JUN 03...	240	150	180	130	47	1.9	14	19	.5	4.3
AUG 11...	110	97	140	130	49	1.7	23	27	.9	5.0
DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)
OCT 08...	20	26	238	--	--	<.010	--	3.20	.010	.01
NOV 23...	20	26	245	2.97	13	.026	.09	3.00	.075	.10
FEB 04...	22	32	246	3.38	15	.015	.05	3.40	<.010	--
APR 12...	11	14	191	4.58	20	.020	.07	4.60	.030	.04
JUN 03...	9.7	15	203	--	--	<.010	--	4.50	.010	.01
AUG 11...	14	23	232	4.09	18	.010	.03	4.10	.010	.01
DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 08...	.25	.26	3.5	.780	.770	.740	2.3	42	12	97
NOV 23...	.12	.20	3.2	.420	.380	.350	1.1	62	10	97
FEB 04...	--	2.4	5.8	.620	.660	.640	2.0	66	15	97
APR 12...	.18	.21	4.8	.310	E.290	.280	.86	65	30	98
JUN 03...	.55	.56	5.1	.700	E.660	.700	2.1	56	31	96
AUG 11...	.27	.28	4.4	.580	.550	.520	1.6	96	30	95

ARKANSAS RIVER BASIN

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07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS

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

DRAINAGE AREA.--575 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year. Occasional low-flow measurements in 1971.

REVISED RECORDS.--WRD Ark 1997: 1996.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good. 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 ft³/s from rating curve extended above 23,000 ft³/s on basis of contracted opening of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	166	1070	276	1050	313	625	686	1110	11100	297	186
2	148	336	681	597	830	308	589	597	893	4060	288	185
3	149	373	555	696	695	297	1080	534	783	2120	288	182
4	143	296	525	583	602	283	3800	1560	703	1540	291	178
5	742	264	770	527	534	275	2010	9430	645	1240	298	221
6	4920	236	623	452	699	275	2270	2390	593	1070	290	297
7	1480	241	583	442	5450	254	1500	1460	550	995	285	218
8	981	406	528	425	2360	512	1260	1190	523	902	268	242
9	668	425	465	400	1640	1610	1140	1020	487	830	257	246
10	496	828	412	359	1350	953	1020	948	463	910	255	212
11	399	1030	376	334	1160	741	901	2660	873	1190	248	218
12	334	676	409	331	1170	907	784	4010	1010	836	238	233
13	294	539	1370	329	964	5560	712	3300	674	750	230	457
14	269	462	1030	311	833	3710	793	1680	735	692	225	289
15	245	400	789	292	739	2750	1010	1310	597	644	220	248
16	228	355	663	280	675	2110	807	1130	558	599	216	232
17	243	326	577	267	623	1720	698	1160	753	571	219	222
18	333	300	515	263	584	1420	626	1450	566	539	216	e220
19	341	288	499	263	550	1240	575	1070	560	513	213	e218
20	280	318	473	254	511	1820	543	934	704	490	211	216
21	253	323	434	250	472	1740	510	930	657	470	213	216
22	232	284	413	250	438	1390	482	1100	610	450	205	206
23	214	260	378	255	420	1230	644	3110	639	424	201	200
24	202	250	353	272	400	1110	710	2340	1070	408	209	202
25	187	240	330	258	378	1010	605	1440	2950	382	200	198
26	176	231	308	252	364	910	1020	2430	2020	361	195	188
27	171	217	297	248	354	821	1640	1390	1210	352	203	180
28	168	209	291	249	332	749	1130	1110	961	343	235	181
29	165	204	285	432	---	755	926	963	984	331	199	186
30	164	853	269	601	---	719	798	875	9830	318	187	182
31	164	---	263	1370	---	658	---	975	---	309	191	---
TOTAL	14936	11336	16534	12118	26177	38150	31208	55182	34711	35739	7291	6659
MEAN	482	378	533	391	935	1231	1040	1780	1157	1153	235	222
MAX	4920	1030	1370	1370	5450	5560	3800	9430	9830	11100	298	457
MIN	143	166	263	248	332	254	482	534	463	309	187	178
AC-FT	29630	22480	32800	24040	51920	75670	61900	109500	68850	70890	14460	13210

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	288	898	560	880	816	1079	824	827	535	418	193	333
MAX	481	2839	824	2256	1442	1767	1029	1772	1156	1153	248	887
(WY)	1999	1997	1997	1998	1997	1998	1999	1999	1999	1999	1997	1996
MIN	175	166	251	290	242	224	669	311	226	153	125	182
(WY)	1996	1996	1996	1997	1996	1996	1998	1997	1996	1996	1996	1995

SUMMARY STATISTICS

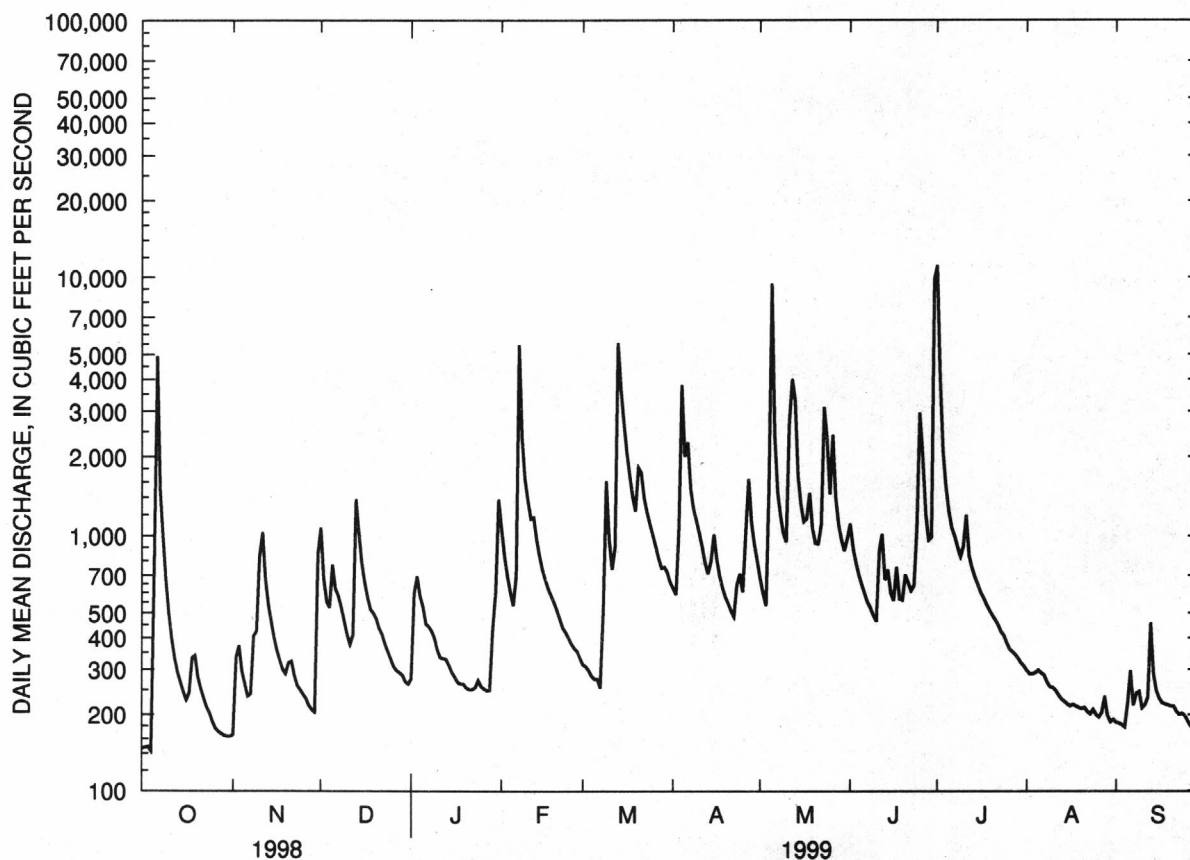
FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1995 - 1999

ANNUAL TOTAL	243871			290041								
ANNUAL MEAN	668			795					639			
HIGHEST ANNUAL MEAN									790			1999
LOWEST ANNUAL MEAN									391			1996
HIGHEST DAILY MEAN	19000	Jan 5		11100	Jul 1				19000	Jan 5		1998
LOWEST DAILY MEAN	86	Sep 7		143	Oct 4				86	Sep 7		1998
ANNUAL SEVEN-DAY MINIMUM	93	Sep 5		168	Oct 26				93	Sep 5		1998
INSTANTANEOUS PEAK FLOW				29300	Jun 30				32300	Jan 5		1998
INSTANTANEOUS PEAK STAGE				18.53	Jun 30				19.24	Jan 5		1998
INSTANTANEOUS LOW FLOW				134	Oct 5				78	Sep 11		1996
ANNUAL RUNOFF (AC-FT)	483700			575300					462800			
10 PERCENT EXCEEDS	1130			1450					1140			
50 PERCENT EXCEEDS	377			496					295			
90 PERCENT EXCEEDS	133			209					141			

e Estimated



ARKANSAS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
OCT											
08...	1430	80513	81213	925	251	7.9	743	18.0	7.4	81	
NOV											
24...	1230	80513	81213	253	330	8.1	741	13.0	11.1	109	
FEB											
10...	1220	80513	81213	1390	255	8.2	744	11.2	8.1	76	
MAR											
08...	1415	80513	81213	390	--	--	--	--	--	--	
13...	0730	80513	81213	7500	147	8.3	735	6.5	11.4	97	
13...	1230	80513	81213	7800	--	--	--	--	--	--	
MAY											
04...	2230	80513	81213	4660	--	--	--	--	--	--	
05...	0410	80513	81213	9700	--	--	--	--	--	--	
05...	1230	80513	81213	13600	--	--	--	--	--	--	
JUN											
09...	1415	80513	81213	498	253	8.5	737	26.5	10.6	136	
25...	0950	80513	81213	3900	--	--	--	--	--	--	
25...	1245	80513	81213	3100	--	--	--	--	--	--	
AUG											
25...	1500	80513	81213	205	355	7.3	735	27.7	11.2	148	
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT											
08...	780	570	1300	88	32	2.0	8.0	16	.4	4.0	
NOV											
24...	73	K43	K17	130	49	2.2	14	18	.5	3.8	
FEB											
10...	350	230	92	99	36	2.1	5.1	10	.2	2.3	
MAR											
13...	40000	34000	70000	59	21	1.6	4.5	13	.3	3.4	
JUN											
09...	K14	28	36	120	46	2.0	9.1	13	.4	3.5	
AUG											
25...	30	K13	30	130	47	1.9	15	20	.6	3.8	
DATE		SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT											
08...	11	9.2	148	3.08	14	.018	.06	3.10	<.010	--	
NOV											
24...	16	15	193	2.47	11	.030	.10	2.50	<.010	--	
FEB											
10...	11	8.2	157	4.38	19	.017	.06	4.40	<.010	--	
MAR											
08...	--	--	--	--	--	--	--	3.10	.049	.06	
13...	10	5.1	104	--	--	<.010	--	1.30	.190	.24	
13...	--	--	--	1.49	6.6	.010	.03	1.50	.200	.26	
MAY											
04...	--	--	--	2.18	9.6	.020	.07	2.20	.070	.09	
05...	--	--	--	1.28	5.7	.020	.07	1.30	.100	.13	
05...	--	--	--	1.28	5.7	.020	.07	1.30	.060	.08	
JUN											
09...	8.7	9.9	170	--	--	<.010	--	2.70	.020	.03	
25...	--	--	--	1.39	6.2	.010	.03	1.40	.020	.03	
25...	--	--	--	1.58	7.0	.020	.07	1.60	.020	.03	
AUG											
25...	12	16	196	--	--	<.010	--	2.00	<.010	--	

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 08...	--	.48	3.6	.210	.170	.160	.49	62	155	86
NOV 24...	--	<.20	--	.180	.160	.140	.43	48	33	95
FEB 10...	--	.48	4.9	.070	.150	.060	.18	77	289	94
MAR 08...	.77	.82	3.9	.300	--	.220	.67	--	--	--
13...	2.8	3.0	4.3	.770	E.300	.300	.92	--	--	--
13...	.46	.66	2.2	.260	E.510	.300	.92	924	19500	90
MAY 04...	1.2	1.3	3.5	.550	E.350	.340	1.0	--	--	--
05...	2.6	2.7	4.0	1.00	E.340	.330	1.0	--	--	--
05...	1.2	1.3	2.6	.560	E.310	.290	.89	--	--	--
JUN 09...	.55	.57	3.3	.120	E.100	.120	.37	68	91	98
25...	1.3	1.3	2.7	.480	E.230	.230	.71	--	--	--
25...	1.2	1.2	2.8	.380	E.140	.120	.37	--	--	--
AUG 25...	--	<.20	--	.180	.180	.160	.49	56	31	99

ARKANSAS RIVER BASIN

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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 mi².

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

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,173.47 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	7.4	9.6	7.6	13	7.7	18	18	18	391	20	15
2	4.7	14	8.8	12	12	7.5	15	16	15	204	19	16
3	4.9	9.2	8.5	11	12	7.3	18	15	14	107	20	16
4	4.8	8.1	9.1	10	11	7.1	20	175	13	72	21	20
5	17	7.4	8.8	9.9	9.9	7.2	26	135	12	56	19	27
6	19	6.9	8.8	9.7	48	7.0	27	72	11	46	18	10
7	11	9.6	9.5	9.2	75	6.8	24	51	11	40	18	8.2
8	8.6	12	9.1	8.8	48	21	21	39	10	34	16	9.9
9	7.5	11	8.8	8.0	40	21	19	30	9.7	28	14	8.2
10	6.8	22	8.4	7.5	33	18	17	31	17	25	12	7.8
11	6.4	17	8.1	7.4	29	16	15	26	20	22	11	8.3
12	5.9	14	9.0	7.4	24	33	14	33	16	20	11	25
13	5.6	12	12	7.1	20	67	13	29	105	19	11	16
14	5.4	10	11	6.9	19	64	18	24	37	17	11	12
15	5.3	9.3	10	6.8	17	62	16	21	21	17	11	10
16	5.3	8.7	9.5	6.8	15	65	15	19	37	16	10	9.4
17	5.6	8.0	8.8	6.8	14	54	14	25	26	15	10	8.9
18	8.5	7.7	8.5	6.6	13	45	13	22	20	14	10	9.0
19	6.4	7.8	9.2	6.5	12	39	12	19	29	13	11	9.2
20	6.0	8.5	8.6	6.5	11	45	12	17	28	12	13	11
21	5.7	7.8	8.6	6.5	10	41	11	18	23	12	14	9.6
22	5.5	7.5	7.9	6.6	9.9	36	23	18	19	12	15	8.7
23	5.4	7.3	7.7	6.8	9.5	32	25	69	22	12	17	8.6
24	5.3	7.1	7.5	6.5	9.1	27	17	45	115	12	17	8.2
25	5.3	7.1	7.3	6.3	8.8	24	19	36	66	11	17	8.1
26	5.3	6.8	7.2	6.3	8.6	21	27	29	41	11	17	8.0
27	5.3	6.8	7.4	6.3	8.2	19	31	24	29	10	21	7.9
28	5.3	6.8	7.3	6.3	7.8	18	28	21	26	12	18	8.3
29	5.3	6.8	7.1	6.8	---	17	24	19	21	18	17	8.3
30	5.5	11	6.8	8.0	---	15	21	18	818	20	16	7.9
31	5.8	---	6.8	13	---	15	---	22	---	20	15	---
TOTAL	209.2	285.6	265.7	241.9	547.8	865.6	573	1136	1649.7	1318	470	340.5
MEAN	6.75	9.52	8.57	7.80	19.6	27.9	19.1	36.6	55.0	42.5	15.2	11.4
MAX	19	22	12	13	75	67	31	175	818	391	21	27
MIN	4.7	6.8	6.8	6.3	7.8	6.8	11	15	9.7	10	10	7.8
AC-FT	415	566	527	480	1090	1720	1140	2250	3270	2610	932	675
CFSM	.48	.67	.60	.55	1.38	1.97	1.35	2.58	3.87	2.99	1.07	.80
IN.	.55	.75	.70	.63	1.44	2.27	1.50	2.98	4.32	3.45	1.23	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1999, BY WATER YEAR (WY)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
MEAN	10.8	18.8	18.4	14.6	15.6	21.6	21.8	18.7	18.5	9.75	7.96	9.16
MAX	51.8	83.7	63.0	50.7	45.3	57.7	60.5	107	121	42.5	61.5	38.3
(WY)	1987	1974	1988	1998	1997	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	.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 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

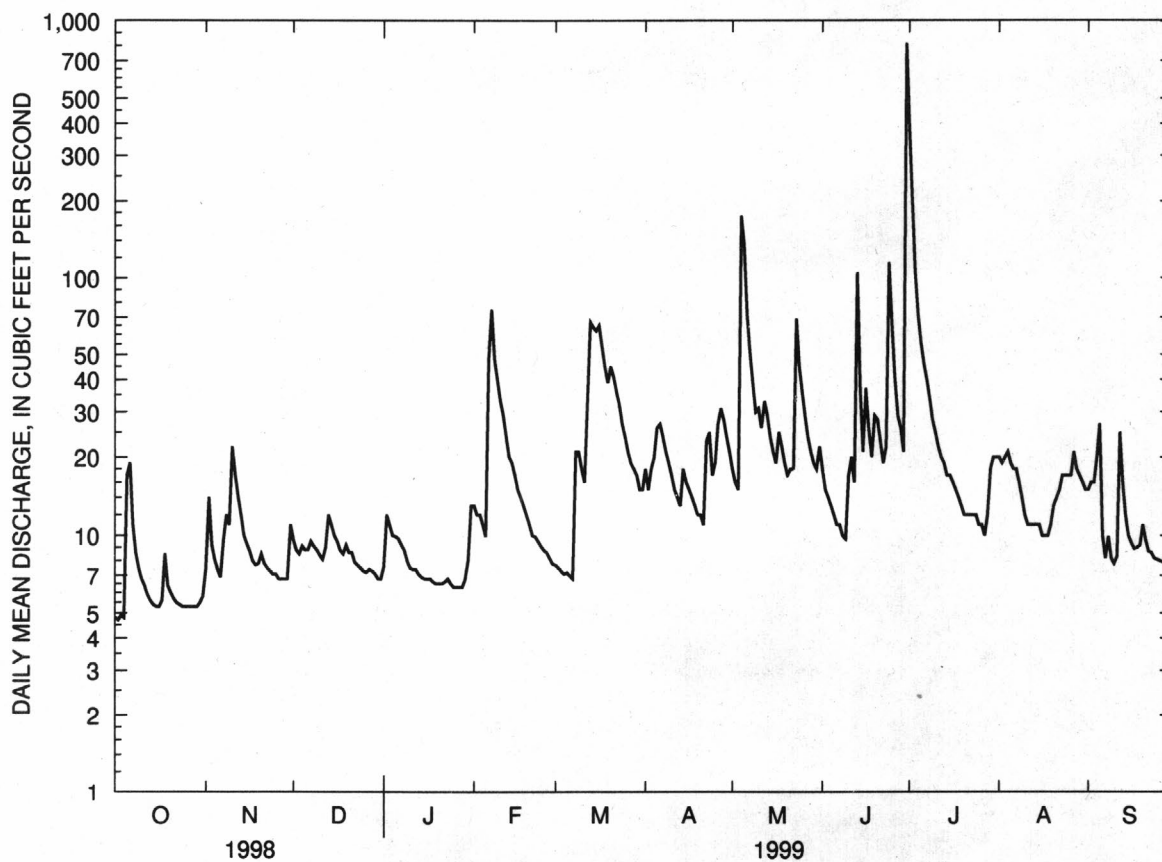
WATER YEARS 1961 - 1999

ANNUAL TOTAL	5415.1		7903.0		
ANNUAL MEAN	14.8		21.7		15.3
HIGHEST ANNUAL MEAN					34.4
LOWEST ANNUAL MEAN					3.80
HIGHEST DAILY MEAN	249	Jan 8	818	Jun 30	1730
LOWEST DAILY MEAN	2.6	Sep 8	4.7	Oct 2	.00
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 5	5.3	Oct 23	.33
INSTANTANEOUS PEAK FLOW			^a 4380	Jun 30	^a 14600
INSTANTANEOUS PEAK STAGE			13.36	Jun 30	^b 17.51
INSTANTANEOUS LOW FLOW			4.4	Oct 2	^c .00
ANNUAL RUNOFF (AC-FT)	10740		15680		11050
ANNUAL RUNOFF (CFSM)	1.04		1.52		1.07
ANNUAL RUNOFF (INCHES)	14.19		20.70		14.60
10 PERCENT EXCEEDS	22		35		29
50 PERCENT EXCEEDS	8.6		12		8.4
90 PERCENT EXCEEDS	4.5		6.8		3.2

^aFrom rating curve extended above 770 ft³/s on basis of contracted opening and flow-over-road measurement of peak flow

^bFrom floodmark

^cResult of pumpage for irrigation upstream from gage



ARKANSAS RIVER BASIN

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07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLAHOMA

LOCATION.--Lat 36°12'58", long 94°36'15", in NE1/4NE1/4 sec.14, T.20 N., R.25 E., Delaware County, Oklahoma, Hydrologic Unit 11110103, on left bank 800 ft downstream from county bridge, 2.5 mi from Arkansas-Oklahoma State line, northwest of West Siloam Springs, Oklahoma.

DRAINAGE AREA.--59.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 958.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow is partially regulated by Lake Siloam Springs, 4.5 mi upstream, and sewage discharge into Flint Creek from city of Gentry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	17	35	21	39	31	44	69	103	647	42	22
2	3.7	36	33	30	39	30	43	65	84	469	40	21
3	3.9	35	32	30	39	29	46	59	77	314	38	21
4	3.9	28	31	30	37	28	56	451	67	251	39	30
5	133	24	30	29	34	27	58	466	64	202	38	42
6	171	22	29	29	93	27	70	219	55	177	36	32
7	92	26	31	28	382	27	64	136	50	160	35	28
8	58	37	30	27	193	44	59	101	46	146	33	34
9	41	39	28	25	148	70	53	83	43	131	32	26
10	31	80	28	23	123	59	47	76	61	126	31	25
11	24	79	25	22	110	53	42	76	105	115	30	27
12	20	62	26	22	94	65	37	93	75	106	28	38
13	17	51	32	22	82	219	36	88	71	97	27	36
14	14	42	32	20	73	192	44	81	154	91	27	29
15	14	36	32	20	68	178	50	70	76	84	26	26
16	12	33	31	20	66	188	43	66	67	80	28	24
17	13	31	28	19	56	158	39	78	78	76	25	24
18	23	28	28	19	53	130	37	83	55	72	24	23
19	21	27	29	19	50	110	33	71	78	68	23	24
20	17	33	28	19	47	134	32	67	111	65	23	25
21	15	31	27	19	43	134	31	82	101	62	23	25
22	14	29	24	19	39	118	30	82	91	58	22	23
23	13	28	24	18	39	103	45	225	101	55	22	23
24	12	27	24	18	37	91	42	192	203	53	22	22
25	13	25	24	18	35	79	44	152	345	51	21	21
26	13	23	24	17	35	71	64	129	229	49	21	21
27	15	23	24	17	35	61	113	111	178	47	22	20
28	16	22	24	17	32	56	92	96	154	44	22	18
29	17	22	22	19	---	55	83	87	132	42	21	16
30	17	35	21	23	---	49	75	75	1910	41	20	15
31	17	---	21	36	---	44	---	121	---	41	20	---
TOTAL	878.0	1031	857	695	2121	2660	1552	3850	4964	4020	861	761
MEAN	28.3	34.4	27.6	22.4	75.8	85.8	51.7	124	165	130	27.8	25.4
MAX	171	80	35	36	382	219	113	466	1910	647	42	42
MIN	3.5	17	21	17	32	27	30	59	43	41	20	15
AC-FT	1740	2040	1700	1380	4210	5280	3080	7640	9850	7970	1710	1510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	31.0	55.2	68.5	52.0	55.9	77.2	69.0	69.4	56.3	26.4	16.7	22.1								
MAX	199	148	219	123	120	176	143	251	169	130	35.6	132								
(WY)	1987	1994	1993	1985	1989	1985	1985	1990	1995	1999	1986	1986								
MIN	3.48	3.86	6.62	3.88	4.37	7.04	7.43	20.9	9.72	2.79	.77	1.80								
(WY)	1981	1981	1980	1980	1981	1981	1981	1981	1981	1980	1980	1980								

ARKANSAS RIVER BASIN

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

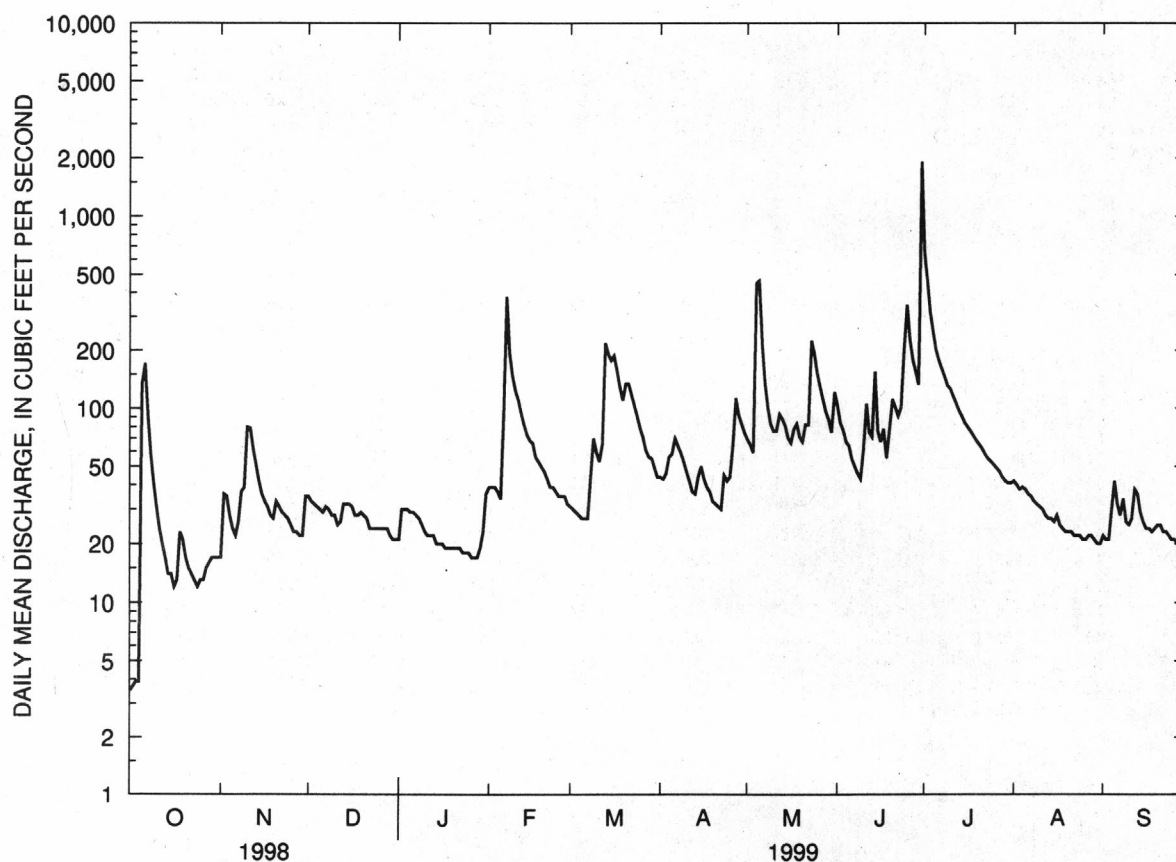
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1980 - 1999

ANNUAL TOTAL	15668.5		24250.0		
ANNUAL MEAN	42.9		66.4		49.9
HIGHEST ANNUAL MEAN					97.9 1985
LOWEST ANNUAL MEAN					10.7 1981
HIGHEST DAILY MEAN	382	Jan 8	1910	Jun 30	2560 Sep 30 1986
LOWEST DAILY MEAN	1.0	Aug 25	3.5	Oct 1	.40 Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 20	14	Oct 21	.56 Aug 5 1980
INSTANTANEOUS PEAK FLOW			^a 6860	Jun 30	^a 6860 Jun 30 1999
INSTANTANEOUS PEAK STAGE			12.80	Jun 30	12.80 Jun 30 1999
ANNUAL RUNOFF (AC-FT)	31080		48100		36170
10 PERCENT EXCEEDS	91		130		106
50 PERCENT EXCEEDS	30		37		28
90 PERCENT EXCEEDS	3.9		19		6.8

^aFrom rating curve extended above 3,300 ft³/s

ARKANSAS RIVER BASIN

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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 mi² (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.--WRD Ark. 1970: Drainage area. WRD Ark. 1993: 1992 (m).

GAGE.--Water-stage recorder. Datum of gage is 986.47 ft above sea level.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	9.7	50	23	47	29	61	55	95	137	2.7	.33
2	3.4	50	37	38	40	28	58	51	64	69	2.8	.19
3	4.0	31	32	31	35	27	322	46	53	47	3.2	.04
4	3.8	25	123	26	32	26	198	1220	46	37	2.7	.49
5	1280	21	66	25	30	26	302	278	41	32	2.4	2.5
6	452	18	49	27	360	25	171	112	37	32	2.4	2.9
7	110	25	44	27	361	24	117	80	33	33	1.9	2.3
8	70	44	36	27	108	130	100	66	30	26	1.4	4.5
9	54	35	32	24	73	60	88	58	28	23	1.2	3.9
10	45	137	27	22	62	30	80	132	28	25	.89	2.9
11	38	50	24	22	93	28	70	104	46	26	.80	3.3
12	33	38	85	23	70	40	65	194	30	21	.69	3.8
13	29	32	96	22	57	e330	61	106	133	19	.34	3.8
14	26	28	53	20	51	250	72	73	71	17	.08	3.2
15	24	25	43	20	48	120	69	60	37	16	.00	2.8
16	21	23	38	20	45	113	60	53	32	14	.00	2.6
17	21	20	34	20	42	91	55	117	30	12	.00	2.3
18	32	19	32	20	41	80	52	84	26	11	.00	2.4
19	26	20	34	18	39	129	50	58	27	14	.00	2.4
20	21	23	32	18	37	249	47	49	33	11	.00	2.8
21	18	20	31	18	35	130	45	65	30	8.6	.00	2.8
22	15	18	28	18	34	98	45	57	25	7.8	.01	2.5
23	13	17	27	19	33	86	206	217	152	7.1	.02	2.1
24	11	15	26	20	32	78	72	98	107	6.4	.00	1.9
25	9.4	15	24	18	31	71	89	459	116	5.8	.00	1.7
26	8.7	13	23	17	31	67	258	260	57	6.0	.00	1.6
27	8.1	12	23	17	31	65	161	111	41	5.3	.28	1.5
28	7.4	12	22	17	29	63	92	77	37	4.5	.49	1.5
29	7.0	11	22	17	---	73	73	64	56	3.7	.76	1.4
30	7.7	181	21	35	---	66	64	58	317	3.2	.82	1.2
31	8.8	---	20	67	---	62	---	186	---	2.9	.69	---
TOTAL	2410.7	987.7	1234	736	1927	2694	3203	4648	1858	683.3	26.57	67.65
MEAN	77.8	32.9	39.8	23.7	68.8	86.9	107	150	61.9	22.0	.86	2.26
MAX	1280	181	123	67	361	330	322	1220	317	137	3.2	4.5
MIN	3.4	9.7	20	17	29	24	45	46	25	2.9	.00	.04
AC-FT	4780	1960	2450	1460	3820	5340	6350	9220	3690	1360	53	134
CFSM	1.92	.81	.98	.58	1.70	2.14	2.63	3.69	1.53	.54	.02	.06
IN.	2.21	.90	1.13	.67	1.77	2.47	2.93	4.26	1.70	.63	.02	.06

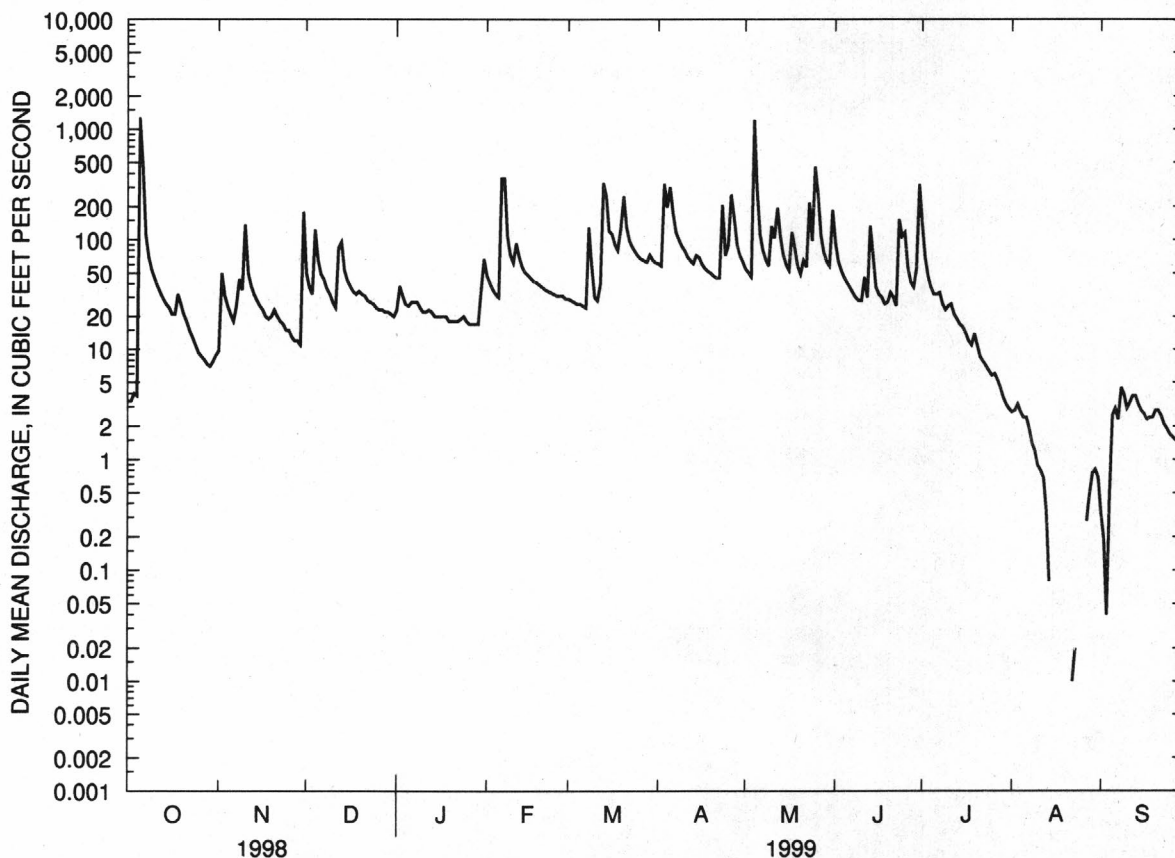
ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	27.0	58.8	53.5	49.3	56.6	79.2	80.1	70.8	34.5	17.3	7.27	19.3
MAX	218	347	221	258	163	205	310	307	167	131	62.0	242
(WY)	1971	1986	1988	1998	1975	1973	1990	1990	1989	1958	1992	1974
MIN	.094	.51	.55	.53	2.16	5.98	6.71	3.25	.35	.22	.000	.080
(WY)	1964	1964	1964	1964	1964	1967	1963	1977	1963	1963	1980	1980

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1958 - 1999	
ANNUAL TOTAL	22286.02		20475.92			
ANNUAL MEAN	61.1		56.1		45.7	
HIGHEST ANNUAL MEAN					104	1993
LOWEST ANNUAL MEAN					3.99	1963
HIGHEST DAILY MEAN	3820	Jan 4	1280	Oct 5	4300	Nov 24 1973
LOWEST DAILY MEAN	.00	Sep 5	.00	Aug 15	.00	Jul 23 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 5	.00	Aug 15	.00	Sep 20 1963
INSTANTANEOUS PEAK FLOW			^a 10200	Oct 5	^a 20900	Nov 18 1985
INSTANTANEOUS PEAK STAGE			11.08	Oct 5	14.81	Nov 18 1985
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	44200		40610		33090	
ANNUAL RUNOFF (CFSM)	1.50		1.38		1.12	
ANNUAL RUNOFF (INCHES)	20.42		18.76		15.28	
10 PERCENT EXCEEDS	98		114		88	
50 PERCENT EXCEEDS	24		30		12	
90 PERCENT EXCEEDS	.36		2.0		.88	

^aFrom rating curve extended above 2,900 ft³/s on basis of contracted-opening measurement at 12,900 ft³/s^eEstimated

ARKANSAS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 07...	1000	80513	81213	101	310	8.0	740	16.5	8.2	86
NOV 18...	1000	80513	81213	19	328	8.0	734	13.0	7.7	76
FEB 02...	1430	80513	81213	40	260	8.6	735	10.3	12.5	116
MAR 08...	1800	80513	81213	320	174	7.1	728	--	--	--
JUN 02...	1115	80513	81213	66	312	8.4	--	23.0	--	--
AUG 04...	1030	80513	81213	2.4	270	7.3	738	25.9	4.4	56
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 07...	2600	2800	6400	130	46	3.3	5.4	8	.2	3.8
NOV 18...	90	62	150	160	58	3.5	6.2	8	.2	3.0
FEB 02...	K67	K110	K80	120	42	3.2	5.8	10	.2	1.7
MAR 08...	K14000	K7400	K26000	67	23	2.4	3.4	9	.2	3.8
JUN 02...	500	490	400	130	46	2.8	3.9	6	.2	2.6
AUG 04...	K300	K210	110	140	52	3.0	5.4	7	.2	3.3
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 07...	16	7.5	222	9.38	42	.022	.07	9.40	<.010	--
NOV 18...	19	8.2	209	--	--	<.010	--	5.10	<.010	--
FEB 02...	19	6.8	162	2.69	12	.012	.04	2.70	<.010	--
MAR 08...	13	4.9	117	1.98	8.8	.020	.07	2.00	.200	.26
JUN 02...	11	5.0	167	--	--	<.010	--	2.60	.040	.05
AUG 04...	11	7.6	190	.970	4.3	.030	.10	1.00	.030	.04
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 07...	--	.43	9.8	.100	.090	.070	.21	38	10	94
NOV 18...	--	.23	5.3	.060	.050	<.010	--	51	2.6	96
FEB 02...	--	.24	2.9	.060	.060	<.010	--	53	5.7	95
MAR 08...	1.1	1.3	3.3	.480	E.250	.260	.80	171	148	95
JUN 02...	.22	.26	2.9	.070	E.060	.080	.25	44	7.9	69
AUG 04...	.21	.24	1.2	.050	<.020	.010	.03	81	.52	94

ARKANSAS RIVER BASIN

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 highway bridge at Cauthron, 2.9 mi downstream from Cross Creek, 7.8 mi downstream from Jones Creek, and at mile 109.0.

DRAINAGE AREA.--203 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1037: 1939 (M). WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.53 ft above sea level. Prior to May 2, 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. As of September 1974, flow from 92.2 mi² upstream from this station is controlled by 16 floodwater-detention reservoirs that have a total combined capacity of 39,082 acre-ft below the flood spillway crests, of which 33,524 acre-ft 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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	88	119	49	454	21	304	170	370	999	4.6	3.1
2	73	112	92	555	294	18	234	131	899	441	4.3	2.8
3	88	99	84	279	207	16	439	106	380	286	4.1	2.6
4	81	87	460	167	155	14	1100	877	244	211	4.2	2.6
5	222	82	528	132	116	14	1050	1700	184	162	4.2	3.0
6	3710	79	263	122	102	13	854	521	143	122	4.1	3.7
7	1140	79	279	120	816	12	469	305	120	96	4.2	4.5
8	830	79	218	107	419	306	325	223	123	121	4.1	7.1
9	486	84	136	92	259	708	265	167	87	105	3.9	7.2
10	329	378	89	72	198	244	197	1550	73	372	3.6	8.6
11	243	221	72	62	173	164	150	1580	109	726	3.5	6.4
12	181	140	789	59	199	275	115	2980	363	254	3.2	4.9
13	144	116	959	57	134	3310	93	1490	112	132	3.4	4.2
14	124	106	419	50	108	2030	110	952	99	89	3.3	4.0
15	107	99	256	42	94	1090	324	580	85	66	3.0	3.7
16	104	93	188	36	82	672	155	367	67	48	2.8	2.8
17	293	89	147	34	70	419	102	276	51	36	2.7	2.9
18	167	85	125	29	61	297	80	219	39	29	2.6	3.1
19	127	83	744	26	55	222	66	168	29	22	2.3	3.1
20	105	82	354	23	47	185	57	132	26	17	2.3	3.1
21	97	80	329	21	40	156	48	163	26	15	2.3	3.0
22	89	78	344	283	34	128	41	315	16	13	2.4	2.9
23	83	76	213	136	37	118	36	3150	15	12	2.4	3.3
24	80	75	168	80	47	114	59	1320	15	11	2.8	2.8
25	77	75	133	60	38	105	139	851	37	8.9	2.9	2.8
26	76	73	113	46	32	91	1120	635	250	7.6	2.9	2.8
27	75	73	99	38	29	73	1260	438	155	6.5	3.1	2.9
28	75	72	88	33	26	1490	601	335	65	5.9	3.7	3.1
29	75	71	75	39	---	1440	328	435	188	5.7	4.2	2.9
30	75	113	62	1020	---	834	232	570	1680	5.4	4.3	2.7
31	82	---	51	1010	---	436	---	329	---	4.9	3.6	---
TOTAL	9508	3067	7996	4879	4326	15015	10353	23035	6050	4429.9	105.0	112.6
MEAN	307	102	258	157	154	484	345	743	202	143	3.39	3.75
MAX	3710	378	959	1020	816	3310	1260	3150	1680	999	4.6	8.6
MIN	70	71	51	21	26	12	36	106	15	4.9	2.3	2.6
AC-FT	18860	6080	15860	9680	8580	29780	20540	45690	12000	8790	208	223

ARKANSAS RIVER BASIN
07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1999, BY WATER YEAR (WY)

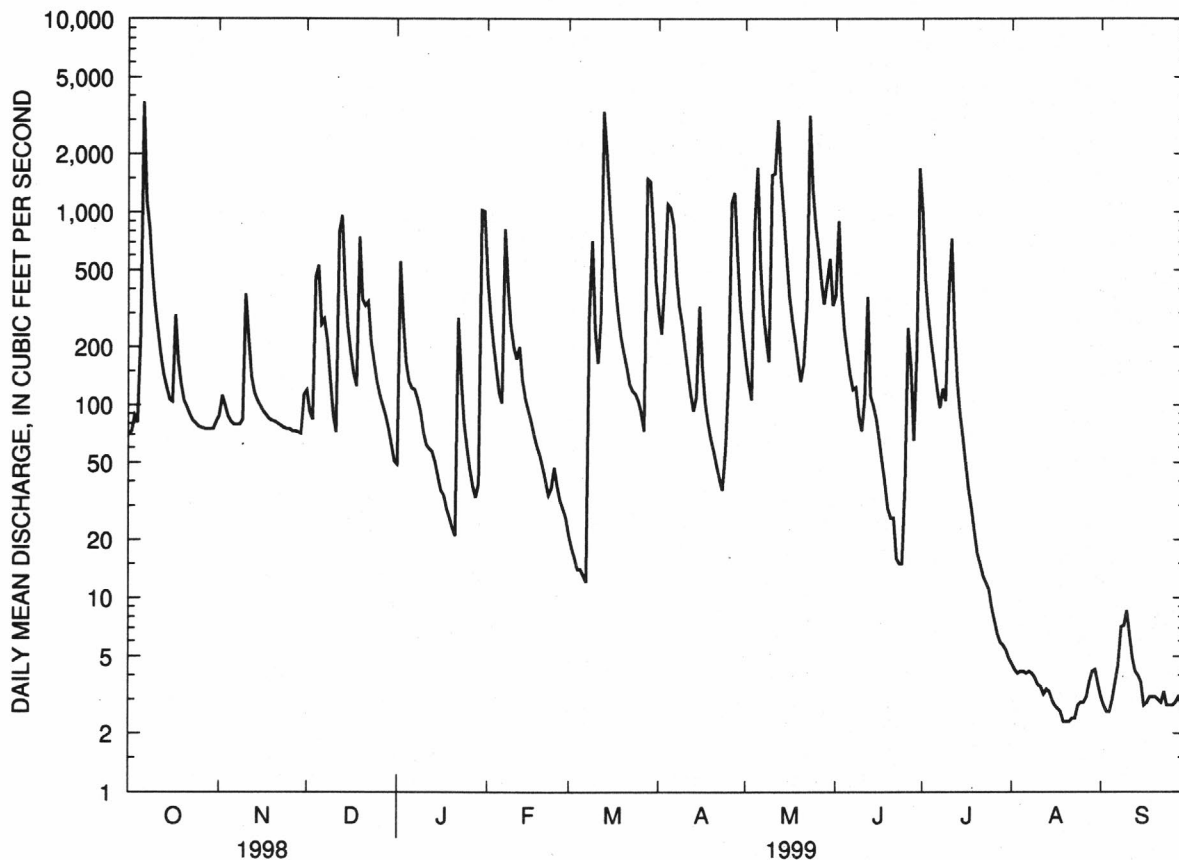
MEAN	115	297	360	302	377	429	345	481	214	61.3	20.6	23.5
MAX	1423	1900	1078	1075	1246	849	1092	2080	846	314	93.7	166
(WY)	1985	1997	1983	1998	1989	1975	1991	1990	1986	1981	1996	1996
MIN	.015	2.09	2.02	14.1	35.6	59.9	42.5	13.6	2.36	.41	.81	.19
(WY)	1979	1996	1990	1981	1996	1986	1976	1977	1988	1980	1976	1980

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1975 - 1999	
ANNUAL TOTAL	106834.47		88876.5			
ANNUAL MEAN	293		243		^a 252	
HIGHEST ANNUAL MEAN					432	
LOWEST ANNUAL MEAN					48.7	
HIGHEST DAILY MEAN	10000	Jan 5	3710	Oct 6	16900	May 3 1990
LOWEST DAILY MEAN	.91	Jul 9	2.3	Aug 19	.00	Aug 30 1976
ANNUAL SEVEN-DAY MINIMUM	1.2	Jul 5	2.4	Aug 17	.00	Oct 7 1978
INSTANTANEOUS PEAK FLOW			6040	Oct 6	^b 24000	May 3 1990
INSTANTANEOUS PEAK STAGE			13.88	Oct 6	^c 22.17	May 3 1990
INSTANTANEOUS LOW FLOW			2.2	Aug 19-21	.00	at times
ANNUAL RUNOFF (AC-FT)	211900		176300		182200	
10 PERCENT EXCEEDS	742		650		613	
50 PERCENT EXCEEDS	81		92		55	
90 PERCENT EXCEEDS	1.8		3.5		1.7	

^aPrior to regulation, water years 1940-74, 218 ft³/s

^bMaximum discharge for period of record, 32,200 ft³/s May 20, 1960

^cMaximum gage height for period of record, 23.76 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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE PER (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 06...	1340	80513	81213	4340	45	7.6	747	20.0	7.2	81
NOV 16...	1000	80513	81213	95	55	7.3	743	12.5	8.7	83
FEB 03...	1130	80513	81213	205	90	7.8	740	8.7	9.2	82
APR 06...	1100	80513	81213	841	66	7.6	750	16.0	8.3	86
JUN 07...	1030	80513	81213	177	55	8.4	750	26.0	5.8	73
AUG 03...	1230	80513	81213	4.4	101	7.2	751	30.1	5.2	69
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 06...	K12000	K13000	K71000	11	2.0	1.5	2.7	28	.4	2.9
NOV 16...	K67	K59	K59	15	2.7	2.1	5.0	38	.6	1.9
FEB 03...	510	370	230	16	2.8	2.2	8.6	51	.9	1.6
APR 06...	K720	1400	1000	18	3.8	2.1	4.4	32	.4	1.6
JUN 07...	140	170	88	14	2.6	1.9	5.1	40	.6	1.8
AUG 03...	K18	K8	32	22	3.7	3.1	9.4	44	.9	3.1
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 06...	4.0	2.2	52	--	--	<.010	--	.840	<.010	--
NOV 16...	8.3	5.7	50	--	--	<.010	--	.260	<.010	--
FEB 03...	9.8	5.4	54	--	--	<.010	--	.380	<.010	--
APR 06...	7.8	3.4	53	.210	.93	.020	.07	.230	.200	.26
JUN 07...	6.7	3.7	46	--	--	<.010	--	.260	.020	.03
AUG 03...	8.9	7.3	61	--	--	<.010	--	.020	.020	.03
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 06...	--	1.0	1.8	.320	.160	.140	.43	173	2030	95
NOV 16...	--	.31	.57	.070	.050	<.010	--	30	7.7	90
FEB 03...	--	.40	.78	.090	.070	.040	.12	25	14	95
APR 06...	.38	.58	.81	.120	E.080	.040	.12	52	118	90
JUN 07...	.31	.33	.59	.110	E.070	.080	.25	26	12	96
AUG 03...	.45	.47	.49	.100	.060	.030	.09	29	.35	91

ARKANSAS RIVER BASIN

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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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1958 to current year.

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 457.71 ft above sea level. Prior to Oct. 1, 1990, at datum 2.00 ft higher.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	39	119	72	267	30	251	91	159	2430	11	6.8
2	14	76	61	420	197	25	202	71	409	467	10	6.9
3	17	69	46	207	148	22	432	62	184	268	9.5	8.2
4	18	40	193	e117	119	19	926	250	112	182	8.9	9.7
5	28	29	338	93	96	18	1020	1150	82	132	8.4	54
6	2130	22	168	100	104	19	1050	260	63	102	8.0	16
7	414	23	143	106	1120	16	386	148	50	92	7.6	5.6
8	164	28	110	99	394	225	277	104	40	125	7.2	9.9
9	102	28	90	86	246	479	221	82	33	79	6.7	3.8
10	73	275	76	69	193	162	171	912	35	74	9.3	2.5
11	54	172	65	63	191	108	134	1180	66	1090	8.3	2.2
12	42	91	668	69	202	370	108	860	138	236	6.2	1.7
13	37	68	1010	69	136	2710	92	462	113	133	5.2	1.2
14	31	57	334	56	116	1510	98	254	575	96	4.3	.32
15	26	49	215	46	104	582	192	171	119	75	3.8	.00
16	26	43	165	43	92	358	131	127	66	60	3.5	.00
17	265	38	133	42	83	264	92	1040	48	49	3.4	.00
18	204	33	116	39	74	204	76	1280	38	42	2.9	.00
19	143	31	299	34	67	163	66	254	31	37	2.6	.00
20	98	30	219	31	60	153	60	160	30	41	2.7	.00
21	75	27	333	32	53	141	51	830	28	38	2.7	.00
22	55	25	375	178	48	118	46	496	25	29	2.6	.00
23	41	21	217	134	48	141	38	1890	31	26	2.4	.00
24	34	19	174	87	52	146	109	604	153	23	2.2	.00
25	29	19	140	65	45	116	192	291	713	21	2.0	.00
26	25	17	122	54	43	101	695	216	812	19	2.9	.00
27	22	16	114	48	40	83	861	163	171	17	5.2	.00
28	19	15	101	48	40	932	256	121	92	16	6.0	.04
29	16	14	90	77	---	1510	157	99	635	14	6.0	.37
30	18	83	78	519	---	491	114	88	4680	13	6.7	.75
31	16	---	68	620	---	320	---	103	---	12	7.2	---
TOTAL	4250	1497	6380	3723	4378	11536	8504	13819	9731	6038	175.4	129.98
MEAN	137	49.9	206	120	156	372	283	446	324	195	5.66	4.33
MAX	2130	275	1010	620	1120	2710	1050	1890	4680	2430	11	54
MIN	14	14	46	31	40	16	38	62	25	12	2.0	.00
AC-FT	8430	2970	12650	7380	8680	22880	16870	27410	19300	11980	348	258
CFSM	.93	.34	1.40	.82	1.06	2.53	1.93	3.03	2.21	1.32	.04	.03
IN.	1.08	.38	1.61	.94	1.11	2.92	2.15	3.50	2.46	1.53	.04	.03

ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	75.5	163	207	164	210	274	237	286	97.2	41.0	11.2	20.2
MAX	867	915	760	820	678	915	1047	1203	342	430	81.7	159
(WY)	1985	1997	1972	1998	1989	1973	1973	1990	1989	1961	1981	1996
MIN	.000	.000	.40	.50	1.08	.92	31.4	21.9	3.14	1.69	.015	.000
(WY)	1964	1964	1967	1964	1967	1967	1982	1962	1966	1964	1980	1963

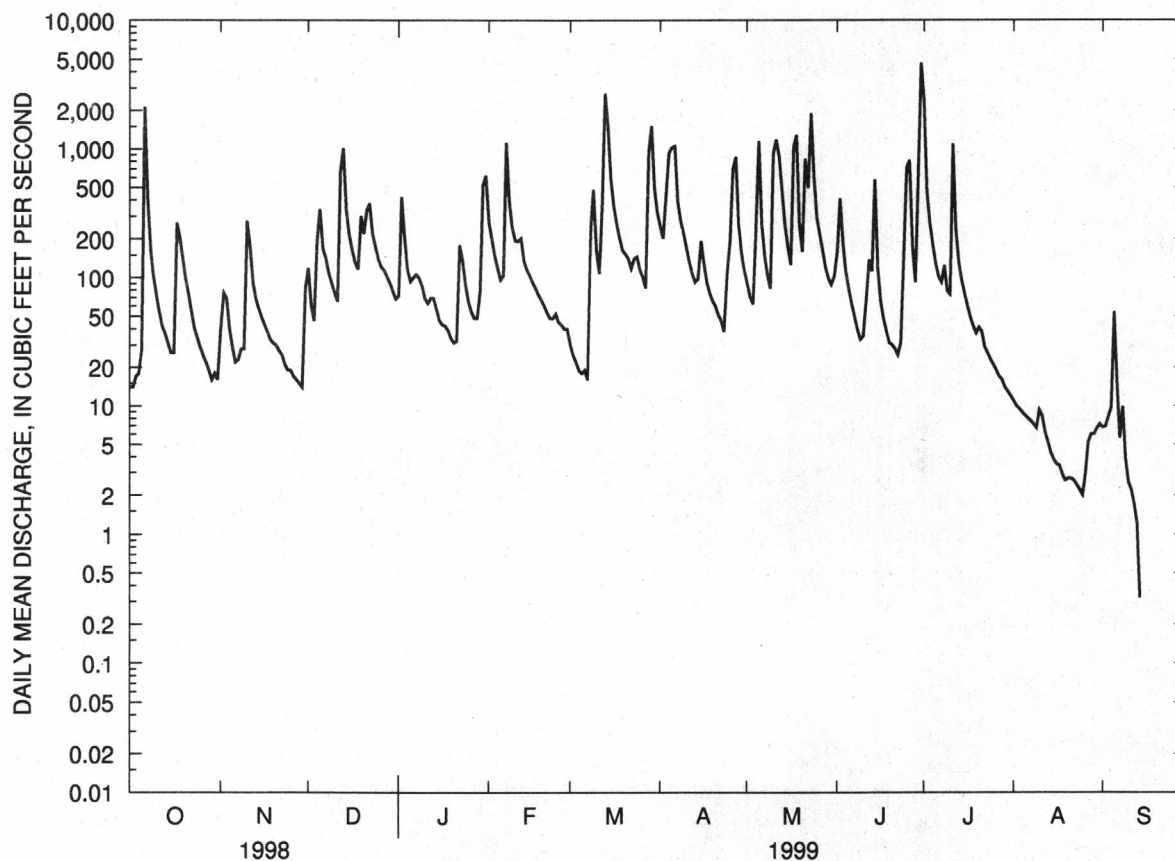
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1958 - 1999

ANNUAL TOTAL	72813.9		70161.38									
ANNUAL MEAN	199		192							147		
HIGHEST ANNUAL MEAN										308		1973
LOWEST ANNUAL MEAN										29.5		1976
HIGHEST DAILY MEAN	8660	Jan 5	4680	Jun 30						17100	May 14	1968
LOWEST DAILY MEAN	2.5	Jul 21	.00	Sep 15						.00	Aug 17	1963
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 25	.00	Sep 15						.00	Aug 17	1963
INSTANTANEOUS PEAK FLOW			6520	Jun 30						^a 30000	May 14	1968
INSTANTANEOUS PEAK STAGE			22.39	Jun 30						^b 25.00	May 14	1968
INSTANTANEOUS LOW FLOW			.00	at times						.00	at times	
ANNUAL RUNOFF (AC-FT)	144400		139200							106600		
ANNUAL RUNOFF (CFSM)	1.36		1.31							1.00		
ANNUAL RUNOFF (INCHES)	18.43		17.76							13.60		
10 PERCENT EXCEEDS	378		464							282		
50 PERCENT EXCEEDS	35		73							32		
90 PERCENT EXCEEDS	7.2		5.2							1.6		

^aFrom rating curve extended above 20,000 ft³/s^bAt present datum^cEstimated

ARKANSAS RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 06...	1000	80513	81213	3180	73	7.1	750	20.0	6.5	73
NOV 16...	1515	80513	81213	43	168	7.6	745	12.0	7.9	75
FEB 03...	1415	80513	81213	143	140	7.4	741	10.1	10.3	94
APR 06...	1430	80513	81213	744	93	8.1	754	16.6	9.0	93
JUN 07...	1230	80513	81213	52	170	7.6	752	25.5	5.6	70
AUG 03...	1000	80513	81213	9.7	328	7.5	752	28.0	4.8	63
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 06...	K12000	K19000	K120000	21	3.8	2.8	3.4	23	.3	3.2
NOV 16...	200	K120	K140	66	11	9.4	11	26	.6	2.1
FEB 03...	320	330	K160	38	6.4	5.3	8.7	31	.6	3.6
APR 06...	K1500	K1500	1800	26	4.8	3.3	5.2	29	.4	1.7
JUN 07...	--	110	150	66	11	9.3	13	29	.7	2.6
AUG 03...	49	23	92	120	18	18	17	23	.7	2.5
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
OCT 06...	11	2.3	68	--	--	<.010	--	1.50	.150	.19
NOV 16...	35	5.8	124	--	--	<.010	--	.710	<.010	--
FEB 03...	25	5.6	87	--	--	<.010	--	.640	<.010	--
APR 06...	15	2.9	72	.220	.97	.010	.03	.230	.060	.08
JUN 07...	37	5.1	132	--	--	<.010	--	.190	.020	.03
AUG 03...	63	4.5	201	--	--	<.010	--	.060	.050	.06
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 06...	1.5	1.7	3.2	.380	.090	.050	.15	400	3430	94
NOV 16...	--	.40	1.1	.060	.050	<.010	--	47	5.5	93
FEB 03...	--	.40	1.0	.040	.040	<.010	--	39	15	89
APR 06...	.58	.64	.87	.100	E.060	.010	.03	74	149	97
JUN 07...	.57	.59	.78	.040	<.020	.030	.09	64	8.9	100
AUG 03...	--	<.20	--	.040	.030	<.010	--	84	2.2	98

ARKANSAS RIVER BASIN

07249985 LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°31'09", long 94°27'58", 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 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)/ WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 429.44 ft above sea level. 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. 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	376	572	281	1080	159	868	891	884	4870	21	.22
2	36	902	495	782	840	152	758	703	652	2480	19	.15
3	38	506	399	893	683	141	5180	577	473	1510	17	.13
4	36	368	759	657	566	132	6100	2460	360	1020	15	.17
5	700	269	1110	530	475	143	4020	5450	e280	732	14	1.6
6	4850	206	863	475	802	160	3610	2240	e220	538	13	2.9
7	1780	214	703	435	6450	131	2360	1420	180	558	12	2.3
8	857	319	554	399	3040	1220	1820	1030	146	948	11	3.7
9	533	336	449	350	1930	2900	1640	776	123	496	11	2.3
10	363	511	372	304	1430	1600	1340	1160	108	535	12	1.6
11	257	765	317	268	1200	1150	1070	2920	331	628	8.9	2.8
12	193	532	597	247	1220	2800	870	5140	281	545	7.2	6.2
13	157	406	1590	232	986	8230	737	3310	1000	350	6.1	10
14	131	340	1260	209	832	5610	767	1940	1330	253	5.2	9.5
15	112	278	911	193	725	3390	1020	1320	622	194	4.5	7.7
16	96	230	715	180	642	2320	853	991	374	160	4.0	6.7
17	86	195	584	171	556	1750	690	1110	290	135	3.3	5.8
18	170	171	500	163	489	1360	588	1460	215	116	2.8	5.2
19	118	171	511	153	441	1150	503	957	169	99	2.2	4.9
20	98	276	462	145	382	2290	436	700	155	84	1.7	5.5
21	90	199	481	139	332	2030	373	764	158	73	1.5	5.2
22	80	175	435	142	292	1510	322	865	137	62	1.4	5.1
23	70	160	397	140	259	1290	3070	1530	295	52	1.3	4.8
24	62	147	353	133	231	1070	1760	1670	2190	47	1.3	4.3
25	56	137	315	125	211	904	1270	1070	3270	42	1.1	e4.0
26	51	125	285	119	198	765	2900	1290	1920	38	.91	e3.5
27	48	115	261	114	185	667	4070	1010	1140	34	.98	3.0
28	44	109	236	129	167	810	2230	700	786	31	.84	2.5
29	41	102	214	143	---	1340	1540	537	619	28	.64	2.0
30	90	285	194	395	---	1180	1150	477	8080	25	.51	1.8
31	91	---	178	1120	---	984	---	543	---	23	.37	---
TOTAL	11372	8925	17072	9766	26644	49338	53915	47011	26788	16706	201.75	115.57
MEAN	367	298	551	315	952	1592	1797	1516	893	539	6.51	3.85
MAX	4850	902	1590	1120	6450	8230	6100	5450	8080	4870	21	10
MIN	36	102	178	114	167	131	322	477	108	23	.37	.13
AC-FT	22560	17700	33860	19370	52850	97860	106900	93250	53130	33140	400	229
CFSM	.87	.71	1.31	.75	2.27	3.79	4.28	3.61	2.13	1.28	.02	.01
IN.	1.01	.79	1.51	.86	2.36	4.37	4.78	4.16	2.37	1.48	.02	.01

ARKANSAS RIVER BASIN

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07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

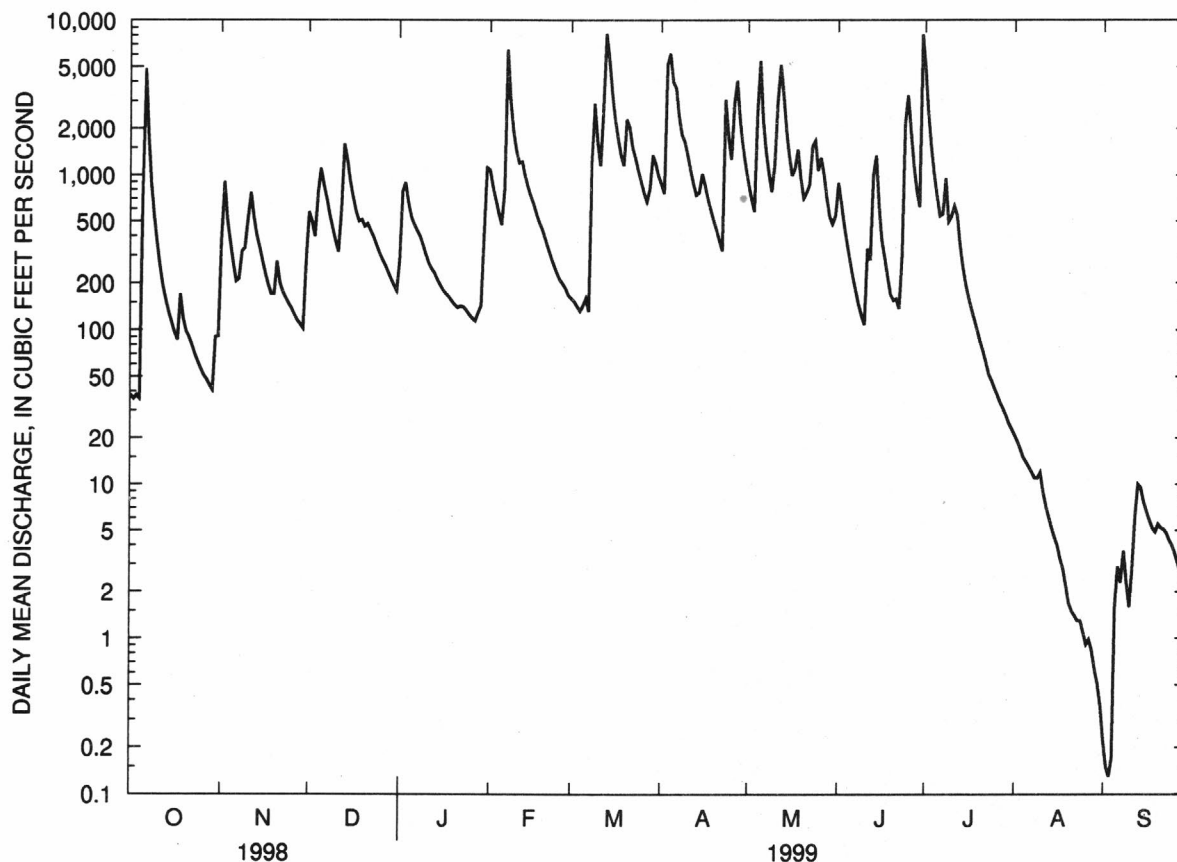
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1999, BY WATER YEAR (WY)

MEAN	239	552	565	569	739	1076	1091	939	424	128	47.1	135
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	.000	.13	1.95	3.31	18.8	25.2	94.6	41.3	7.00	.19	.000	.000
(WY)	1957	1957	1967	1956	1967	1967	1954	1977	1936	1936	1934	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1931 - 1999
ANNUAL TOTAL	256613.31	267854.32	
ANNUAL MEAN	703	734	541
HIGHEST ANNUAL MEAN			1090 1935
LOWEST ANNUAL MEAN			92.5 1954
HIGHEST DAILY MEAN	21300 Jan 5	8230 Mar 13	40000 Nov 24 1973
LOWEST DAILY MEAN	.00 Aug 6	.13 Sep 3	.00 Sep 8 1932
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 6	.31 Aug 29	.00 Sep 8 1932
INSTANTANEOUS PEAK FLOW		18500 Jun 30	80600 May 6 1960
INSTANTANEOUS PEAK STAGE		13.64 Jun 30	^a 30.30 May 6 1960
INSTANTANEOUS LOW FLOW		.00 Sep 1,3	.00 at times
ANNUAL RUNOFF (AC-FT)	509000	531300	391800
ANNUAL RUNOFF (CFSM)	1.67	1.75	1.29
ANNUAL RUNOFF (INCHES)	22.73	23.72	17.49
10 PERCENT EXCEEDS	1500	1770	1240
50 PERCENT EXCEEDS	230	331	135
90 PERCENT EXCEEDS	3.3	4.9	2.4

^aAt former site and datum

^eEstimated



ARKANSAS RIVER BASIN

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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 14...	0930	80513	81213	133	85	7.9	753	17.0	8.7	91
NOV 17...	0930	80513	81213	198	82	7.7	753	12.5	8.7	83
FEB 08...	1530	80513	81213	2720	60	7.6	743	12.8	10.3	100
APR 07...	1100	80513	81213	2370	48	7.9	752	14.2	8.9	88
JUN 02...	1300	80513	81213	670	90	8.3	--	22.0	--	--
AUG 04...	1200	80513	81213	15	95	8.7	752	31.1	5.3	72
DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE UREASE (COL / 100 ML) (31633)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT 14...	72	44	K36	37	12	1.8	3.6	17	.3	1.4
NOV 17...	K29	K27	K29	34	11	1.7	3.2	16	.2	1.0
FEB 08...	160	200	260	20	6.1	1.2	1.8	16	.2	.90
APR 07...	210	180	92	21	6.5	1.2	1.9	15	.2	1.1
JUN 02...	94	70	68	36	12	1.5	2.2	11	.2	1.1
AUG 04...	28	K6	K6	42	14	1.8	2.9	12	.2	1.5
DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)
OCT 14...	5.8	4.0	68	--	--	<.010	--	.490	.060	.08
NOV 17...	5.8	4.1	58	--	--	<.010	--	.210	<.010	--
FEB 08...	4.9	2.0	44	--	--	--	--	.600	--	--
APR 07...	4.6	1.9	41	.250	1.1	.010	.03	.260	.100	.13
JUN 02...	4.3	2.2	62	--	--	<.010	--	.100	.050	.06
AUG 04...	3.7	2.7	62	--	--	<.010	--	.070	.040	.05
DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 14...	<.20	--	<.020	<.020	<.010	--	<1.00	20	7.2	93
NOV 17...	<.20	--	.030	.030	<.010	--	<1.00	25	13	93
FEB 08...	.23	.83	.060	.040	--	--	1.33	42	308	88
APR 07...	<.20	--	.030	E.020	<.010	--	2.05	46	294	95
JUN 02...	<.20	--	<.020	<.020	.030	.09	.300	--	--	--
AUG 04...	<.20	--	.020	<.020	<.010	--	1.80	37	1.5	91

ARKANSAS RIVER BASIN

207

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level.

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 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	32	384	224	801	.46	634	625	451	5300	.00	.00
2	25	880	374	424	523	197	464	594	528	2090	.00	.00
3	33	442	300	656	456	192	4700	399	436	1190	.00	.00
4	27	261	513	483	423	82	6640	1540	422	778	.00	.00
5	299	299	830	416	214	56	3450	5880	57	543	.00	.00
6	4520	194	643	348	382	.00	3120	1910	40	425	.00	.00
7	1550	.00	513	344	6040	60	1880	1090	113	402	.00	.00
8	699	103	399	329	2490	746	1400	918	85	741	.00	.00
9	427	273	333	209	1450	2270	1210	527	71	411	.00	.00
10	305	348	291	229	1040	1210	1020	853	94	425	.00	.00
11	239	506	251	308	834	909	824	2480	201	551	.00	.00
12	224	445	401	269	829	1940	565	4820	205	502	.00	.00
13	232	294	1170	123	693	8980	578	3010	651	349	.00	.00
14	200	437	996	162	591	5740	530	1620	1020	261	.00	.00
15	.00	365	707	234	526	2830	605	1070	483	203	.00	.00
16	.00	66	556	298	521	1830	739	799	292	155	.00	.00
17	48	142	456	78	386	1060	448	751	219	120	.00	.00
18	155	180	396	.00	318	766	449	1160	171	107	.00	.00
19	103	99	372	199	297	863	213	706	129	81	.00	.00
20	118	58	369	99	299	1590	413	535	130	64	.00	.00
21	233	49	378	132	294	1590	312	461	120	58	.00	.00
22	114	130	329	198	96	1150	253	663	101	45	.00	.00
23	.00	61	315	56	115	986	2040	1050	186	37	.00	.00
24	.00	100	282	.00	212	837	1390	1320	1480	31	.00	.00
25	.00	96	256	204	139	563	941	861	2890	25	.00	.00
26	100	80	234	80	98	545	1960	908	1630	18	.00	.00
27	198	75	222	89	88	405	3660	733	885	7.6	.00	.00
28	36	74	199	174	82	530	1790	487	586	1.7	.00	.00
29	.00	72	171	.00	---	1040	1180	379	461	.00	.00	.00
30	12	200	209	76	---	928	892	415	8020	.00	.00	.00
31	.00	---	251	780	---	746	---	414	---	.00	.00	---
TOTAL	9912.00	6361.00	13100	7221.00	20237	40641.46	44300	38978	22157	14921.30	0.00	0.00
MEAN	320	212	423	233	723	1311	1477	1257	739	481	.000	.000
MAX	4520	880	1170	780	6040	8980	6640	5880	8020	5300	.00	.00
MIN	.00	.00	171	.00	82	.00	213	379	40	.00	.00	.00
AC-FT	19660	12620	25980	14320	40140	80610	87870	77310	43950	29600	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

MEAN	149	1082	767	905	775	1054	1209	799	366	122	15.1	84.1
MAX	454	3274	1666	2661	1961	1743	2178	1732	878	481	54.6	307
(WY)	1994	1997	1993	1998	1997	1998	1993	1995	1993	1999	1994	1996
MIN	.000	23.3	207	105	94.0	199	544	75.6	33.1	.000	.000	.000
(WY)	1993	1996	1996	1997	1996	1996	1998	1997	1998	1998	1993	1995

ARKANSAS RIVER BASIN **07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN--CONTINUED**

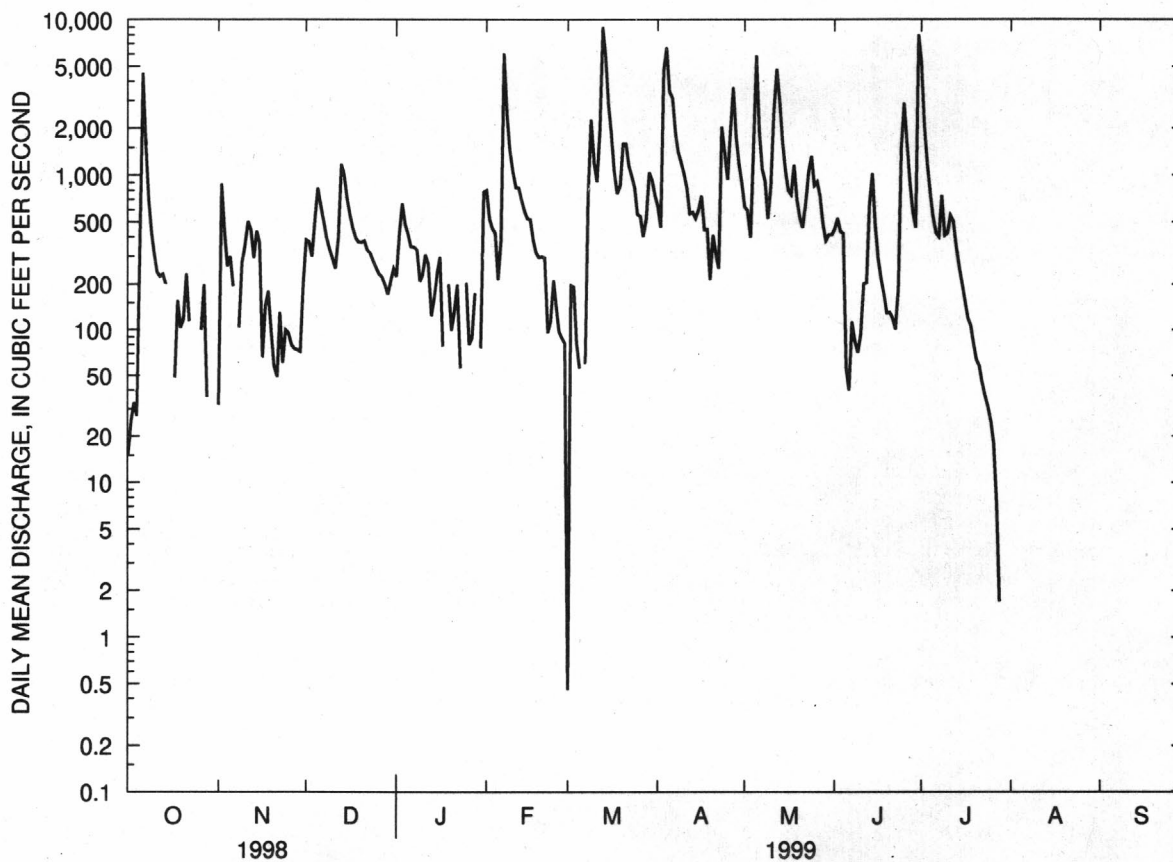
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1993 - 1999

ANNUAL TOTAL	211153.80	217828.76	
ANNUAL MEAN	579	597	608
HIGHEST ANNUAL MEAN			833 1993
LOWEST ANNUAL MEAN			315 1996
HIGHEST DAILY MEAN	23900 Jan 5	8980 Mar 13	24800 Feb 21 1997
LOWEST DAILY MEAN	.00 Jun 3	.00 Oct 15	.00 Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 23	.00 Jul 29	.00 Oct 1 1992
INSTANTANEOUS PEAK FLOW		19500 Jun 30	^a 42100 Feb 21 1997
INSTANTANEOUS PEAK STAGE		23.12 Jun 30	25.01 Feb 21 1997
INSTANTANEOUS LOW FLOW		.00 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	418800	432100	440700
10 PERCENT EXCEEDS	989	1390	1400
50 PERCENT EXCEEDS	183	261	163
90 PERCENT EXCEEDS	.00	.00	.00

^aFrom rating curve extended above 25,000 ft³/s

ARKANSAS RIVER BASIN

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

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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 09...	0830	80513	81213	118000	325	7.5	756	20.0	6.5	72	360
DEC 01...	1100	80513	81213	72200	470	8.1	762	14.5	10.4	102	250
FEB 02...	1030	80513	81213	54700	712	8.3	753	8.5	11.8	102	74
APR 27...	1130	80513	81213	151000	787	7.4	756	16.6	9.2	95	110
JUN 10...	1100	80513	81213	144000	396	8.3	752	29.5	8.1	109	86
AUG 23...	1400	80513	81213	23100	775	7.8	748	29.1	7.3	97	K14

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 09...	200	620	81	23	5.7	31	44	1	3.3	34
DEC 01...	150	160	120	35	7.3	43	43	2	4.7	43
FEB 02...	78	120	160	44	11	74	50	3	3.5	62
APR 27...	140	130	180	54	12	70	45	2	3.3	84
JUN 10...	64	44	130	37	8.4	31	34	1	3.2	47
AUG 23...	K7	K6	190	52	14	79	47	3	4.6	100

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 09...	43	198	.564	2.5	.036	.12	.600	.090	.12	.75
DEC 01...	64	276	.512	2.3	.018	.06	.530	.200	.26	.36
FEB 02...	110	404	.798	3.5	.032	.11	.830	.038	.05	.42
APR 27...	100	428	.750	3.3	.020	.07	.770	.060	.08	.58
JUN 10...	43	260	--	--	<.010	--	.670	.020	.03	.62
AUG 23...	110	495	--	--	<.010	--	<.020	<.010	--	--

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CHLOR-A PHYTO-PLANK-TON CHROMO-FLUOROM (UG/L) (70953)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 09...	.84	1.4	.190	.050	.030	.09	<1.00	195	62100	66
DEC 01...	.56	1.1	.160	.080	<.010	--	<1.00	132	25700	91
FEB 02...	.46	1.3	.130	.140	.100	.31	13.6	137	20200	94
APR 27...	.64	1.4	.110	E.060	.050	.15	4.90	141	57500	74
JUN 10...	.64	1.3	.100	E.040	.050	.15	2.00	143	55600	88
AUG 23...	.79	--	.070	<.020	.030	.09	21.0	170	10600	99

ARKANSAS RIVER BASIN

07252000 MULBERRY RIVER NEAR MULBERRY

LOCATION.--Lat 35°34'37", long 94°00'55", in SE1/4SW1/4 sec.31, T.11 N., R.29 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 mi².

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. WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 432.75 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Apr. 19, 1940, nonrecording gage at site 500 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1927 reached a stage of 22.0 ft, discharge, about 59,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	128	541	379	1910	255	833	831	534	3870	21	2.3
2	47	178	505	3440	1490	243	747	713	474	1690	18	2.0
3	48	311	477	2450	1200	233	2110	628	423	1030	16	1.9
4	44	283	505	1630	1010	223	4860	1020	383	720	15	1.8
5	64	249	782	1250	850	231	3850	4870	344	534	14	2.1
6	3740	226	781	1060	774	227	4610	2230	310	421	13	2.3
7	2080	216	870	919	4310	195	2680	1510	281	374	14	2.6
8	961	246	798	799	2760	406	1950	1150	257	332	14	4.2
9	621	287	697	702	1900	2010	1760	934	238	278	13	4.1
10	455	430	617	602	1460	1330	1390	858	221	227	14	4.2
11	359	710	548	538	1300	1070	1100	1420	206	213	11	4.8
12	290	588	729	502	1330	1000	900	2430	195	206	9.5	7.4
13	243	509	4110	470	1090	3760	767	2600	190	174	8.3	8.7
14	207	458	2250	429	946	3340	730	1710	268	149	7.1	8.0
15	178	412	1530	387	844	2560	948	1270	288	131	5.8	7.2
16	155	366	1180	359	757	2060	880	1040	236	114	4.8	6.4
17	167	321	977	338	680	1660	766	1060	208	99	4.2	5.5
18	581	290	823	336	608	1320	689	2210	184	87	3.6	5.0
19	836	273	763	317	557	1100	620	1390	164	77	3.0	4.8
20	573	397	679	295	504	1100	559	1070	151	68	2.5	4.7
21	451	502	633	280	451	1010	506	978	139	61	2.2	4.1
22	367	450	770	351	401	881	462	963	128	55	1.9	3.7
23	303	418	732	568	374	794	580	1100	126	50	1.7	3.4
24	263	384	674	563	345	717	592	1110	136	46	1.8	3.2
25	231	350	610	533	321	640	549	910	312	42	1.7	2.9
26	203	319	560	501	303	568	1310	814	251	39	1.6	2.8
27	182	292	520	479	288	513	2590	710	203	36	1.9	2.7
28	166	271	482	460	273	514	1650	615	227	32	1.8	2.6
29	153	255	440	446	---	941	1230	551	201	28	1.9	2.2
30	142	317	401	674	---	983	998	517	4970	26	2.5	2.0
31	132	---	361	2460	---	901	---	518	---	23	2.6	---
TOTAL	14296	10436	26345	24517	29036	32785	43216	39730	12248	11232	233.4	119.6
MEAN	461	348	850	791	1037	1058	1441	1282	408	362	7.53	3.99
MAX	3740	710	4110	3440	4310	3760	4860	4870	4970	3870	21	8.7
MIN	44	128	361	280	273	195	462	517	126	23	1.6	1.8
AC-FT	28360	20700	52260	48630	57590	65030	85720	78800	24290	22280	463	237
CFSM	1.24	.93	2.28	2.12	2.78	2.84	3.86	3.44	1.09	.97	.02	.01
IN.	1.43	1.04	2.63	2.45	2.90	3.27	4.31	3.96	1.22	1.12	.02	.01

ARKANSAS RIVER BASIN

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07252000 MULBERRY RIVER NEAR MULBERRY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	175	554	655	632	882	1081	1125	987	384	116	65.6	84.2
MAX	1566	2280	2997	3083	2873	4124	3576	4233	2589	908	952	1497
(WY)	1985	1974	1983	1949	1951	1945	1945	1990	1945	1950	1950	1974
MIN	.000	.033	2.45	5.34	47.0	75.7	263	88.7	9.68	2.72	.061	.000
(WY)	1954	1954	1990	1964	1967	1967	1971	1977	1977	1963	1954	1954

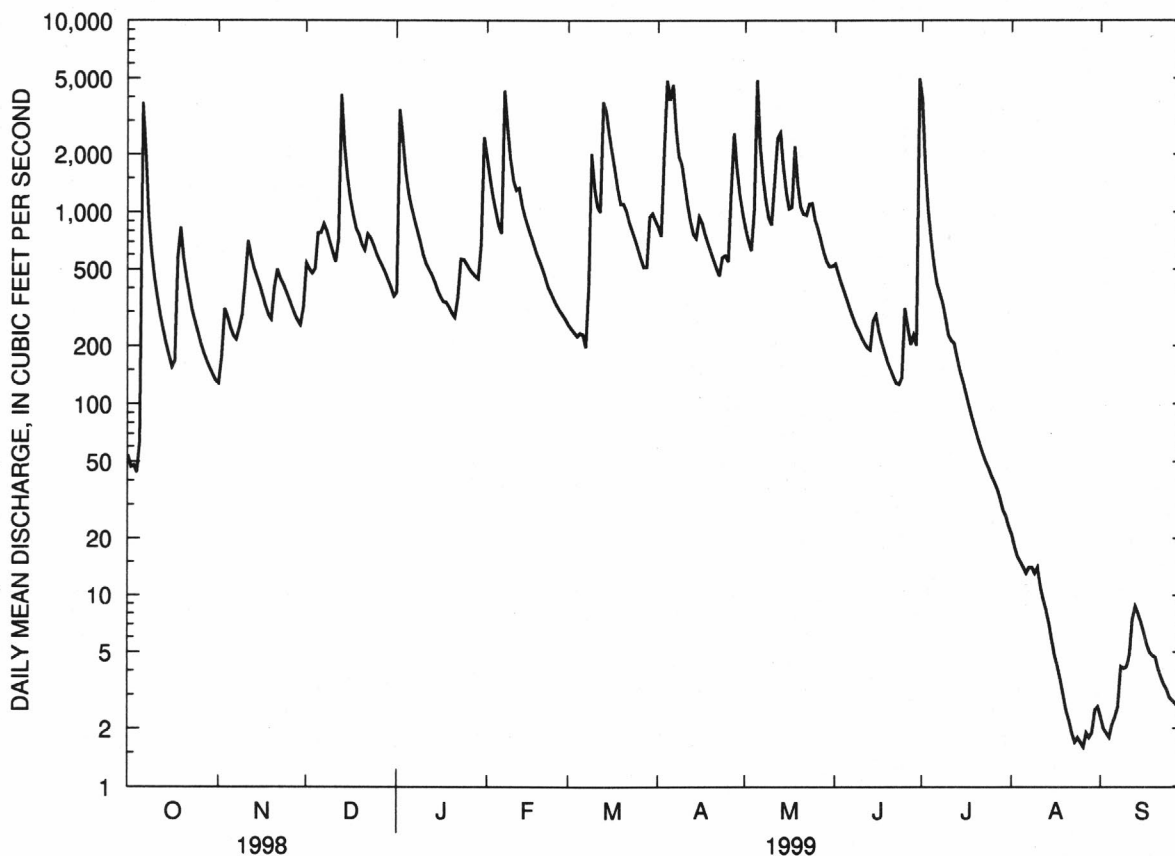
SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1938-94, 1999

ANNUAL TOTAL	244194.0		
ANNUAL MEAN	669		557
HIGHEST ANNUAL MEAN			1226 1945
LOWEST ANNUAL MEAN			185 1954
HIGHEST DAILY MEAN	4970	Jun 30	40900 May 3 1990
LOWEST DAILY MEAN	1.6	Aug 26	.00 Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 22	.00 Aug 25 1943
INSTANTANEOUS PEAK FLOW	11500	Jun 30	^a 70200 Dec 3 1982
INSTANTANEOUS PEAK STAGE	10.51	Jun 30	23.66 Dec 3 1982
INSTANTANEOUS LOW FLOW	1.5	Aug 26	.00 at times
ANNUAL RUNOFF (AC-FT)	484400		403500
ANNUAL RUNOFF (CFSM)	1.79		1.49
ANNUAL RUNOFF (INCHES)	24.35		20.29
10 PERCENT EXCEEDS	1570		1350
50 PERCENT EXCEEDS	418		184
90 PERCENT EXCEEDS	4.8		3.8

^aFrom rating curve extended above 38,000 ft³/s



ARKANSAS RIVER BASIN

07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER

LOCATION.--Lat 35°30'48", long 93°10'24", 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 mi².

PERIOD OF RECORD.--October 1950 to September 1995, October 1998 to current year. Annual maximum, water years 1996-1998.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	54	193	241	1300	150	712	300	158	3060	9.3	.55
2	15	64	188	4790	1020	143	599	263	165	1380	7.9	.51
3	17	139	176	2470	822	137	834	235	137	805	7.0	.41
4	15	118	612	1500	685	128	3170	512	117	532	5.9	.32
5	19	98	1660	1080	561	181	2760	4190	104	380	5.2	.38
6	1270	85	932	874	500	288	2960	1750	90	286	5.2	.40
7	942	77	747	716	2760	223	1920	1120	78	272	4.8	.24
8	340	75	578	606	1890	586	1440	799	69	200	4.5	.28
9	194	87	453	516	1330	2210	1220	597	61	156	4.6	.25
10	136	135	373	429	1010	1290	949	478	54	166	5.0	.13
11	105	303	314	382	841	951	739	701	52	157	5.8	.11
12	85	263	840	350	897	778	577	750	55	114	4.9	1.3
13	71	219	3330	330	706	2350	479	951	63	94	4.1	1.0
14	58	190	1620	292	598	2150	549	692	127	80	3.8	.76
15	50	168	1060	257	528	1770	1390	544	122	69	3.6	.63
16	45	149	802	238	469	1520	1150	461	98	60	3.4	.56
17	628	133	637	227	407	1240	913	434	79	52	3.1	.49
18	1860	119	522	223	358	966	743	696	67	45	2.7	.43
19	1010	109	506	208	331	764	620	517	58	40	2.4	.51
20	510	118	445	191	292	689	520	403	52	34	1.9	.31
21	327	184	422	183	258	623	438	356	46	32	1.6	.20
22	232	165	639	365	230	521	373	338	42	28	1.4	.14
23	174	152	594	600	215	459	329	629	40	24	1.4	.08
24	141	143	529	506	202	404	293	528	47	21	1.2	.02
25	119	132	459	442	188	352	260	392	144	19	1.0	.00
26	103	124	412	394	177	312	318	329	208	17	.98	.00
27	90	114	372	364	170	284	610	278	138	15	1.0	.00
28	79	106	336	341	162	348	531	229	106	14	.81	.00
29	71	99	300	316	---	1120	416	197	134	13	.69	.00
30	63	110	267	352	---	976	348	177	3950	11	.62	.00
31	57	---	237	1710	---	822	---	163	---	9.2	.57	---
TOTAL	8842	4032	20555	21493	18907	24735	28160	20009	6661	8185.2	106.37	10.01
MEAN	285	134	663	693	675	798	939	645	222	264	3.43	.33
MAX	1860	303	3330	4790	2760	2350	3170	4190	3950	3060	9.3	1.3
MIN	15	54	176	183	162	128	260	163	40	9.2	.57	.00
AC-FT	17540	8000	40770	42630	37500	49060	55860	39690	13210	16240	211	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	132	434	552	455	621	839	871	696	253	71.5	38.4	48.1
MAX	1467	2419	3325	1663	1840	2158	2937	2528	1242	342	413	499
(WY)	1985	1995	1983	1993	1989	1973	1957	1990	1974	1961	1958	1970
MIN	.000	.000	5.86	7.03	47.9	125	120	67.1	14.0	.76	.000	.000
(WY)	1954	1954	1990	1964	1963	1967	1963	1988	1977	1985	1980	1954

ARKANSAS RIVER BASIN

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07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER--CONTINUED

SUMMARY STATISTICS

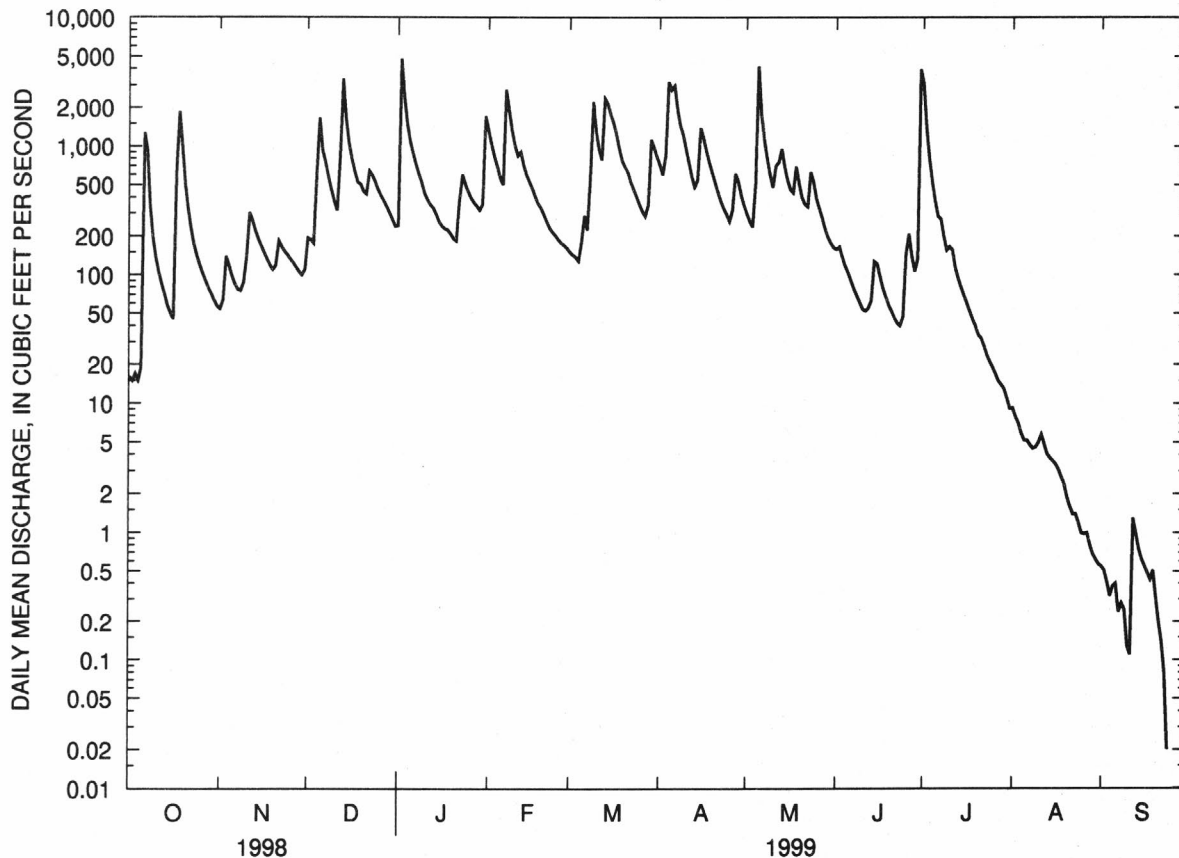
FOR 1999 WATER YEAR

WATER YEARS 1951-95, 1999

ANNUAL TOTAL	161695.58			
ANNUAL MEAN	443		419	
HIGHEST ANNUAL MEAN			823	1973
LOWEST ANNUAL MEAN			141	1963
HIGHEST DAILY MEAN	4790	Jan 2	43500	Dec 3 1982
LOWEST DAILY MEAN	.00	Sep 25	.00	Oct 2 1952
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 24	.00	Sep 12 1953
INSTANTANEOUS PEAK FLOW	11300	Jun 30	^a 111000	Dec 3 1982
INSTANTANEOUS PEAK STAGE	10.03	Jun 30	^b 33.87	Dec 3 1982
INSTANTANEOUS LOW FLOW	.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	320700		303700	
10 PERCENT EXCEEDS	1070		996	
50 PERCENT EXCEEDS	215		128	
90 PERCENT EXCEEDS	1.1		3.0	

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

^bAt site and datum then in use



ARKANSAS RIVER BASIN

07260500 PETIT JEAN RIVER AT DANVILLE

LOCATION.--Lat 35°03'33", long 93°23'44", in NW1/4SE1/4 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 mi².

PERIOD OF RECORD.--June 1916 to current year. Prior to October 1965, published as "Petit Jean Creek at Danville."

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 303.33 ft above sea level. June 1, 1916, to Aug. 24, 1934, nonrecording gage on railroad bridge 0.3 mi downstream at datum 0.25 ft higher. Aug. 25, 1934, to July 12, 1939, nonrecording gage at present site and datum. Since June 18, 1954, auxiliary water-stage recorder 2.2 mi downstream.

REMARKS.--Records good except estimated daily discharges, which are poor. 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 mi² 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	44	117	392	774	150	2310	1290	2100	755	43	17
2	92	48	113	2370	1780	94	2170	1220	1500	890	40	28
3	63	46	152	e2400	2320	50	2180	1170	1830	1170	45	30
4	18	86	790	970	2100	43	3160	785	1690	1190	48	24
5	27	116	e2100	1310	1700	43	2710	1110	1290	1170	41	15
6	2200	113	e1000	1480	817	45	2060	874	1180	1140	47	12
7	e3400	113	705	1350	1150	44	1170	1280	1080	1060	44	14
8	e1800	115	874	1240	1300	104	1390	1300	316	421	26	77
9	1010	135	836	892	1230	901	2040	1230	164	348	26	16
10	1140	283	779	763	2020	576	2240	1210	151	223	18	7.3
11	1120	505	737	719	1990	342	2160	1430	151	203	6.5	21
12	1090	346	1310	504	1480	315	2010	2600	484	220	1.2	32
13	1070	704	3410	423	1030	e3000	1870	3780	630	520	.68	26
14	1160	750	e2000	401	885	7150	1900	1350	670	548	.62	21
15	1160	698	760	377	515	e4900	1870	1590	896	521	.60	24
16	1130	493	1410	259	362	e2500	1310	1570	813	308	.58	25
17	524	439	1750	179	322	960	1610	1600	465	236	.55	28
18	345	297	1550	152	302	1870	1740	2320	393	213	.53	22
19	346	140	1800	143	288	2230	1570	1730	256	203	5.3	15
20	455	83	1750	144	273	2520	1140	1880	205	74	12	14
21	463	80	1490	138	262	2400	767	2220	194	16	11	13
22	443	72	1490	154	249	2200	453	2020	147	13	5.4	13
23	274	64	1290	185	246	2140	239	2490	83	11	11	11
24	236	61	897	167	236	2090	209	1320	32	10	15	10
25	225	56	794	152	180	1980	307	1940	29	9.4	15	9.6
26	141	81	763	402	165	1840	356	2210	29	9.0	4.5	11
27	84	105	734	441	161	1260	936	2390	34	9.1	11	9.7
28	55	103	706	435	156	1170	834	2400	64	17	12	8.2
29	51	102	676	435	---	1140	1300	2400	489	17	13	3.5
30	49	112	634	646	---	2280	1370	e2700	617	27	11	5.1
31	47	---	399	1010	---	2480	---	e2600	---	50	10	---
TOTAL	20309	6390	33816	20633	24293	48817	45381	56009	17982	11601.5	525.46	562.4
MEAN	655	213	1091	666	868	1575	1513	1807	599	374	17.0	18.7
MAX	3400	750	3410	2400	2320	7150	3160	3780	2100	1190	48	77
MIN	18	44	113	138	156	43	209	785	29	9.0	.53	3.5
AC-FT	40280	12670	67070	40930	48190	96830	90010	111100	35670	23010	1040	1120

ARKANSAS RIVER BASIN

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07260500 PETIT JEAN RIVER AT DANVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

MEAN	193	597	1187	1172	1309	1493	1369	1442	750	328	178	108
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	6.79
(WY)	1947	1996	1966	1964	1967	1967	1963	1977	1966	1985	1947	1982

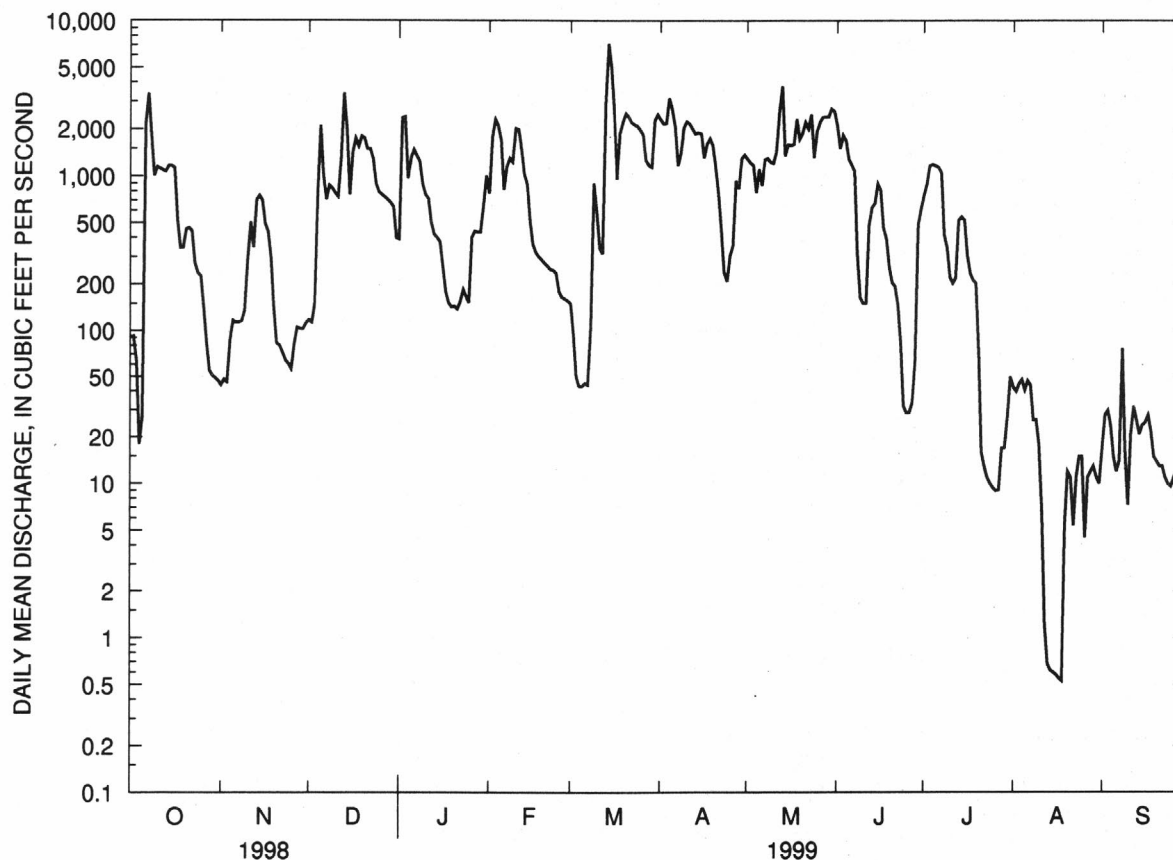
SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1947 - 1999	
ANNUAL TOTAL	406724.63		286319.36			
ANNUAL MEAN	1114		784		^a 842	
HIGHEST ANNUAL MEAN					1920	
LOWEST ANNUAL MEAN					187	
HIGHEST DAILY MEAN	11600	Jan 6	7150	Mar 14	26400	Dec 3 1982
LOWEST DAILY MEAN	.62	Sep 12	.53	Aug 18	.00	Aug 11 1956
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 28	.68	Aug 12	.13	Nov 2 1988
INSTANTANEOUS PEAK FLOW			7820	Mar 14	^b 47500	Dec 3 1982
INSTANTANEOUS PEAK STAGE			21.82	Mar 14	^c 29.36	Dec 3 1982
INSTANTANEOUS LOW FLOW			.51	Aug 18	.00	at times
ANNUAL RUNOFF (AC-FT)	806700		567900		609900	
10 PERCENT EXCEEDS	3230		2100		2540	
50 PERCENT EXCEEDS	346		423		186	
90 PERCENT EXCEEDS	5.9		13		11	

^aPrior to regulation, water years 1917-46, 845 ft³/s

^bMaximum discharge for period of record, 70,800 ft³/s, Apr. 17, 1939

^cMaximum gage height for period of record, 31.82 ft, Apr. 17, 1939

^eEstimated



ARKANSAS RIVER BASIN

07261000 CADRON CREEK NEAR GUY

LOCATION.--Lat 35°17'56", long 92°24'10", 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 mi².

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as "North Fork Cadron Creek near Guy."

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 371.68 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	e3.5	8.7	73	670	74	123	147	23	160	.30	.00
2	.37	e3.0	8.3	2170	515	69	114	121	27	100	.18	.00
3	.72	2.4	8.9	1200	400	69	117	102	23	65	.16	.00
4	.51	3.0	16	572	320	63	475	97	20	46	.10	.00
5	.39	2.6	23	374	256	60	1160	353	17	35	.04	.00
6	13	2.3	55	291	228	60	1150	219	14	26	.02	.00
7	7.0	2.3	55	248	317	60	780	136	12	21	.03	.00
8	8.4	3.0	46	209	328	74	565	101	9.6	27	.05	.00
9	11	e4.0	40	187	262	251	553	84	7.6	19	.05	.00
10	8.5	e5.0	36	155	231	246	459	75	6.1	15	.03	.00
11	8.1	e7.0	33	136	220	198	363	66	5.0	76	.00	.00
12	5.7	e10	31	127	330	173	279	60	4.3	63	.00	.00
13	4.3	e15	29	121	281	1060	228	55	8.2	38	.00	.00
14	3.3	e13	28	109	233	1500	253	49	8.8	27	.00	.00
15	2.6	e12	28	97	208	1070	1520	44	11	19	.00	.00
16	2.2	e11	26	92	188	727	950	39	12	14	.00	.00
17	2.4	e10	24	89	167	546	629	47	8.6	12	.00	.00
18	5.1	9.0	22	85	149	425	473	252	7.0	9.0	.00	.00
19	16	7.7	22	86	144	336	373	127	5.6	6.7	.00	.00
20	50	7.2	22	80	134	309	300	77	4.4	5.1	.00	.00
21	31	6.4	35	89	116	314	246	62	3.7	4.1	.00	.00
22	22	6.3	302	1140	102	252	200	60	3.3	3.2	.00	.00
23	16	6.2	215	1180	96	217	170	58	3.0	2.7	.00	.00
24	12	6.3	139	677	92	195	148	51	7.1	2.4	.00	.00
25	10	6.5	102	485	86	171	140	44	85	2.1	.00	.00
26	e9.0	6.6	85	373	83	149	183	38	37	1.7	.00	.00
27	e8.0	6.9	76	309	81	133	498	34	83	1.7	.00	.00
28	e7.0	6.5	69	259	79	125	320	31	54	1.0	.00	.00
29	e6.0	6.3	63	255	---	147	229	27	37	.59	.00	.00
30	e5.0	8.4	58	426	---	160	181	24	89	.49	.00	.00
31	e4.0	---	52	855	---	131	---	24	---	.37	.00	---
TOTAL	280.02	199.4	1757.9	12549	6316	9364	13179	2704	636.3	804.15	0.96	0.00
MEAN	9.03	6.65	56.7	405	226	302	439	87.2	21.2	25.9	.031	.000
MAX	50	15	302	2170	670	1500	1520	353	89	160	.30	.00
MIN	.37	2.3	8.3	73	79	60	114	24	3.0	.37	.00	.00
AC-FT	555	396	3490	24890	12530	18570	26140	5360	1260	1600	1.9	.00
CFSM	.05	.04	.34	2.40	1.33	1.79	2.60	.52	.13	.15	.00	.00
IN.	.06	.04	.39	2.76	1.39	2.06	2.90	.60	.14	.18	.00	.00

ARKANSAS RIVER BASIN
07261000 CADRON CREEK NEAR GUY--CONTINUED

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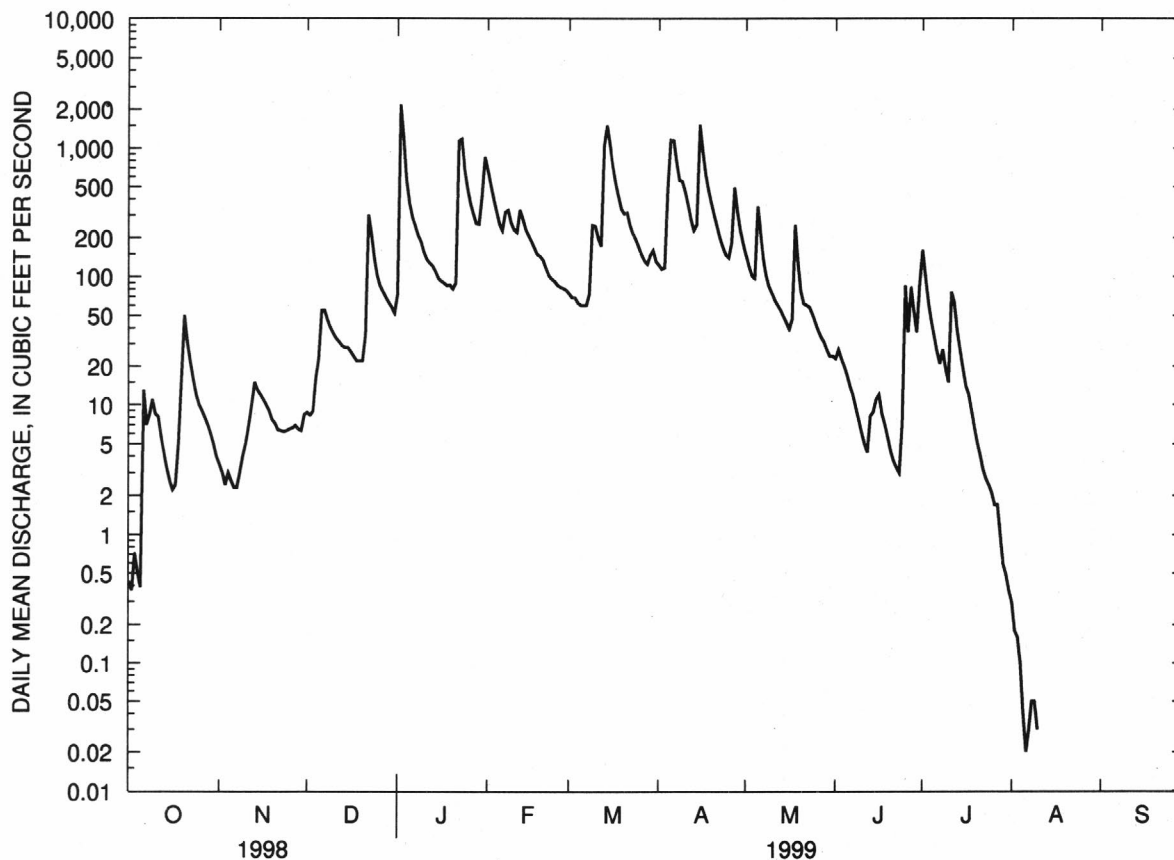
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1999, BY WATER YEAR (WY)

MEAN	76.2	284	419	393	471	560	479	374	141	39.3	43.1	55.6
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	.000	.000	6.97	21.0	49.6	91.8	81.1	33.4	5.25	.78	.000	.000
(WY)	1955	1955	1955	1955	1963	1972	1960	1988	1988	1998	1999	1999

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1955 - 1999

ANNUAL TOTAL	63283.76			47790.73								
ANNUAL MEAN	173			131						277		
HIGHEST ANNUAL MEAN										566		1973
LOWEST ANNUAL MEAN										120		1996
HIGHEST DAILY MEAN	5380	Mar 8		2170	Jan 2				14800	Dec 4	1982	
LOWEST DAILY MEAN	.00	Jul 1		.00	Aug 11				.00	Oct 1	1954	
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 16		.00	Aug 11				.00	Oct 1	1954	
INSTANTANEOUS PEAK FLOW				3850	Jan 2				24200	Dec 4	1982	
INSTANTANEOUS PEAK STAGE				9.92	Jan 2				29.29	Dec 4	1982	
INSTANTANEOUS LOW FLOW				.00	at times				.00	at times		
ANNUAL RUNOFF (AC-FT)	125500			94790					200600			
ANNUAL RUNOFF (CFSM)	1.03			.77					1.64			
ANNUAL RUNOFF (INCHES)	13.93			10.52					22.26			
10 PERCENT EXCEEDS	472			332					659			
50 PERCENT EXCEEDS	18			29					91			
90 PERCENT EXCEEDS	.00			.00					1.3			

^eEstimated



ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION

LOCATION.--Lat 34°52'33, 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 386.45 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good, except for those below 2.0 ft³/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.5	7.7	272	220	11	44	49	29	3.6	.00	.00
2	.00	3.0	6.8	2020	156	9.8	38	37	42	5.7	.00	.00
3	.00	3.0	7.6	462	115	8.4	115	29	38	3.2	.00	.00
4	.00	3.3	45	236	87	7.5	367	37	21	1.6	.00	.00
5	.00	3.0	130	177	68	7.1	310	67	14	.82	.00	.00
6	356	3.1	77	113	60	7.2	219	37	9.1	.56	.00	.00
7	86	4.0	55	88	193	6.1	142	24	5.8	.59	.00	.00
8	34	5.9	38	73	140	20	105	17	3.9	.78	.00	.00
9	18	6.0	29	60	107	43	85	13	2.7	.36	.00	.00
10	10	21	25	49	87	32	63	10	1.9	.33	.00	.00
11	6.2	34	24	42	78	25	49	10	1.9	96	.00	.00
12	3.3	27	37	39	70	47	36	12	1.5	42	.00	.00
13	1.8	21	82	35	55	1290	30	9.8	6.6	20	.00	.03
14	1.2	17	70	29	48	580	137	7.4	5.2	9.6	.00	.00
15	.92	14	52	25	44	318	259	5.6	2.7	5.1	.00	.00
16	35	12	40	24	40	198	140	4.5	2.1	2.7	.00	.00
17	66	9.3	32	22	35	133	93	125	1.5	1.4	.00	.00
18	239	8.2	27	19	31	95	68	255	1.2	4.3	.00	.00
19	125	7.4	83	17	27	72	60	87	.89	3.0	.00	.00
20	60	9.2	75	15	24	75	52	48	.73	1.1	.00	.00
21	40	8.3	380	47	20	64	32	72	.54	.74	.00	.00
22	27	7.6	424	286	17	51	25	83	.43	.49	.00	.00
23	18	7.5	197	223	16	46	20	169	.35	.22	.00	.00
24	13	6.9	122	135	16	41	28	82	.33	.09	.00	.00
25	9.2	5.9	89	98	14	36	47	52	2.1	.06	.00	.00
26	6.6	4.6	70	75	14	30	313	38	6.9	.00	.00	.00
27	5.2	4.6	57	63	14	26	333	27	1.7	.00	.00	.00
28	4.0	4.2	47	52	12	24	160	19	.82	.00	.00	.00
29	3.2	4.1	38	67	---	55	97	14	1.7	.00	.00	.00
30	4.4	6.3	31	417	---	54	68	13	5.6	.00	.00	.00
31	3.3	---	26	362	---	48	---	22	---	.00	.00	---
TOTAL	1176.32	273.9	2424.1	5642	1808	3460.1	3535	1475.3	212.19	204.34	0.00	0.03
MEAN	37.9	9.13	78.2	182	64.6	112	118	47.6	7.07	6.59	.000	.001
MAX	356	34	424	2020	220	1290	367	255	42	96	.00	.03
MIN	.00	2.5	6.8	15	12	6.1	20	4.5	.33	.00	.00	.00
AC-FT	2330	543	4810	11190	3590	6860	7010	2930	421	405	.00	.06
CFSM	.82	.20	1.70	3.95	1.40	2.42	2.56	1.03	.15	.14	.00	.00
IN.	.95	.22	1.96	4.55	1.46	2.79	2.85	1.19	.17	.16	.00	.00

ARKANSAS RIVER BASIN

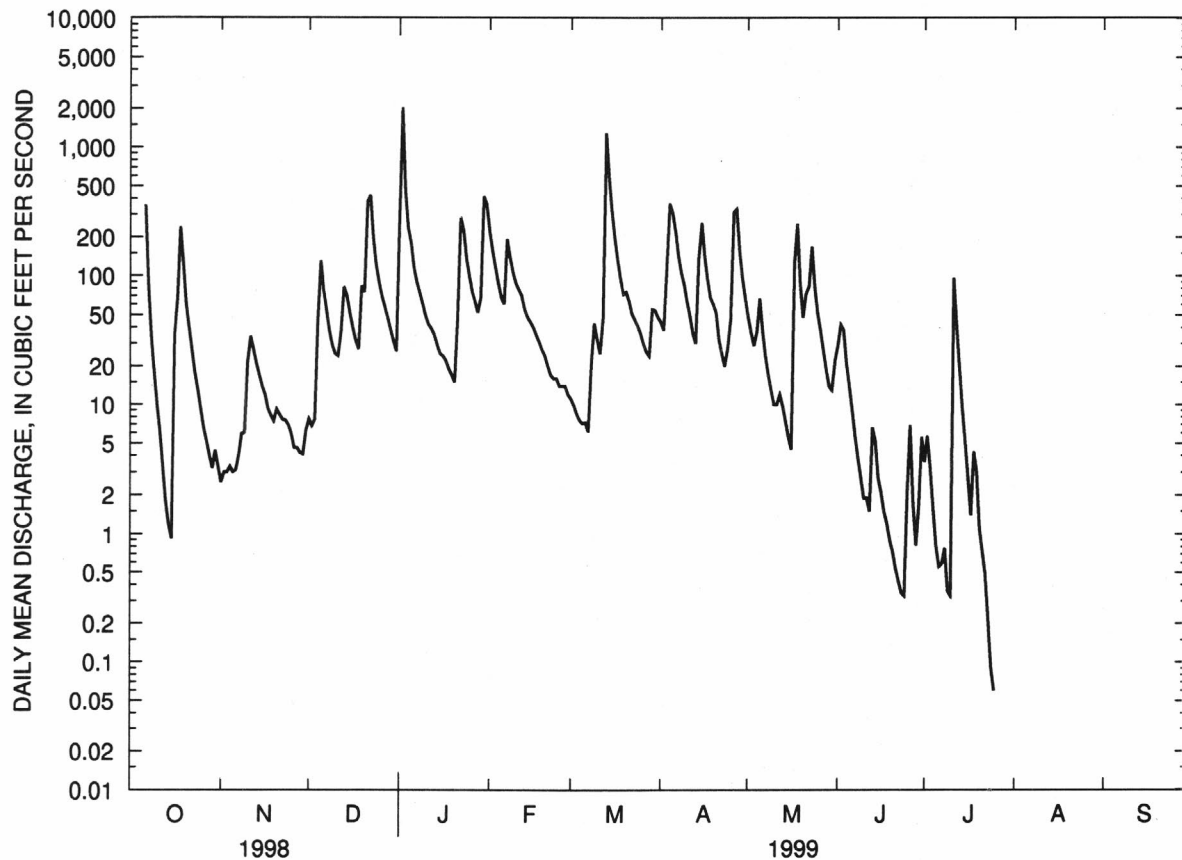
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07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	24.2	65.3	116	123	106	129	121	69.5	19.1	9.60	2.16	2.36
MAX	85.9	265	222	228	248	256	247	257	56.4	47.3	12.9	10.7
(WY)	1991	1997	1992	1991	1998	1990	1991	1990	1996	1994	1992	1991
MIN	.000	3.97	3.53	44.6	13.9	39.4	8.26	1.20	.68	.016	.000	.000
(WY)	1993	1990	1990	1996	1996	1996	1992	1992	1998	1990	1990	1993

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1989 - 1999
ANNUAL TOTAL	24791.53	20211.28	
ANNUAL MEAN	67.9	55.4	66.4
HIGHEST ANNUAL MEAN			91.9 1990
LOWEST ANNUAL MEAN			23.8 1996
HIGHEST DAILY MEAN	2470 Feb 11	2020 Jan 2	2620 Dec 3 1993
LOWEST DAILY MEAN	.00 May 24	.00 Oct 1	.00 Jul 4 1990
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 16	.00 Jul 26	.00 Jul 4 1990
INSTANTANEOUS PEAK FLOW		3670 Jan 2	6450 Dec 3 1993
INSTANTANEOUS PEAK STAGE		9.44 Jan 2	12.19 Dec 3 1993
INSTANTANEOUS LOW FLOW		.00 Jan 1	.00 Jan 1 1990
ANNUAL RUNOFF (AC-FT)	49170	40090	48100
ANNUAL RUNOFF (CFSM)	1.47	1.20	1.44
ANNUAL RUNOFF (INCHES)	20.01	16.31	19.57
10 PERCENT EXCEEDS	175	131	151
50 PERCENT EXCEEDS	10	14	13
90 PERCENT EXCEEDS	.00	.00	.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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
NOV 10...	1030	80513	81213	5.0	27	6.2	752	11.8	30	4.5	8.4	79	
DEC 02...	1030	80513	80020	4.8	--	--	760	12.7	--	--	6.2	--	
21...	2335	80513	81213	780	22	6.0	769	9.0	70	46	10.9	93	
FEB 09...	0915	80513	81213	105	19	6.7	761	12.3	20	4.8	10.1	94	
MAR 13...	0905	80513	80020	1550	50	6.0	749	8.0	70	28	11.0	95	
MAY 06...	0845	80513	81213	38	33	6.3	757	18.2	30	6.2	7.9	84	
		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	
NOV 10...	93	160	9	1.4	1.4	1.4	23	.2	.80	8	2.2	2.5	
DEC 02...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	K620	5800	7	1.1	1.0	1.2	25	.2	.70	4	3.2	1.6	
FEB 09...	25	26	6	.90	.90	1.3	30	.2	.40	5	2.7	1.8	
MAR 13...	1500	380	6	.91	.83	1.0	25	.2	.63	2	2.4	1.1	
MAY 06...	K210	490	8	1.2	1.1	1.6	29	.3	.70	6	2.4	1.8	
		FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
NOV 10...	<.10	6.6	26	21	.04	.35	.027	.12	.003	.01	.030	.007	
DEC 02...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	<.10	6.0	32	17	.04	67.4	.027	.12	.003	.01	.030	.020	
FEB 09...	<.10	6.7	20	18	.03	5.67	.003	.01	.002	.01	.005	.008	
MAR 13...	<.10	4.5	30	13	.04	126	.037	.16	.001	.00	.038	<.002	
MAY 06...	<.10	6.5	25	19	.03	2.57	.012	.05	.004	.01	.016	.026	
		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
NOV 10...	.01	--	<.20	--	.012	<.001	--	1.3	1.3	--	190	530	
DEC 02...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	.03	.57	.59	.62	.040	<.001	--	5.1	5.0	--	130	1400	
FEB 09...	.01	--	<.20	--	.006	<.001	--	1.1	.70	--	65	160	
MAR 13...	--	--	.43	.47	.045	.001	.00	9.2	5.4	1.8	230	--	
MAY 06...	.03	.22	.25	.27	.032	.008	.02	2.4	2.1	--	210	480	

ARKANSAS RIVER BASIN

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07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	MANGA-NESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DIAZ-INON, D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE, DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)
NOV 10...	22	14	<.10	11	.15	--	--	--	--	--	--	--
DEC 02...	--	--	--	--	--	.008	<.002	146	<.001	126	<.004	<.005
21...	84	24	<.10	78	164	--	--	--	--	--	--	--
FEB 09...	7	4.9	<.10	8	2.3	--	--	--	--	--	--	--
MAR 13...	--	28	<.10	68	285	--	--	--	--	--	--	--
MAY 06...	17	11	<.10	13	1.3	--	--	--	--	--	--	--
DATE	METO-LACHLOR, WATER DISSOLV (UG/L) (39415)	PARA-THION, DIS-SOLVED (UG/L) (39542)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,4,5-T, DIS-SOLVED (UG/L) (39742)	SILVEX, DIS-SOLVED (UG/L) (39762)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL, ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
DEC 02...	<.002	<.004	<.240	<.0350	<.0210	<.0020	<.002	<.0140	<.0020	<.0040	<.0040	E.0100
DATE	FONOFOS, WATER DISS, REC (UG/L) (04095)	P, P' DDE, DISSOLV (UG/L) (34653)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	METRI-BUZIN, SENCOR, WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL, ANILINE, WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE, WATER, FLTRD, GF, REC (UG/L) (82664)	TER-BACIL, WATER, FLTRD, GF, REC (UG/L) (82665)	LIN-URON, WATER, FLTRD, GF, REC (UG/L) (82666)
DEC 02...	<.0030	<.0060	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
DATE	METHYL, PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC, WATER, FLTRD, GF, REC (UG/L) (82668)	PEB-ULATE, WATER, FLTRD, GF, REC (UG/L) (82669)	TEBU-THIURON, WATER, FLTRD, GF, REC (UG/L) (82670)	MOL-INATE, WATER, FLTRD, GF, REC (UG/L) (82671)	ETHO-PROP, WATER, FLTRD, GF, REC (UG/L) (82672)	BEN-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82673)	CARBO-FURAN, WATER, FLTRD, GF, REC (UG/L) (82674)	TER-BUFOS, WATER, FLTRD, GF, REC (UG/L) (82675)	TERBUTH, YLAZINE, SURROGT, WAT FLT 0.7 U PERCENT (91064)	PRON-AMIDE, WATER, FLTRD, GF, REC (UG/L) (82676)	DISUL-FOTON, WATER, FLTRD, GF, REC (UG/L) (82677)
DEC 02...	<.0060	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	125	<.0030	<.0170
DATE	TRIAL-LATE, WATER, FLTRD, GF, REC (UG/L) (82678)	PRO-PANIL, WATER, FLTRD, GF, REC (UG/L) (82679)	CAR-BARYL, WATER, FLTRD, GF, REC (UG/L) (82680)	THIO-BENCARB, WATER, FLTRD, GF, REC (UG/L) (82681)	DCPA, WATER, FLTRD, GF, REC (UG/L) (82682)	PENDI-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE, WATER, FLTRD, GF, REC (UG/L) (82684)	PRO-PARGITE, WATER, FLTRD, GF, REC (UG/L) (82685)	METHYL, AZIN-PHOS, WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN, CIS, WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO-CHLOR, WATER, FLTRD, REC (UG/L) (49260)	ACIFL-UORFEN, WATER, FLTRD, GF, REC (UG/L) (49315)
DEC 02...	<.0010	<.0040	E.0104	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020	<.0350
DATE	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)	CHLOR-AMBN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	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)	CHLORO-THALO-NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DNOC, WAT, FLT GF 0.7U REC (UG/L) (49299)	DACTHAL, MONO-ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)
DEC 02...	<.100	<.0210	<.550	<.420	<.0350	<.0350	<.0080	<.120	<.480	<.230	<.420	<.0170

ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR- 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)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	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)
DEC 02...	<.0350	<1.20	<.0320	<.0350	<.0200	<.0130	<.0350	<.0140	<.0180	<.170	<.140
DATE	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)	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)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	2,4-D, DIS- SOLVED (UG/L) (39732)
DEC 02...	<.0260	<.0170	<.0150	<.0240	<.310	<.0180	<.0500	<.0350	<.0350	<.250	<.150

ARKANSAS RIVER BASIN

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07263297 LAKE MAUMELLE EAST OF HWY 10 BRIDGE NEAR WYE

LOCATION.--Lat 34°52'31", long 92°38'53", in SW1/4NW1/4 sec.30, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, downstream from bridge on State Highway 10, 4.3 mi south of Wye.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV												
11...	1030	80513	80513	--	14.0	--	--	769	1.90	--	--	--
11...	1040	80513	80513	.00	14.0	23	6.4	769	--	15.2	9.5	94
11...	1041	80513	80513	5.00	14.0	23	6.4	769	--	14.7	9.4	92
11...	1042	80513	80513	10.0	14.0	23	6.3	769	--	14.1	9.2	88
11...	1043	80513	80513	14.0	14.0	23	6.2	769	--	13.7	8.9	85
11...	1045	80513	81213	--	14.0	--	--	769	--	--	--	--
FEB												
09...	1130	80513	80513	--	20.0	--	--	764	.58	--	--	--
09...	1131	80513	80513	.00	20.0	22	E6.9	764	--	12.9	10.0	95
09...	1132	80513	80513	5.00	20.0	22	E6.8	764	--	10.8	10.0	90
09...	1133	80513	80513	10.0	20.0	22	E6.8	764	--	9.5	9.9	87
09...	1134	80513	80513	15.0	20.0	21	E6.8	764	--	10.3	9.8	87
09...	1135	80513	80513	20.0	20.0	21	E6.8	764	--	10.1	9.8	87
09...	1140	80513	81213	--	20.0	--	--	764	--	--	--	--
MAY												
06...	1115	80513	80513	--	17.0	--	--	760	.98	--	--	--
06...	1120	80513	80513	.00	17.0	23	6.3	760	--	19.9	8.2	90
06...	1121	80513	80513	5.00	17.0	23	6.3	760	--	19.3	7.4	81
06...	1122	80513	80513	10.0	17.0	24	6.2	760	--	19.2	6.9	75
06...	1123	80513	80513	15.0	17.0	24	6.2	760	--	18.8	6.0	65
06...	1124	80513	80513	17.0	17.0	25	6.0	760	--	18.4	5.3	57
06...	1125	80513	81213	--	17.0	--	--	760	--	--	--	--
AUG												
17...	1030	80513	80513	--	15.0	--	--	769	1.20	--	--	--
17...	1049	80513	80513	.00	15.0	26	6.5	769	--	30.5	7.2	96
17...	1050	80513	80513	5.00	15.0	26	6.5	769	--	29.8	7.1	92
17...	1051	80513	80513	10.0	15.0	27	6.5	769	--	29.4	6.6	86
17...	1053	80513	80513	15.0	15.0	27	6.4	769	--	28.7	6.0	77
17...	1100	80513	81213	--	15.0	--	--	769	--	--	--	--

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FIELD MG/L AS CAC03 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV									
11...	1045	.00	12	5	2.2	K6	K8	5	20
FEB									
09...	1140	.00	18	40	7.7	K10	160	5	18
MAY									
06...	1125	.00	15	20	2.7	44	E49	6	21
AUG									
17...	1100	.00	15	10	2.8	K18	K16	5	18

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV									
11...	--	--	.001	.00	<.002	.006	.01	--	<.20
FEB									
09...	.030	.13	.002	.01	.032	.016	.02	.23	.25
MAY									
06...	.005	.02	.003	.01	.008	.036	.05	.22	.26
AUG									
17...	--	--	.001	.00	<.002	.004	.01	.25	.25

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC SOLVED (MG/L AS C) (00681)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	CHLOR-A PHYTO- PLANK- TON CHROMO- FLUOROM (UG/L) (70953)
NOV								
11...	--	.014	<.001	1.2	1.1	140	30	4.70
FEB								
09...	.28	.017	--	2.2	1.7	280	30	.700
MAY								
06...	.27	.026	<.001	2.9	2.6	480	86	5.10
AUG								
17...	--	.017	<.001	2.4	2.4	220	71	5.90

ARKANSAS RIVER BASIN

07263299 LAKE MAUMELLE NEAR LITTLE ITALY

LOCATION.--Lat 34°43'34", long 92°34'34", in SW1/4NW1/4 sec.26, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, on Lake Maumelle 4.0 mi southwest of Little Italy.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	SAM- PLING DEPTH (FEET) (000003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (000078)	TEMPER- ATURE WATER (DEG C) (000010)	OXYGEN, DIS- SOLVED (MG/L) (000300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV												
11...	0945	80513	80513	--	40.0	--	--	770	1.80	--	--	--
11...	0958	80513	80513	.00	40.0	24	6.2	770	--	16.4	8.7	88
11...	0959	80513	80513	5.00	40.0	24	6.2	770	--	16.3	8.4	85
11...	1000	80513	80513	10.0	40.0	24	6.2	770	--	16.3	8.4	85
11...	1001	80513	80513	15.0	40.0	24	6.1	770	--	16.3	8.3	84
11...	1002	80513	80513	20.0	40.0	24	6.2	770	--	16.3	8.3	84
11...	1003	80513	80513	25.0	40.0	24	6.2	770	--	16.3	8.3	84
11...	1004	80513	80513	30.0	40.0	24	6.2	770	--	16.3	8.3	84
11...	1005	80513	80513	35.0	40.0	24	6.1	770	--	16.3	8.3	83
11...	1006	80513	80513	40.0	40.0	24	6.1	770	--	16.3	8.2	83
11...	1015	80513	81213	--	40.0	--	--	770	--	--	--	--
FEB												
09...	1055	80513	80513	--	45.0	--	--	764	1.20	--	--	--
09...	1056	80513	80513	.00	45.0	21	E7.1	764	--	11.6	11.0	101
09...	1057	80513	80513	5.00	45.0	21	E7.1	764	--	10.9	11.1	100
09...	1058	80513	80513	10.0	45.0	21	E7.0	764	--	10.5	10.9	97
09...	1059	80513	80513	15.0	45.0	21	E7.0	764	--	9.8	10.9	95
09...	1100	80513	80513	20.0	45.0	21	E7.0	764	--	9.6	10.8	94
09...	1101	80513	80513	25.0	45.0	21	E6.9	764	--	9.2	10.6	92
09...	1102	80513	80513	30.0	45.0	21	E6.9	764	--	9.1	10.5	91
09...	1103	80513	80513	35.0	45.0	21	E6.9	764	--	9.1	10.4	90
09...	1104	80513	80513	40.0	45.0	21	E6.9	764	--	9.0	10.4	90
09...	1105	80513	80513	45.0	45.0	21	E6.9	764	--	9.0	10.4	89
09...	1110	80513	81213	--	45.0	--	--	764	--	--	--	--
MAY												
06...	1035	80513	80513	--	44.0	--	--	760	2.20	--	--	--
06...	1040	80513	80513	.00	44.0	23	6.8	760	--	20.1	9.3	103
06...	1041	80513	80513	5.00	44.0	23	6.8	760	--	20.0	9.3	103
06...	1042	80513	80513	10.0	44.0	23	6.8	760	--	20.0	9.3	102
06...	1043	80513	80513	15.0	44.0	23	6.8	760	--	19.9	9.3	102
06...	1044	80513	80513	18.0	44.0	23	6.6	760	--	18.8	8.8	95
06...	1045	80513	80513	20.0	44.0	23	6.4	760	--	17.4	7.8	82
06...	1046	80513	80513	25.0	44.0	23	6.2	760	--	16.0	6.8	69
06...	1047	80513	80513	30.0	44.0	23	6.1	760	--	15.9	6.4	65
06...	1048	80513	80513	35.0	44.0	24	6.0	760	--	15.9	6.0	61
06...	1049	80513	80513	40.0	44.0	24	6.0	760	--	15.9	5.9	60
06...	1050	80513	80513	44.0	44.0	24	6.0	760	--	15.9	5.8	59
06...	1055	80513	81213	--	44.0	--	--	760	--	--	--	--
AUG												
17...	0945	80513	80513	--	40.0	--	--	769	2.40	--	--	--
17...	0954	80513	80513	.00	40.0	26	6.6	769	--	29.7	7.3	96
17...	0956	80513	80513	5.00	40.0	26	6.6	769	--	29.5	7.2	94
17...	0957	80513	80513	10.0	40.0	26	6.6	769	--	29.5	7.2	93
17...	0959	80513	80513	15.0	40.0	26	6.7	769	--	29.4	7.1	93
17...	1001	80513	80513	20.0	40.0	26	6.7	769	--	29.4	7.2	93
17...	1002	80513	80513	22.0	40.0	26	6.6	769	--	29.3	6.7	86
17...	1003	80513	80513	23.0	40.0	31	6.4	769	--	27.8	1.6	21
17...	1004	80513	80513	24.0	40.0	50	6.2	769	--	23.4	.6	7
17...	1005	80513	80513	25.0	40.0	60	6.2	769	--	22.4	.2	2
17...	1007	80513	80513	28.0	40.0	74	6.2	769	--	20.9	.2	2
17...	1008	80513	80513	30.0	40.0	75	6.3	769	--	20.8	.2	2
17...	1009	80513	80513	35.0	40.0	75	6.3	769	--	20.5	.2	2
17...	1010	80513	80513	40.0	40.0	75	6.4	769	--	20.4	.2	2
17...	1015	80513	81213	--	40.0	--	--	769	--	--	--	--
17...	1020	80513	81213	--	40.0	--	--	769	--	--	--	--

ARKANSAS RIVER BASIN

225

07263299 LAKE MAUMELLE NEAR LITTLE ITALY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FET FIELD MG/L AS CAC03 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	
DATE	TIME									
NOV										
11...	1015	.00	39	5	2.4	K1	<1	7	22	
FEB										
09...	1110	.00	42	20	4.1	K4	K4	4	20	
MAY										
06...	1055	.00	42	10	1.1	2	E1	10	17	
AUG										
17...	1015	.00	21	10	1.2	<1	K6	6	24	
17...	1020	24	39	60	5.2	K1	K3	8	31	
DATE		NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV										
11...	.014	.06	.002	.01	.016	.066	.08	.16	.23	
FEB										
09...	.030	.13	.002	.01	.032	.025	.03	.23	.26	
MAY										
06...	.009	.04	.003	.01	.012	.025	.03	.23	.26	
AUG										
17...	.001	.00	.001	.00	.002	.006	.01	.20	.21	
17...	.001	.00	.001	.00	.002	.028	.04	.29	.32	
DATE		NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
NOV										
11...	.25	.014	<.001	--	1.1	1.0	230	100	6.20	
FEB										
09...	.29	.014	--	--	2.1	2.0	200	43	8.50	
MAY										
06...	.27	.013	<.001	--	2.7	2.5	130	41	4.80	
AUG										
17...	.21	.017	.002	.01	2.5	2.4	70	57	3.80	
17...	.32	.019	<.001	--	2.5	2.1	3100	1600	--	

ARKANSAS RIVER BASIN

072632995 LAKE MAUMELLE NEAR 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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
NOV													
11...	0850	80513	80513	--	43.0	--	--	770	1.50	--	--	--	
11...	0859	80513	80513	.00	43.0	25	6.2	770	--	16.2	8.7	87	
11...	0900	80513	80513	5.00	43.0	25	6.3	770	--	16.2	8.6	87	
11...	0901	80513	80513	10.0	43.0	25	6.2	770	--	16.2	8.5	86	
11...	0902	80513	80513	15.0	43.0	25	6.3	770	--	16.2	8.5	86	
11...	0903	80513	80513	20.0	43.0	25	6.2	770	--	16.3	8.5	86	
11...	0904	80513	80513	25.0	43.0	25	6.2	770	--	16.3	8.5	86	
11...	0905	80513	80513	30.0	43.0	25	6.2	770	--	16.3	8.5	85	
11...	0906	80513	80513	35.0	43.0	25	6.3	770	--	16.3	8.5	85	
11...	0907	80513	80513	40.0	43.0	25	6.3	770	--	16.2	8.5	85	
11...	0908	80513	80513	43.0	43.0	25	6.2	770	--	16.3	8.5	85	
11...	0910	80513	81213	--	43.0	--	--	770	--	--	--	--	
FEB													
09...	1015	80513	80513	--	49.0	--	--	764	1.40	--	--	--	
09...	1016	80513	80513	.00	49.0	21	E7.3	764	--	11.4	11.9	109	
09...	1017	80513	80513	5.00	49.0	21	E7.3	764	--	10.2	11.8	105	
09...	1018	80513	80513	10.0	49.0	21	E7.3	764	--	9.7	11.7	103	
09...	1019	80513	80513	15.0	49.0	21	E7.2	764	--	9.4	11.5	100	
09...	1020	80513	80513	20.0	49.0	21	E7.1	764	--	9.1	11.3	98	
09...	1021	80513	80513	25.0	49.0	21	E7.0	764	--	8.9	11.1	95	
09...	1022	80513	80513	30.0	49.0	21	E7.0	764	--	8.9	10.9	93	
09...	1023	80513	80513	35.0	49.0	21	E6.9	764	--	8.9	10.8	93	
09...	1024	80513	80513	40.0	49.0	21	E6.9	764	--	8.8	10.7	92	
09...	1025	80513	80513	45.0	49.0	21	E6.9	764	--	8.8	10.7	92	
09...	1026	80513	80513	49.0	49.0	21	E6.9	764	--	8.8	10.6	91	
09...	1030	80513	81213	--	49.0	--	--	764	--	--	--	--	
MAY													
06...	0940	80513	80513	--	45.0	--	--	760	2.10	--	--	--	
06...	0945	80513	80513	.00	45.0	23	6.5	760	--	19.3	9.3	101	
06...	0946	80513	80513	5.00	45.0	23	6.6	760	--	19.3	9.2	101	
06...	0947	80513	80513	10.0	45.0	23	6.7	760	--	19.3	9.2	100	
06...	0948	80513	80513	15.0	45.0	23	6.7	760	--	19.3	9.2	100	
06...	0949	80513	80513	20.0	45.0	23	6.7	760	--	19.2	9.1	99	
06...	0950	80513	80513	25.0	45.0	23	6.7	760	--	19.1	9.1	99	
06...	0951	80513	80513	27.0	45.0	23	6.4	760	--	18.5	8.5	91	
06...	0952	80513	80513	30.0	45.0	23	6.4	760	--	17.6	8.3	87	
06...	0953	80513	80513	35.0	45.0	24	6.3	760	--	16.3	7.6	78	
06...	0954	80513	80513	40.0	45.0	24	6.2	760	--	15.8	7.0	71	
06...	0955	80513	80513	45.0	45.0	27	6.2	760	--	15.3	6.0	60	
06...	1020	80513	81213	--	45.0	--	--	760	--	--	--	--	
AUG													
17...	0830	80513	80513	--	44.0	--	--	768	2.80	--	--	--	
17...	0839	80513	80513	.00	44.0	26	6.2	768	--	29.4	7.5	98	
17...	0840	80513	80513	5.00	44.0	26	6.3	768	--	29.4	7.5	97	
17...	0841	80513	80513	10.0	44.0	26	6.4	768	--	29.4	7.5	97	
17...	0843	80513	80513	15.0	44.0	26	6.0	768	--	29.4	7.5	97	
17...	0844	80513	80513	20.0	44.0	27	6.5	768	--	28.8	7.1	91	
17...	0845	80513	80513	21.0	44.0	28	6.3	768	--	27.7	2.5	32	
17...	0846	80513	80513	22.0	44.0	28	6.1	768	--	26.7	1.2	15	
17...	0847	80513	80513	23.0	44.0	30	6.0	768	--	25.1	.8	9	
17...	0848	80513	80513	24.0	44.0	41	5.9	768	--	23.4	.3	3	
17...	0849	80513	80513	25.0	44.0	50	5.9	768	--	22.2	.2	3	
17...	0850	80513	80513	26.0	44.0	58	6.1	768	--	21.6	.2	2	
17...	0851	80513	80513	30.0	44.0	70	6.1	768	--	20.5	.2	2	
17...	0852	80513	80513	35.0	44.0	76	6.2	768	--	20.0	.2	2	
17...	0853	80513	80513	40.0	44.0	77	6.3	768	--	19.8	.2	2	
17...	0854	80513	80513	44.0	44.0	78	6.4	768	--	19.7	.2	2	
17...	0900	80513	81213	--	44.0	--	--	768	--	--	--	--	
17...	0910	80513	81213	--	44.0	--	--	768	--	--	--	--	
DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)		
NOV													
11...	0910	.00	42	5	1.8	K4	K3	9	1.1	1.4	1.3		
FEB													
09...	1030	.00	48	10	1.4	K7	K5	7	.90	1.1	1.3		
MAY													
06...	1020	.00	45	10	1.4	<1	E2	7	1.1	1.1	1.4		
AUG													
17...	0900	.00	21	5	.96	<1	K6	8	1.1	1.2	1.4		
17...	0910	.21	42	40	3.5	<1	K4	10	1.5	1.4	1.4		

ARKANSAS RIVER BASIN

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072632995 LAKE MAUMELLE NEAR NATURAL STEPS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)
NOV 11...	23	.2	.60	7	2.6	2.0	<.10	3.1	18	16	.02
FEB 09...	27	.2	.60	5	3.4	1.9	<.10	.50	18	13	.02
MAY 06...	27	.2	.60	4	3.4	1.7	<.10	.90	18	13	.02
AUG 17...	26	.2	.60	5	2.9	1.8	<.10	2.1	18	14	.02
17...	23	.2	.70	8	2.2	1.8	<.10	4.4	26	21	.04

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, TOTAL ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + TOTAL ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
NOV 11...	.018	.08	.002	.01	.020	.080	.10	--	<.20	--	.015
FEB 09...	.005	.02	.002	.01	.007	.018	.02	.23	.25	.26	.012
MAY 06...	.007	.03	.002	.01	.009	.016	.02	--	<.20	--	.011
AUG 17...	.001	.00	.001	.00	.002	.004	.01	.21	.21	.21	.012
17...	.001	.00	.001	.00	.002	.062	.08	.26	.32	.32	.023

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, TOTAL ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, DIS- SOLVED (MG/L AS C) (00681)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
NOV 11...	<.001	--	1.7	1.1	9.9	180	140	.30	<.10	8.60
FEB 09...	<.001	--	2.0	1.6	15	130	47	7.7	<.10	16.0
MAY 06...	<.001	--	2.7	2.6	17	160	30	3.7	<.10	3.90
AUG 17...	<.001	--	2.7	2.5	3.1	30	24	.50	<.10	5.00
17...	.003	.01	3.1	2.5	1600	1900	1500	1500	<.10	--

ARKANSAS RIVER BASIN

07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS

LOCATION.--Lat 34°51'50, long 92°29'04", in SW1/4SE1/4 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	420	14	130	297	148	.00	.00	.00
2	.00	.00	.00	.00	427	14	121	244	179	.00	.00	.00
3	.00	.00	.00	.00	387	9.8	139	196	178	.00	.00	.00
4	.00	.00	.00	.00	341	1.7	305	168	167	.00	.00	.00
5	.00	.00	.00	.00	296	3.3	585	197	129	.00	.00	.00
6	.00	.00	.00	.00	276	5.0	695	190	100	.00	.00	.00
7	.00	.00	.00	.00	345	1.1	655	151	74	.00	.00	.00
8	.00	.00	.00	.00	359	8.9	592	103	54	.00	.00	.00
9	.00	.00	.00	.00	344	29	520	85	35	.00	.00	.00
10	.00	.00	.00	.00	315	17	435	67	23	.00	.00	.00
11	.00	.00	.00	.00	328	15	373	60	e20	.12	.00	.00
12	.00	.00	.00	.00	276	16	290	55	e12	1.5	.00	.00
13	.00	.00	.00	.00	207	518	228	43	e6.0	.00	.00	.00
14	.00	.00	.00	.00	181	895	296	23	e3.0	.00	.00	.00
15	.00	.00	.00	.00	160	896	788	12	e1.0	.00	.00	.00
16	.00	.00	.00	.00	139	813	717	11	e.00	.00	.00	.00
17	.00	.00	.00	.00	124	705	573	24	e.00	.00	.00	.00
18	.00	.00	.00	.00	105	594	447	92	.00	.00	.00	.00
19	.00	.00	.00	.00	99	483	387	96	.00	.00	.00	.00
20	.00	.00	.00	.00	82	435	312	86	.00	.00	.00	.00
21	.00	.00	.00	.00	71	382	262	118	.00	.00	.00	.00
22	.00	.00	.00	.00	50	304	209	158	.00	.00	.00	.00
23	.00	.00	.00	.00	63	276	183	180	.00	.00	.00	.00
24	.00	.00	.00	4.0	37	236	155	167	.00	.00	.00	.00
25	.00	.00	.00	17	31	205	158	131	.00	.00	.00	.00
26	.00	.00	.00	28	25	177	248	109	.00	.00	.00	.00
27	.00	.00	.00	41	34	136	502	88	.00	.00	.00	.00
28	.00	.00	.00	46	30	118	502	69	.00	.00	.00	.00
29	.00	.00	.00	78	---	145	437	52	2.8	.00	.00	.00
30	.00	.00	.00	175	---	155	360	56	.00	.00	.00	.00
31	.00	---	.00	374	---	141	---	132	---	.00	.00	---
TOTAL	0.00	0.00	0.00	763.00	5552	7748.8	11604	3460	1131.80	1.62	0.00	0.00
MEAN	.000	.000	.000	24.6	198	250	387	112	37.7	.052	.000	.000
MAX	.00	.00	.00	374	427	896	788	297	179	1.5	.00	.00
MIN	.00	.00	.00	.00	25	1.1	121	11	.00	.00	.00	.00
AC-FT	.00	.00	.00	1510	11010	15370	23020	6860	2240	3.2	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	.000	75.6	273	233	287	406	316	228	47.7	13.6	5.48	.000
MAX	.000	435	840	836	724	947	642	546	198	86.3	53.1	.000
(WY)	1990	1997	1992	1991	1998	1997	1991	1990	1992	1994	1992	1989
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1990	1990	1990	1996	1996	1996	1992	1998	1990	1990	1989

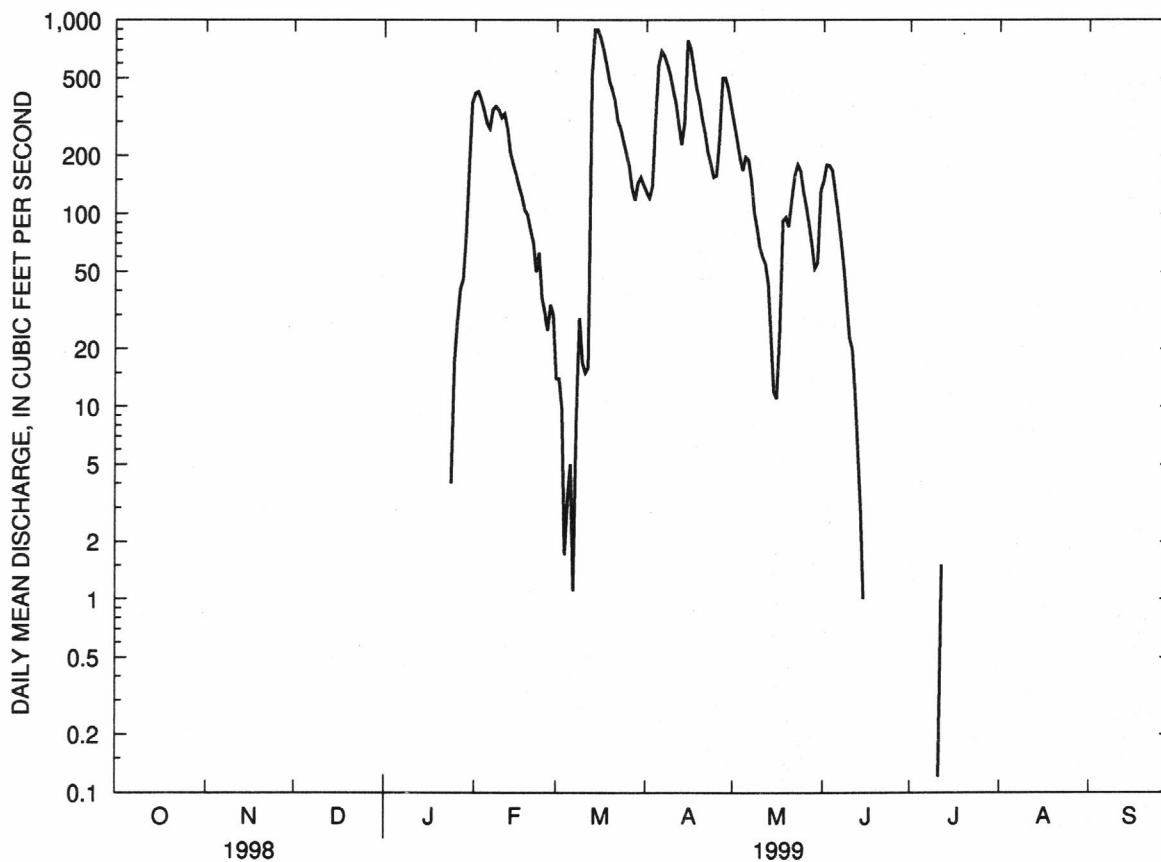
ARKANSAS RIVER BASIN

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07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS--CONTINUED

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1990 - 1999	
ANNUAL TOTAL	44179.71		30261.22			
ANNUAL MEAN	121		82.9		157	
HIGHEST ANNUAL MEAN					274	1997
LOWEST ANNUAL MEAN					13.9	1996
HIGHEST DAILY MEAN	2710	Feb 11	896	Mar 15	2970	Mar 8 1990
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Aug 17 1989
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Aug 17 1989
INSTANTANEOUS PEAK FLOW			972	Apr 15	3420	Mar 8 1990
INSTANTANEOUS PEAK STAGE			91.18	Apr 15	92.49	Mar 8 1990
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	87630		60020		113400	
10 PERCENT EXCEEDS	378		308		484	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

^eEstimated



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 mi², of which 22,241 mi² 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 sea level (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.--No estimated daily discharges. Records good except discharges below 10,000 ft³/s, 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19800	41000	76000	34700	88100	38100	96300	165000	159000	147000	33300	18700
2	42	46500	81500	50800	96000	33200	87500	153000	160000	177000	36200	13700
3	1240	64300	77100	70700	87300	22600	79600	154000	154000	184000	31600	8090
4	18400	81600	70200	69800	69000	29000	92100	156000	154000	178000	34200	2960
5	26800	91800	70500	48900	73500	25300	131000	162000	159000	152000	36300	5550
6	76400	121000	84000	46600	84000	22000	134000	170000	158000	130000	9190	5820
7	128000	133000	78800	27600	87400	24000	119000	176000	153000	129000	8390	6170
8	154000	133000	51800	38100	105000	28900	103000	180000	154000	133000	17200	8720
9	148000	130000	62800	48500	131000	33000	97200	170000	161000	126000	8280	7240
10	130000	139000	78300	37200	137000	64600	95700	161000	159000	129000	15600	6190
11	133000	142000	69300	29000	117000	52500	89200	160000	159000	137000	19300	1390
12	141000	144000	56700	17900	103000	53600	73700	166000	159000	140000	15400	3510
13	144000	146000	82200	23400	88200	80800	67900	178000	161000	134000	29500	3720
14	140000	149000	110000	28000	85100	134000	69600	182000	159000	133000	27700	4050
15	134000	141000	120000	23700	89900	172000	64700	176000	138000	132000	16900	8950
16	128000	143000	116000	23000	89900	181000	64400	167000	121000	132000	12700	9180
17	131000	147000	92100	27400	82500	166000	66600	160000	111000	129000	15200	8330
18	120000	149000	78700	27400	71400	145000	80400	161000	96500	126000	11600	6500
19	88400	146000	74700	25200	46000	148000	90400	172000	87900	126000	18700	15600
20	80700	138000	76800	16600	39800	160000	93700	182000	93400	127000	15200	17200
21	84600	126000	64900	18600	37300	167000	95400	183000	86000	124000	8630	13600
22	88200	111000	53700	13500	35700	164000	98700	176000	87700	122000	19000	9720
23	107000	84100	42800	25700	39800	153000	89700	166000	104000	111000	27400	3650
24	93400	70800	52500	32500	50000	147000	85500	169000	118000	95300	24300	9290
25	86500	75500	50700	33900	47400	142000	88100	175000	131000	89500	22100	5450
26	79100	78000	48100	31800	31400	130000	97900	175000	142000	76100	15100	2470
27	62400	68700	43200	30900	30500	100000	125000	169000	146000	60700	16900	4650
28	63500	60300	43200	25300	33900	94600	155000	159000	147000	56100	12100	10600
29	52800	72600	39600	17000	---	92300	166000	153000	135000	26600	258	21000
30	39900	76300	38500	24300	---	85700	173000	153000	123000	36700	4370	6480
31	37000	---	36500	65200	---	91600	---	157000	---	31400	20200	---
TOTAL	2737182	3249500	2121200	1033200	2077100	2980800	2970300	5186000	4076500	3630400	582818	248480
MEAN	88300	108300	68430	33330	74180	96150	99010	167300	135900	117100	18800	8283
MAX	154000	149000	120000	70700	137000	181000	173000	183000	161000	184000	36300	21000
MIN	42	41000	36500	13500	30500	22000	64400	153000	86000	26600	258	1390
AC-FT	5429000	6445000	4207000	2049000	4120000	5912000	5892000	10290000	8086000	7201000	1156000	492900

ARKANSAS RIVER BASIN

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07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK--CONTINUED

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

MEAN	30380	49550	54570	47440	48110	75580	80010	80010	68610	34160	16740	16220
MAX	215100	176000	155400	161800	108200	169500	215900	234800	191600	117100	62730	51690
(WY)	1987	1975	1993	1998	1975	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

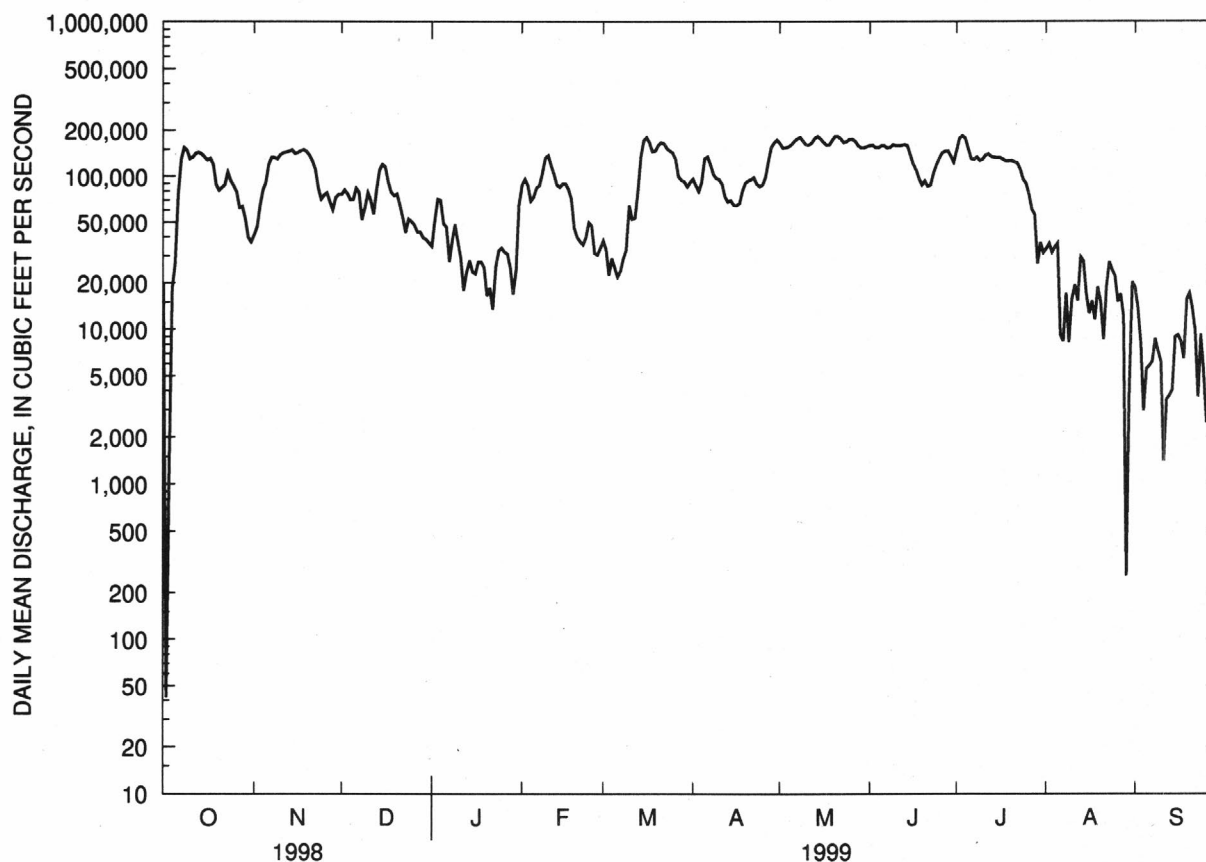
SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1970 - 1999	
ANNUAL TOTAL	25685921		30893480			
ANNUAL MEAN	70370		84640		^a 50090	
HIGHEST ANNUAL MEAN					96810	
LOWEST ANNUAL MEAN					12880	
HIGHEST DAILY MEAN	251000	Jan 8	184000	Jul 3	404000	May 8 1990
LOWEST DAILY MEAN	42	Oct 2	42	Oct 2	^b 14	Oct 25 1978
ANNUAL SEVEN-DAY MINIMUM	1100	Sep 7	4970	Sep 8	432	Oct 15 1982
INSTANTANEOUS PEAK FLOW			189000	Jul 3	^c 406000	May 7 1990
INSTANTANEOUS PEAK STAGE			242.85	Jul 3	^d 256.97	May 7 1990
ANNUAL RUNOFF (AC-FT)	50950000		61280000		36290000	
10 PERCENT EXCEEDS	155000		160000		135000	
50 PERCENT EXCEEDS	62400		82500		31300	
90 PERCENT EXCEEDS	6900		13600		4020	

^aPrior to regulation, water years 1928-69, 39,920 ft³/s

^bAlso minimum daily discharge for period of record

^cMaximum discharge for period of record 536,000 ft³/s, May 27, 1943

^dMaximum gage height for period of record, 30.05 ft, May 27, 1943, at site and datum then in use



ARKANSAS RIVER BASIN

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK

LOCATION.--Lat 34°43'13, long 92°21'32", 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 mi².

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 sea level.

REMARKS.--Records good, except those above 2,300 ft³/s, and for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 13, 1978, reached a stage of 18.22 ft, discharge, 22,500 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	.41	4.9	111	29	5.4	12	e13	20	5.1	2.8	2.7
2	1.7	.41	3.1	267	22	6.9	11	e10	51	4.1	2.6	2.6
3	89	.30	2.8	45	17	6.8	89	e8.0	e20	3.7	2.6	2.5
4	47	.30	41	30	14	5.6	70	e6.0	e10	3.4	2.6	2.4
5	14	.27	22	21	12	15	79	e35	e8.0	3.3	2.6	2.4
6	568	.23	13	17	11	18	40	e20	e6.0	8.9	2.6	2.4
7	40	15	57	14	71	6.5	25	e15	e5.0	5.4	2.6	2.4
8	9.2	9.2	26	17	23	63	20	e10	e4.0	3.6	2.6	15
9	4.2	47	10	14	17	31	17	e8.0	e3.0	3.5	2.6	5.7
10	2.2	105	41	11	15	16	16	e7.0	e3.0	80	2.7	2.8
11	1.5	7.2	27	11	25	12	15	e6.0	e2.0	199	2.7	2.6
12	1.1	3.0	33	10	16	47	15	e5.0	e2.0	15	3.4	8.7
13	.97	1.5	21	9.1	11	210	15	e5.0	e2.0	6.7	6.9	31
14	.64	1.1	12	7.9	10	70	142	e4.0	24	4.6	6.9	7.6
15	.48	.87	8.0	7.3	9.3	38	75	e3.0	e15	4.0	3.2	4.8
16	1.1	.65	6.3	6.3	8.4	26	30	e3.0	e10	3.6	2.9	2.8
17	1.1	.62	5.3	6.0	7.6	20	23	e70	e2.0	3.4	2.6	2.5
18	211	.54	6.9	5.6	6.9	16	e20	e15	e2.0	3.3	4.1	2.4
19	11	.54	89	5.1	6.7	13	e15	e12	e2.0	3.3	2.7	2.4
20	4.0	22	22	5.1	5.9	31	e10	e10	e2.0	3.1	2.6	2.3
21	2.3	1.4	40	60	5.8	17	e8.0	e8.0	e2.0	3.1	2.6	2.2
22	1.2	.86	33	152	8.1	13	e6.5	21	e2.0	3.0	2.6	2.2
23	.89	.65	21	40	12	18	e6.0	e15	e2.0	2.9	2.6	2.2
24	.75	.66	16	23	9.6	13	e5.0	e10	e2.0	2.9	3.6	2.2
25	.49	.60	12	18	7.2	11	e5.0	e7.0	e30	2.9	2.8	2.0
26	.45	.82	9.8	14	5.2	11	204	e6.0	77	7.1	7.1	1.9
27	.40	.65	8.5	12	5.0	10	48	e5.0	e30	3.1	15	1.9
28	.30	.50	8.9	14	5.8	9.8	27	e4.0	e10	2.9	3.8	1.9
29	.31	.41	8.3	81	---	39	e20	e4.0	6.6	2.9	3.1	1.8
30	.49	24	7.6	125	---	17	e15	e3.0	14	2.9	3.5	1.8
31	.41	---	6.8	46	---	13	---	34	---	2.9	2.9	---
TOTAL	1021.58	246.69	623.2	1205.4	396.5	829.0	1083.5	382.0	368.6	403.6	113.9	128.1
MEAN	33.0	8.22	20.1	38.9	14.2	26.7	36.1	12.3	12.3	13.0	3.67	4.27
MAX	568	105	89	267	71	210	204	70	77	199	15	31
MIN	.30	.23	2.8	5.1	5.0	5.4	5.0	3.0	2.0	2.9	2.6	1.8
AC-FT	2030	489	1240	2390	786	1640	2150	758	731	801	226	254
CFSM	1.61	.40	.98	1.90	.69	1.30	1.76	.60	.60	.64	.18	.21
IN.	1.85	.45	1.13	2.19	.72	1.50	1.97	.69	.67	.73	.21	.23

ARKANSAS RIVER BASIN

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07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

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

MEAN	37.2	50.2	41.0	50.8	57.4	66.6	42.2	13.0	21.5	14.3	11.3	21.1
MAX	42.8	92.2	55.6	89.7	83.5	106	69.8	14.3	45.3	18.4	22.5	32.4
(WY)	1997	1997	1998	1998	1998	1997	1997	1998	1997	1998	1998	1997
MIN	33.0	8.22	20.1	23.9	14.2	26.7	21.1	12.3	7.03	11.6	3.67	4.27
(WY)	1999	1999	1999	1997	1999	1999	1998	1999	1998	1997	1999	1999

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

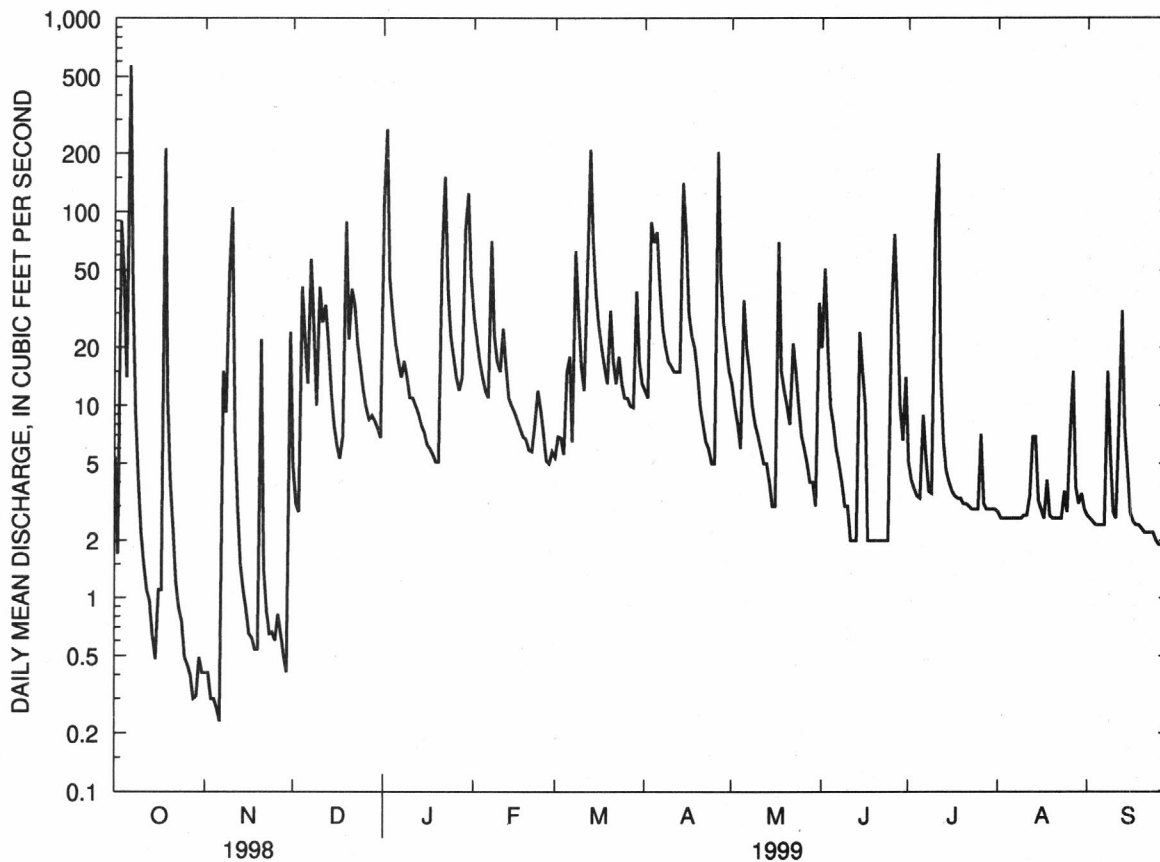
FOR 1999 WATER YEAR

WATER YEARS 1997 - 1999

ANNUAL TOTAL	12429.91	6802.07	
ANNUAL MEAN	34.1	18.6	35.4
HIGHEST ANNUAL MEAN			46.8 1997
LOWEST ANNUAL MEAN			18.6 1999
HIGHEST DAILY MEAN	723 Feb 10	568 Oct 6	723 Feb 10 1998
LOWEST DAILY MEAN	.23 Nov 6	.23 Nov 6	.05 Oct 19 1996
ANNUAL SEVEN-DAY MINIMUM	.33 Oct 31	.33 Oct 31	.08 Oct 14 1996
INSTANTANEOUS PEAK FLOW		^a 3910 Oct 6	^a 4650 Oct 27 1996
INSTANTANEOUS PEAK STAGE		7.02 Oct 6	7.47 Oct 27 1996
INSTANTANEOUS LOW FLOW		.19 Nov 6	.05 Oct 18 1996
ANNUAL RUNOFF (AC-FT)	24650	13490	25650
ANNUAL RUNOFF (CFSM)	1.66	.91	1.73
ANNUAL RUNOFF (INCHES)	22.56	12.34	23.46
10 PERCENT EXCEEDS	86	40	85
50 PERCENT EXCEEDS	6.9	6.9	8.0
90 PERCENT EXCEEDS	.65	1.3	.95

^aFrom rating curve extended above 1,400 ft³/s

^eEstimated



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 mi², of which 22,241 mi² 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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 07...	1540	80513	80020	136000	565	7.3	765	24.4	45	6.4	77
NOV 12...	1000	80513	80020	147000	505	7.8	776	13.1	180	10.4	98
DEC 08...	0930	80513	80020	44500	459	8.1	770	15.3	28	6.7	67
FEB 04...	1030	80513	80020	68500	638	7.6	772	9.5	18	11.2	97
MAR 17...	1015	80513	80020	172000	503	7.7	768	9.6	50	12.1	105
APR 20...	0900	80513	80020	94200	461	8.4	765	15.4	20	10.2	102
MAY 24...	0830	80513	80020	167000	338	8.1	765	22.4	36	8.1	93
JUN 22...	0905	80513	80020	83500	494	7.7	764	25.4	20	7.3	90
JUL 19...	1045	80513	80020	126000	418	7.5	764	28.9	24	7.7	99
AUG 09...	0815	80513	80020	10600	534	7.8	760	31.0	4.1	6.3	85
SEP 02...	0745	80513	80020	19600	655	8.0	763	29.1	4.2	6.1	80

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT FET FIELD (MG/L AS CACO3 (00418)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)
OCT 07...	140	60	37	11	54	45	2	3.6	76	0	93
NOV 12...	110	35	31	7.9	52	49	2	3.7	75	0	92
DEC 08...	110	24	33	7.1	44	46	2	3.8	88	0	105
FEB 04...	130	52	37	9.5	68	52	3	2.9	83	0	99
MAR 17...	120	43	35	8.8	49	45	2	3.0	80	0	98
APR 20...	--	--	--	--	--	--	--	--	78	0	96
MAY 24...	--	--	--	--	--	--	--	--	69	0	83
JUN 22...	130	37	36	8.7	44	42	2	3.1	89	0	110
JUL 19...	120	39	35	8.4	31	35	1	3.8	84	0	100
AUG 09...	150	44	42	10	49	41	2	4.3	103	0	125
SEP 02...	180	65	50	13	63	43	2	4.7	114	0	139

ARKANSAS RIVER BASIN

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07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
OCT 07...	76	58	73	.22	4.2	320	288	.44	118000	.233	1.0
NOV 12...	75	44	71	.25	6.1	280	265	.38	111000	.720	3.2
DEC 08...	86	38	63	.15	7.4	264	252	.36	31700	--	--
FEB 04...	81	55	100	.13	7.1	368	334	.50	68100	--	--
MAR 17...	80	47	70	.12	6.1	280	270	.38	130000	--	--
APR 20...	78	52	61	.13	--	273	--	--	--	--	--
MAY 24...	68	37	31	.12	--	199	--	--	--	--	--
JUN 22...	90	52	62	.15	5.8	293	268	.40	66100	--	--
JUL 19...	82	46	42	.16	6.8	250	225	.34	85000	--	--
AUG 09...	103	59	62	.19	6.1	320	294	.44	9160	.123	.54
SEP 02...	114	78	84	.20	.23	378	362	.51	20000	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
OCT 07...	.064	.21	.297	.039	.05	.57	.35	.61	.39	.91	.69
NOV 12...	.014	.05	.734	.058	.07	.98	.34	1.0	.40	1.8	1.1
DEC 08...	<.010	--	.672	.028	.04	.53	.34	.56	.36	1.2	1.0
FEB 04...	<.010	--	.795	.039	.05	.49	.28	.53	.32	1.3	1.1
MAR 17...	<.010	--	.638	.030	.04	.67	.31	.70	.34	1.3	.98
APR 20...	<.010	--	.412	.046	.06	.49	.28	.53	.32	.94	.74
MAY 24...	<.010	--	.601	.024	.03	.67	--	.69	<.10	1.3	--
JUN 22...	<.010	--	.306	.031	.04	.56	.35	.59	.38	.89	.69
JUL 19...	<.010	--	.451	<.020	--	--	--	.51	.41	.97	.86
AUG 09...	.017	.06	.140	.048	.06	.46	.24	.50	.29	.64	.43
SEP 02...	<.010	--	<.050	.028	.04	.48	.31	.51	.34	--	--

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOR, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOR, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C) (00689)	BORON, DIS- SOLVED (UG/L AS B) (01020)	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)
OCT 07...	.125	.064	.056	.17	4.2	.60	51	--	--	2	--
NOV 12...	.325	.072	.076	.23	4.8	3.8	43	--	--	2	--
DEC 08...	.162	.092	.095	.29	5.1	1.7	36	--	--	2	--
FEB 04...	.116	.077	.079	.24	4.9	.20	44	--	--	1	--
MAR 17...	.161	.052	.042	.13	4.4	1.3	35	3.2	<1.0	1	67
APR 20...	.079	.032	.027	.08	4.9	.70	--	--	--	--	--
MAY 24...	.143	.057	.051	.16	5.8	1.9	--	--	--	--	--
JUN 22...	.102	.057	.054	.17	5.4	1.1	37	4.3	<1.0	1	75
JUL 19...	.109	.065	.057	.17	5.6	.20	45	3.3	<1.0	2	73
AUG 09...	.079	.051	.042	.13	4.1	.50	49	3.1	<1.0	3	85
SEP 02...	.061	.028	.020	.06	8.1	1.3	63	--	--	3	--

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	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 07...	--	--	--	--	--	<10	--	7	--	--	--
NOV 12...	--	--	--	--	--	E9.4	--	9	--	--	--
DEC 08...	--	--	--	--	--	E8.8	--	8	--	--	--
FEB 04...	--	--	--	--	--	14	--	E6	--	--	--
MAR 17...	<1.0	<1.0	1.6	<1.0	1.8	15	<1.0	7	2.9	<1.0	2.3
JUN 22...	<1.0	<1.0	--	<1.0	2.4	E7.7	<1.0	<6	<1.0	<1.0	1.4
JUL 19...	<1.0	<1.0	<1.0	<1.0	2.1	<10	<1.0	E5	<1.0	<1.0	1.7
AUG 09...	<1.0	<1.0	<1.0	<1.0	1.8	<10	<1.0	E5	<1.0	1.1	2.0
SEP 02...	--	--	--	--	--	<10	--	E3	--	--	--

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)	SEDI- MENT, DIS- SUS- PENED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)
OCT 07...	<1	--	311	<10	--	201	73800	88	.585	<.002	<.001
NOV 12...	<1	--	269	<10	--	352	140000	98	.268	<.002	<.001
DEC 08...	<1	--	236	<10	--	34	4090	92	.119	<.002	<.001
FEB 04...	<1	--	302	<10	--	35	6470	72	.087	<.002	<.001
MAR 17...	<1	<1.0	266	<10	1.4	128	59400	86	.144	E.003	<.001
APR 20...	--	--	--	--	--	--	--	--	.110	<.002	<.001
MAY 24...	--	--	--	--	--	86	38800	91	.602	.017	<.001
JUN 22...	1	<1.0	280	<10	<1.0	37	8340	94	.837	E.004	<.001
JUL 19...	<1	<1.0	248	<10	<1.0	49	16700	97	.781	<.002	<.001
AUG 09...	<1	<1.0	335	<10	6.4	8	229	92	.866	<.002	<.001
SEP 02...	<1	--	428	<10	--	16	847	92	.601	<.002	<.001

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	PARA- THION, DIS- SOLVED (UG/L) (39542)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	FONOFOS WATER DISS REC (UG/L) (04095)
OCT 07...	<.004	<.005	.058	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0540	<.0030
NOV 12...	<.004	<.005	.085	<.004	<.0020	E.004	<.0020	<.0040	<.0100	E.0276	<.0030
DEC 08...	<.004	<.005	.038	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0114	<.0030
FEB 04...	<.004	<.005	.022	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0069	<.0030
MAR 17...	<.004	<.005	.017	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0119	<.0030
APR 20...	<.004	<.005	.010	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0102	<.0030
MAY 24...	<.004	<.005	.174	<.004	<.0020	.037	<.0020	<.0040	<.0040	E.0322	<.0030
JUN 22...	<.004	<.005	.220	<.004	<.0020	.031	<.0020	<.0040	<.0080	E.0438	<.0030
JUL 19...	<.004	<.005	.328	<.004	<.0020	.068	<.0020	<.0040	<.0040	E.105	<.0030
AUG 09...	<.004	<.005	.395	<.004	<.0020	.047	<.0020	<.0040	<.0040	E.103	<.0030
SEP 02...	<.004	.006	.301	<.004	<.0020	.017	<.0020	<.0040	<.0040	E.0837	<.0030

ARKANSAS RIVER BASIN

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07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	P, P' DDE DISSOLV (UG/L) (34653)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
OCT 07...	<.0060	<.0180	<.0070	.0220	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
NOV 12...	<.0060	<.0180	<.0070	.0204	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
DEC 08...	<.0060	<.0180	<.0070	.0132	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
FEB 04...	<.0060	E.0019	<.0070	.0175	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
MAR 17...	<.0060	E.0035	<.0070	.0474	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
APR 20...	<.0060	<.0180	<.0070	.0338	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
MAY 24...	<.0060	E.0100	<.0070	.0305	<.004	<.0030	E.0016	<.0040	<.0020	<.0070	<.0020
JUN 22...	<.0060	E.0091	<.0070	.0186	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
JUL 19...	<.0060	E.0113	<.0070	.0164	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
AUG 09...	<.0060	E.0103	<.0070	.0107	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
SEP 02...	<.0060	E.0143	<.0070	.0164	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020
DATE	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
OCT 07...	<.0060	<.0020	<.0040	.0195	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
NOV 12...	<.0060	<.0020	<.0040	.0125	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
DEC 08...	<.0060	<.0020	<.0040	E.0049	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
FEB 04...	<.0060	<.0020	<.0040	.0122	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
MAR 17...	<.0060	<.0020	<.0040	.0206	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
APR 20...	<.0060	<.0020	<.0040	.0241	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
MAY 24...	<.0060	<.0020	<.0040	.0364	<.0040	<.0030	<.0020	E.0112	<.0130	<.0030	<.0170
JUN 22...	<.0060	<.0020	<.0040	.0295	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
JUL 19...	<.0060	<.0020	<.0040	E.0310	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
AUG 09...	<.0060	<.0020	<.0040	.0150	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
SEP 02...	<.0060	<.0020	<.0040	E.0234	<.0040	<.0030	<.0020	<.0030	<.0130	<.0030	<.0170
DATE	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)
OCT 07...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
NOV 12...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
DEC 08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
FEB 04...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAR 17...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
APR 20...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY 24...	<.0010	<.0040	<.0030	<.0020	E.0010	<.0040	<.0030	<.0130	<.0010	<.0050	.0145
JUN 22...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL 19...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	--	<.0010	<.0050	<.0020
AUG 09...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
SEP 02...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

ARKANSAS RIVER BASIN

07264000 BAYOU METO NEAR LONOKE

LOCATION.--Lat 34°44'10", 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 mi².

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 sea level. 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 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	12	17	102	745	77	260	752	35	61	5.1	2.6
2	5.6	12	16	367	789	77	262	718	36	49	1.9	3.0
3	5.7	11	14	628	844	79	232	566	43	43	.40	2.1
4	6.6	11	14	734	875	70	324	348	47	32	2.3	1.5
5	6.1	8.9	22	e840	849	65	473	262	51	15	.84	1.1
6	25	5.8	32	e950	731	67	608	287	52	1.6	.69	.60
7	84	3.5	58	e1000	570	70	697	375	34	2.4	.92	.38
8	172	4.0	107	s1080	447	65	743	377	21	2.2	2.2	1.7
9	244	3.0	157	1040	454	166	744	288	30	.74	.73	2.1
10	219	1.9	182	928	522	278	684	183	28	9.1	.51	1.8
11	139	4.1	187	763	496	366	586	116	27	64	.52	1.2
12	71	32	181	579	416	394	495	89	50	62	.71	1.6
13	41	82	188	402	336	534	374	82	72	91	.61	3.7
14	26	83	190	289	287	712	272	67	39	68	.54	4.0
15	12	64	182	246	242	793	288	58	27	39	1.3	4.4
16	8.2	47	166	214	207	869	377	48	19	27	1.7	4.7
17	11	35	140	183	189	960	524	46	16	15	.51	2.8
18	15	32	112	160	175	1010	631	53	7.8	10	.95	2.0
19	21	30	106	138	160	992	686	50	4.3	7.1	.36	1.6
20	53	28	122	125	145	908	666	67	1.3	6.3	.76	1.4
21	161	26	192	113	123	766	537	88	.91	5.7	1.4	1.1
22	146	21	282	108	110	587	346	79	1.7	6.2	1.7	1.3
23	88	17	304	213	100	440	229	63	2.6	5.5	.91	1.3
24	54	15	302	448	95	351	159	61	8.4	3.8	6.0	.60
25	36	15	294	626	91	292	166	71	14	5.6	3.4	.04
26	26	16	256	756	88	264	295	62	37	2.6	1.6	.29
27	20	16	206	835	86	240	471	45	58	.44	.63	1.4
28	18	16	169	839	85	200	560	51	54	.91	.55	2.0
29	18	17	145	773	---	180	643	38	57	.34	.45	1.2
30	16	17	139	689	---	180	719	28	69	.16	.50	1.8
31	12	---	115	704	---	216	---	29	---	3.0	.80	---
TOTAL	1767.8	686.2	4597	16872	10257	12268	14051	5447	943.01	639.69	41.49	55.31
MEAN	57.0	22.9	148	544	366	396	468	176	31.4	20.6	1.34	1.84
MAX	244	83	304	1080	875	1010	744	752	72	91	6.0	4.7
MIN	5.6	1.9	14	102	85	65	159	28	.91	.16	.36	.04
AC-FT	3510	1360	9120	33470	20340	24330	27870	10800	1870	1270	82	110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1999, BY WATER YEAR (WY)

MEAN	63.0	244	459	424	503	551	514	439	157	57.6	48.4	67.8
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	2.28	.83	2.87	25.9	65.2	166	64.5	23.6	2.28	1.28	1.34	1.84
(WY)	1957	1955	1955	1955	1972	1972	1960	1988	1988	1980	1999	1999

ARKANSAS RIVER BASIN

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07264000 BAYOU METO NEAR LONOKE--CONTINUED

SUMMARY STATISTICS

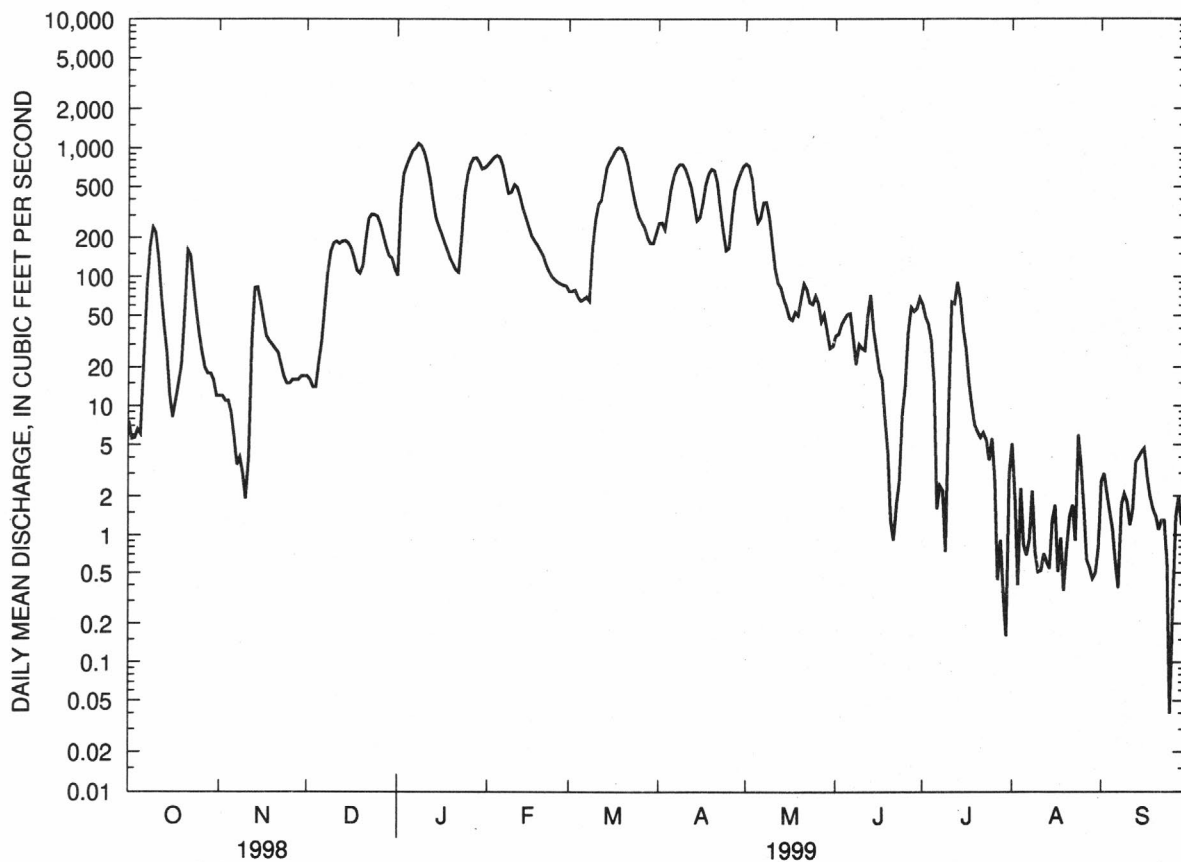
FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1955 - 1999

ANNUAL TOTAL	67546.41	67625.50		
ANNUAL MEAN	185	185	293	
HIGHEST ANNUAL MEAN			550	1973
LOWEST ANNUAL MEAN			95.2	1963
HIGHEST DAILY MEAN	1250 Jan 12	1080 Jan 8	5570	Dec 29 1987
LOWEST DAILY MEAN	.00 Jul 30	.04 Sep 25	.00	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	.55 Jul 28	.70 Aug 9	.00	Oct 18 1954
INSTANTANEOUS PEAK FLOW		1090 Jan 8	5750	Dec 29 1987
INSTANTANEOUS PEAK STAGE		17.72 Jan 8	27.11	Dec 29 1987
INSTANTANEOUS LOW FLOW		.00 Sep 6,25	.00	at times
ANNUAL RUNOFF (AC-FT)	134000	134100	212200	
10 PERCENT EXCEEDS	683	673	872	
50 PERCENT EXCEEDS	43	61	86	
90 PERCENT EXCEEDS	1.4	1.3	6.5	

^eEstimated



RED RIVER BASIN

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 mi², of which 5,936 mi² 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 sea level. 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2710	2400	2590	5360	14100	3310	9770	27400	6820	18600	4910	4370
2	2670	2840	2770	8830	14200	3410	14100	29100	6390	17200	5330	4020
3	2650	3070	2970	11800	16600	3390	19500	28300	7110	17700	5380	2820
4	3640	3720	3250	10400	17600	3420	21700	25700	10700	21300	5410	2220
5	4510	6830	5910	7660	15100	3150	19900	22500	14600	23100	4920	3020
6	6260	8950	13000	6470	12000	2810	27200	19000	21200	23900	4210	3750
7	14300	8680	15200	6650	9370	2830	34700	17900	24000	24100	4600	3070
8	22300	6220	17500	6060	7150	3060	30000	19900	22600	22100	6300	2690
9	20800	4320	17300	4710	6270	3440	26300	20000	20400	19700	6780	2610
10	19900	3670	17900	4250	6820	3700	24400	17800	19600	18000	6830	2240
11	16300	3380	18700	4310	9700	3800	22000	17000	16500	15700	6820	1830
12	12200	3540	17600	4230	10900	4570	19100	17700	11500	14700	5660	1770
13	10600	3610	15200	4140	10700	15600	17700	30800	8940	14400	4270	2320
14	9660	3600	12200	4000	8290	27100	15400	39500	8260	13900	4530	2690
15	9070	4800	11800	3530	6650	25700	12700	34600	11100	14200	5800	2630
16	8740	5050	16200	3140	5920	22300	11800	33500	15800	12700	6170	2790
17	8160	4520	18000	3050	5490	22900	13100	33400	15100	11400	6290	2620
18	6130	4380	15500	3020	5120	25500	13100	31200	12200	10300	6110	2100
19	4740	4260	13200	2960	5660	25200	12400	27100	11200	9550	4770	2110
20	4070	4170	11200	3310	5900	23100	12200	24800	11300	9210	3240	2420
21	3850	3450	10700	3390	4830	19200	10700	24800	11600	7760	2960	2290
22	4880	2740	10600	3150	4150	15000	7440	21500	11800	5180	4100	2110
23	5150	2670	12200	2880	3830	12700	5850	17500	11300	4010	4440	1990
24	5060	2800	13500	2930	3740	11700	7610	15900	10300	4630	4460	1860
25	4270	2820	11500	3320	3610	11100	9650	14800	10600	5770	4420	1660
26	3680	2820	8960	3450	3200	10200	10500	13400	11600	5830	3900	1530
27	3460	2660	8050	3420	2840	8860	11000	12000	12700	5750	2840	1570
28	3350	2300	7370	3550	2890	8140	12400	10600	12500	5570	2410	1700
29	3210	2000	6770	4620	---	7620	14500	9050	12800	4270	3300	1710
30	2790	2210	6400	8240	---	7130	22400	8140	16700	3200	4060	1680
31	2400	---	5910	12200	---	7340	---	7440	---	3370	4230	---
TOTAL	231510	118480	349950	159030	222630	347280	489120	672330	397220	387100	149450	72190
MEAN	7468	3949	11290	5130	7951	11200	16300	21690	13240	12490	4821	2406
MAX	22300	8950	18700	12200	17600	27100	34700	39500	24000	24100	6830	4370
MIN	2400	2000	2590	2880	2840	2810	5850	7440	6390	3200	2410	1530
AC-FT	459200	235000	694100	315400	441600	688800	970200	1334000	787900	767800	296400	143200

RED RIVER BASIN

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07337000 RED RIVER AT INDEX--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

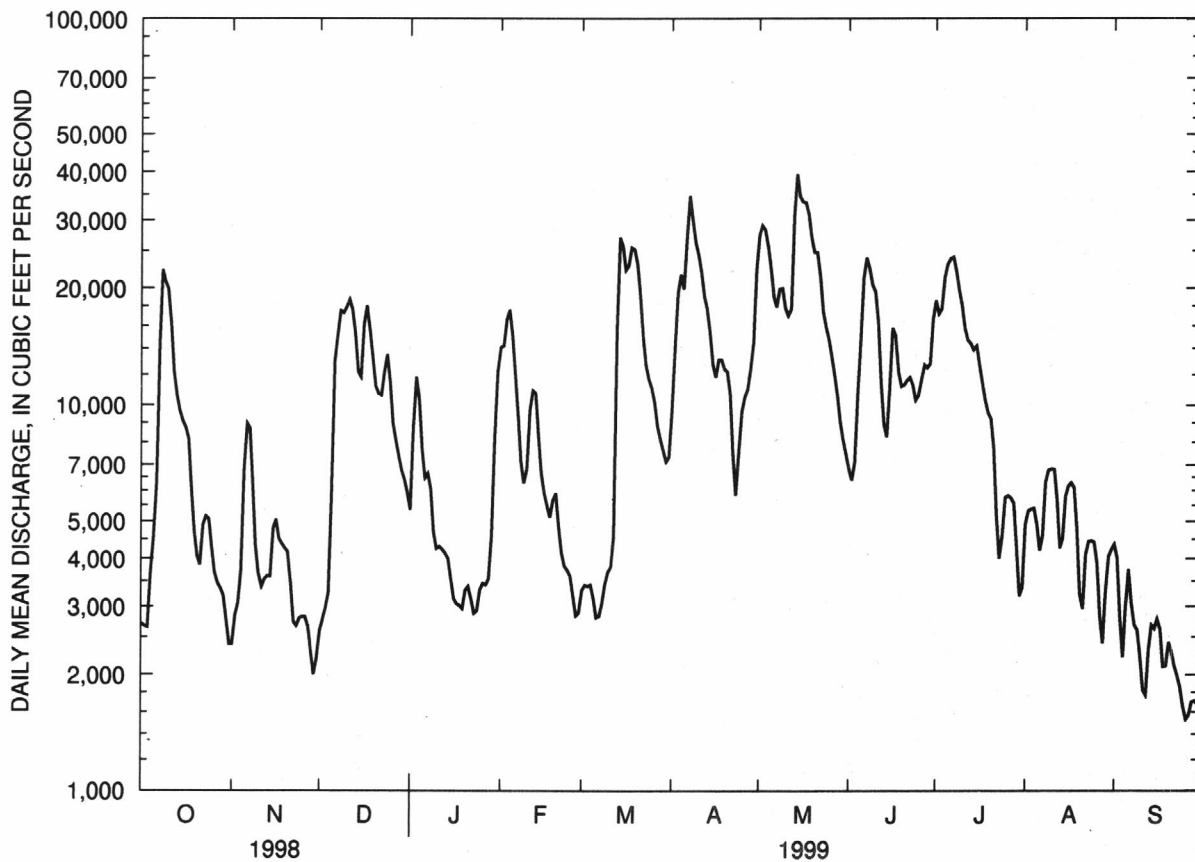
MEAN	8300	10810	12030	11250	14030	17000	17390	24240	22310	9910	5835	6006
MAX	41690	47140	47910	60160	38960	67730	61460	121000	94400	33990	39230	30340
(WY)	1946	1975	1992	1998	1946	1945	1990	1990	1957	1989	1950	1950
MIN	716	642	1206	1360	2127	2233	2096	4199	3098	1162	1025	909
(WY)	1957	1957	1957	1964	1964	1967	1956	1972	1988	1944	1944	1944

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1944 - 1999	
ANNUAL TOTAL	6009370		3596290			
ANNUAL MEAN	16460		9853		^a 13240	
HIGHEST ANNUAL MEAN					30420	
LOWEST ANNUAL MEAN					4383	
HIGHEST DAILY MEAN	86000	Jan 8	39500	May 14	268000	May 10 1990
LOWEST DAILY MEAN	2000	Nov 29	1530	Sep 26	384	Nov 28 1956
ANNUAL SEVEN-DAY MINIMUM	2480	Nov 26	1670	Sep 24	397	Oct 19 1956
INSTANTANEOUS PEAK FLOW			41000	May 14	^b 270000	May 10 1990
INSTANTANEOUS PEAK STAGE			10.31	May 14	^c 32.30	May 10 1990
INSTANTANEOUS LOW FLOW			1510	Sep 26,27	378	Nov 28 1956
ANNUAL RUNOFF (AC-FT)	11920000		7133000		9594000	
10 PERCENT EXCEEDS	51300		21600		35400	
50 PERCENT EXCEEDS	6190		6830		6010	
90 PERCENT EXCEEDS	2890		2760		2310	

^aPrior to regulation, water years 1937-43, 11,970 ft³/s

^bMaximum discharge for period of record, 297,000 ft³/s, Feb. 23, 1938

^cMaximum 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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)				
NOV											
04...	1335	80513	80513	440	1.00	2.00	642				
04...	1336	80513	80513	440	1.00	9.00	686				
04...	1337	80513	80513	440	2.50	5.00	730				
04...	1338	80513	80513	440	1.60	6.00	774				
04...	1339	80513	80513	440	1.60	10.0	818				
04...	1340	80513	80513	440	1.30	17.0	862				
04...	1341	80513	80513	440	1.60	17.0	906				
04...	1342	80513	80513	440	1.70	24.0	950				
04...	1343	80513	80513	440	2.00	18.0	994				
04...	1344	80513	80513	440	2.20	11.0	1040				
04...	1400	80513	81213	--	--	--	--				
		SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)				
NOV											
04...	987	8.1	18.0	9.1	97	757					
04...	990	8.1	18.0	9.1	98	757					
04...	991	8.1	18.1	9.1	97	757					
04...	993	8.2	18.1	9.1	97	757					
04...	991	8.3	18.1	9.1	98	757					
04...	990	8.1	18.1	9.1	98	757					
04...	991	8.2	18.1	9.1	98	757					
04...	987	8.2	18.1	9.1	98	757					
04...	983	8.2	18.1	9.2	98	757					
04...	981	8.2	18.1	9.1	98	757					
04...	988	8.2	18.1	9.1	98	757					
		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	
NOV	04...	1400	3610	988	8.2	757	18.1	9.1	98	160	180
NOV											
		STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED TOTAL (MG/L AS CL) (00940)
NOV	04...	280	270	70	24	94	42	2	4.3	160	130
		SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	
NOV											
04...	602	.008	.04	.012	.04	.020	.060	.08	.52		

RED RIVER BASIN

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07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE		NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SED. MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV										
04...		.58	.60	.030	<.020	.030	.09	98	955	96
DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
JAN										
13...	1205	80513	81213	4170	911	8.1	760	11.1	10.0	91
MAR										
11...	1020	80513	81213	3950	1140	7.5	757	12.9	8.4	80
JUN										
09...	0645	80513	81213	20400	1370	8.0	760	28.0	7.0	90
JUL										
08...	1055	80513	81213	22600	969	8.1	760	30.3	6.5	87
AUG										
24...	1115	80513	81213	4750	1720	8.1	757	30.3	6.1	82
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TURAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR PER (COLS. / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
JAN										
13...	58	38	K12	260	68	21	89	43	2	3.7
MAR										
11...	350	140	64	290	75	26	110	44	3	4.4
JUN										
09...	49	K27	78	350	88	31	160	50	4	4.8
JUL										
08...	70	K13	84	220	57	20	110	51	3	4.0
AUG										
24...	K8	K12	K240	410	100	38	210	52	5	5.9
DATE		SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, DIS- ORGANIC TOTAL (MG/L AS N) (00605)
JAN										
13...	130	110	548	<.010	--	.340	.210	.27	.44	
MAR										
11...	180	150	679	.010	.03	<.020	.050	.06	1.1	
JUN										
09...	260	230	912	<.010	--	.140	.030	.04	.76	
JUL										
08...	160	150	632	<.010	--	.080	.040	.05	.90	
AUG										
24...	310	280	1140	<.010	--	<.020	<.010	--	--	
DATE		NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SED. MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN										
13...	.65	.99	.060	<.020	.020	.06	129	1450	96	
MAR										
11...	1.2	--	.100	E.040	.010	.03	167	1780	95	
JUN										
09...	.79	.93	.160	E.030	<.010	--	607	33400	63	
JUL										
08...	.94	1.0	.190	<.020	<.010	--	724	44200	51	
AUG										
24...	1.0	--	.100	<.020	<.010	--	224	2870	98	

RED RIVER BASIN

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 mi².

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. WRD Ark. 1978: drainage area.

GAGE.--Water-stage recorder. Datum of gage is 272.89 ft above sea level. 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.--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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	713	986	1670	6780	684	2480	9600	1910	8760	1420	856
2	1970	792	1580	6140	10900	654	2450	6400	3540	9340	1100	930
3	1910	1450	2430	7350	12900	635	1840	6250	4100	8200	1530	885
4	2420	2890	5720	3960	11100	603	2680	6190	4110	4820	1160	880
5	3680	3170	13100	6990	9820	505	5670	6880	4230	4210	1140	903
6	6750	2090	11100	7660	6920	405	13700	9850	2570	4450	1770	908
7	14300	1490	7540	7270	3460	362	11400	7640	2480	9080	1400	824
8	14400	916	11200	6240	4720	389	10500	7580	3890	9600	1130	1280
9	15100	764	13500	2550	8980	677	10700	5570	2620	9340	1090	954
10	15100	1820	13100	2030	9800	1630	8180	6240	2450	6540	1460	874
11	16000	4930	10400	1880	10200	2510	6260	9520	2060	6640	2370	879
12	15800	6240	7700	1490	8090	1990	6770	10900	1910	6890	2250	939
13	15200	5640	6730	1180	6190	8580	6410	13200	2340	5460	2350	1060
14	14800	5100	6440	1410	3650	14400	7300	15000	1790	5830	2090	987
15	12900	4030	8600	1160	3340	11400	7860	13800	1940	6130	1150	1140
16	10800	3750	10300	991	3560	9850	6320	12000	2610	4700	975	1150
17	10000	3740	7920	953	3470	10800	5420	11600	2890	2840	2000	972
18	7580	3350	5190	911	3370	11400	3910	11400	2060	1340	2510	871
19	6860	1930	7420	868	3640	11500	3520	11500	1660	873	2210	915
20	7200	1760	8840	875	3180	9960	3490	11900	1290	2460	1930	883
21	6880	1110	6760	1330	2260	6770	2370	10800	1220	2590	1100	855
22	4130	866	10700	1390	e2110	6480	2720	8170	1150	2590	920	591
23	3250	819	12500	1330	e1960	5270	1810	5730	1180	2160	996	458
24	3910	774	11000	787	e1880	4970	1180	7160	1440	2220	952	286
25	2700	1310	7240	628	1240	4290	779	6100	1780	1240	899	307
26	2620	1750	5370	1180	891	4150	2420	2680	2630	953	1400	410
27	1970	1250	4880	944	805	4270	6500	1760	2110	2150	1140	287
28	1480	1450	4000	907	726	3620	11400	906	1530	2610	1570	308
29	1330	801	4750	1950	---	3970	9910	1010	2440	2650	862	385
30	1200	650	3080	5940	---	3410	10800	697	5850	2920	394	268
31	1120	---	2390	8440	---	2550	---	829	---	2680	344	---
TOTAL	225380	67345	232466	88404	145942	148684	176749	238862	73780	142266	43612	23245
MEAN	7270	2245	7499	2852	5212	4796	5892	7705	2459	4589	1407	775
MAX	16000	6240	13500	8440	12900	14400	13700	15000	5850	9600	2510	1280
MIN	1120	650	986	628	726	362	779	697	1150	873	344	268
AC-FT	447000	133600	461100	175300	289500	294900	350600	473800	146300	282200	86500	46110

RED RIVER BASIN

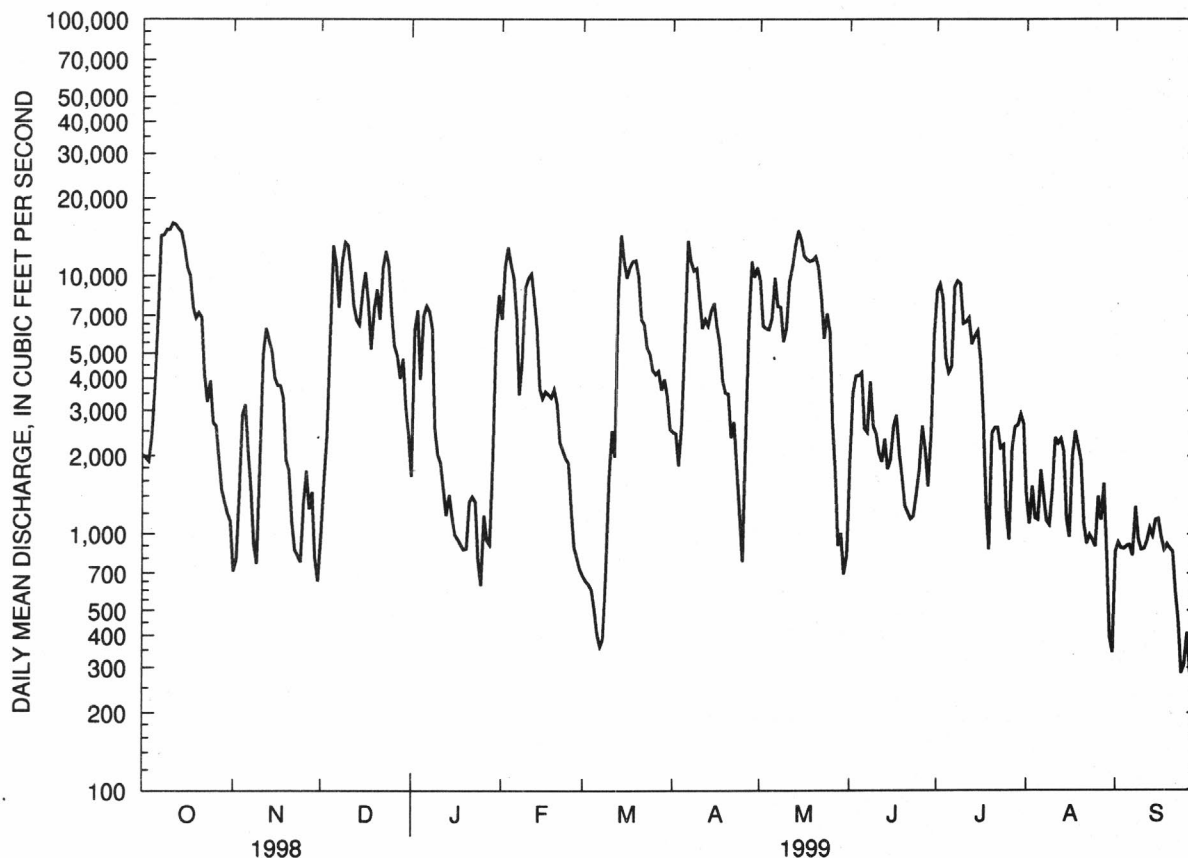
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07340000 LITTLE RIVER NEAR HORATIO--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1999, BY WATER YEAR (WY)

MEAN	2237	4524	6473	4895	5694	6853	5634	6263	4136	1720	1160	1484
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	281	240	244	493	669	665	1449	530	346	281	411	303
(WY)	1989	1996	1990	1981	1996	1996	1981	1988	1988	1972	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1969 - 1999	
ANNUAL TOTAL	1782114		1606735			
ANNUAL MEAN	4883		4402		^a 4248	
HIGHEST ANNUAL MEAN					7523	
LOWEST ANNUAL MEAN					1547	
HIGHEST DAILY MEAN	20300	Jan 8	16000	Oct 11	57700	Dec 12 1971
LOWEST DAILY MEAN	317	Apr 26	268	Sep 30	^b 121	Oct 5 1972
ANNUAL SEVEN-DAY MINIMUM	429	Sep 5	322	Sep 24	152	Oct 4 1972
INSTANTANEOUS PEAK FLOW			16200	Oct 11	^c 65100	Dec 10 1971
INSTANTANEOUS PEAK STAGE			20.05	Oct 11	^d 32.84	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	3535000		3187000		3078000	
10 PERCENT EXCEEDS	14300		10800		12600	
50 PERCENT EXCEEDS	1920		2620		1860	
90 PERCENT EXCEEDS	503		856		363	

^aPrior to regulation water years 1931-68, 3,742 ft³/s^bMinimum discharge for period of record, 1.0 ft³/s, Aug. 18 to Sept. 1, 1934^cMaximum discharge for period of record, 120,000 ft³/s, Mar. 30, 1945, from rating curve extended above 93,000 ft³/s^dMaximum gage height for period of record, 37.70 ft, Mar. 30, 1945^eEstimated

RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT
(Hydrologic benchmark station)

LOCATION.--Lat 34°22'46", long 94°14'08", 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

REVISED RECORDS.--WRD Ark. 1978: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 771.88 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good. 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	108	221	340	42	88	138	52	367	11	14
2	18	47	89	1500	235	41	86	110	344	196	11	15
3	184	38	79	551	174	39	163	93	141	118	17	13
4	111	31	2620	316	136	37	508	575	87	81	13	11
5	1410	28	917	221	107	40	1880	721	64	61	12	67
6	4730	26	422	175	98	68	1010	247	51	50	12	82
7	696	27	312	139	487	54	459	149	42	44	11	32
8	283	34	244	119	338	253	292	107	36	72	12	94
9	162	42	194	100	241	433	212	83	32	104	15	58
10	108	367	158	84	185	241	161	248	30	172	18	33
11	79	231	130	76	171	171	125	330	41	179	24	26
12	61	143	389	73	166	350	99	1530	38	90	19	24
13	50	103	451	70	149	2940	85	626	112	61	17	39
14	42	82	284	62	132	1010	233	298	130	47	16	38
15	37	68	198	57	118	480	474	182	88	40	15	27
16	33	57	151	56	107	300	298	129	55	34	14	22
17	39	50	120	55	93	214	210	100	43	29	14	20
18	50	43	108	52	83	162	157	90	35	26	13	18
19	47	40	677	48	76	129	126	67	30	24	13	17
20	39	46	368	46	68	114	105	57	28	22	12	17
21	34	44	380	46	61	97	90	53	26	21	12	18
22	30	40	373	47	55	85	79	54	25	19	12	17
23	26	39	279	47	55	91	72	54	30	18	13	16
24	25	37	204	42	52	83	339	50	32	17	17	15
25	24	36	157	39	49	95	470	42	42	17	15	15
26	23	34	129	38	49	98	638	40	3380	17	14	16
27	22	32	110	37	48	94	1050	36	444	15	25	16
28	21	31	95	41	45	89	490	33	205	15	21	15
29	21	30	83	72	---	92	282	31	341	14	16	14
30	21	78	72	522	---	86	188	32	623	13	15	13
31	21	---	65	593	---	88	---	42	---	12	14	---
TOTAL	8463	1926	9966	5545	3918	8116	10469	6347	6627	1995	463	822
MEAN	273	64.2	321	179	140	262	349	205	221	64.4	14.9	27.4
MAX	4730	367	2620	1500	487	2940	1880	1530	3380	367	25	94
MIN	16	22	65	37	45	37	72	31	25	12	11	11
AC-FT	16790	3820	19770	11000	7770	16100	20770	12590	13140	3960	918	1630
CFSM	3.05	.72	3.59	2.00	1.56	2.92	3.89	2.29	2.47	.72	.17	.31
IN.	3.51	.80	4.14	2.30	1.63	3.37	4.35	2.64	2.75	.83	.19	.34

RED RIVER BASIN

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07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

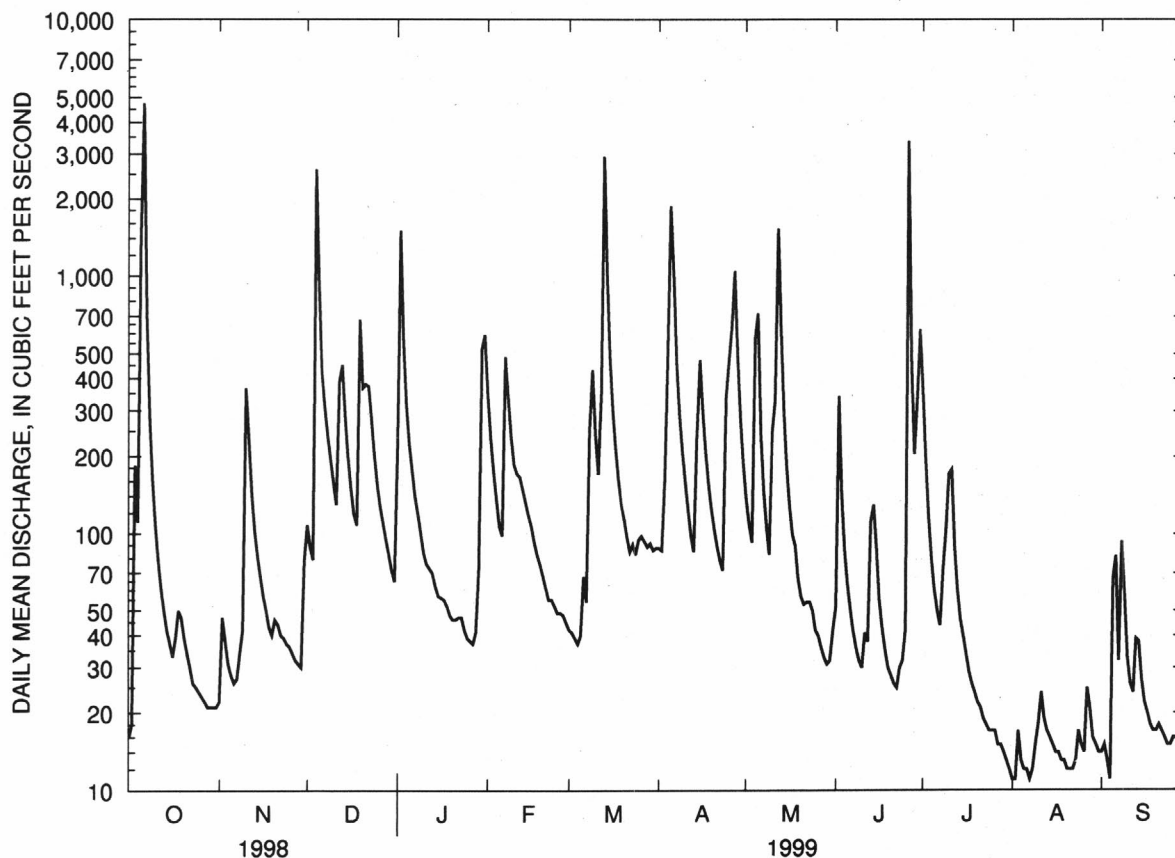
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

MEAN	133	233	319	231	242	357	288	252	142	86.5	28.4	57.4
MAX	899	878	1105	624	524	860	799	827	426	565	65.1	376
(WY)	1985	1997	1972	1969	1997	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	11.6
(WY)	1979	1990	1990	1981	1996	1986	1987	1988	1972	1978	1972	1983

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1967 - 1999	
ANNUAL TOTAL	65407.7		64657			
ANNUAL MEAN	179		177		197	
HIGHEST ANNUAL MEAN					358	1973
LOWEST ANNUAL MEAN					86.3	1996
HIGHEST DAILY MEAN	4730	Oct 6	4730	Oct 6	15800	Dec 9 1971
LOWEST DAILY MEAN	9.0	Sep 10	11	Aug 1	7.2	Aug 29 1972
ANNUAL SEVEN-DAY MINIMUM	9.5	Sep 5	12	Aug 1	7.4	Aug 27 1972
INSTANTANEOUS PEAK FLOW			^a 17400	Oct 5	^a 32000	Dec 2 1982
INSTANTANEOUS PEAK STAGE			15.23	Oct 5	19.50	Dec 2 1982
INSTANTANEOUS LOW FLOW			10	^b Aug 6	7.2	Aug 28-31 1972
ANNUAL RUNOFF (AC-FT)	129700		128200		143100	
ANNUAL RUNOFF (CFSM)	2.00		1.98		2.20	
ANNUAL RUNOFF (INCHES)	27.16		26.84		29.94	
10 PERCENT EXCEEDS	393		370		406	
50 PERCENT EXCEEDS	68		61		66	
90 PERCENT EXCEEDS	14		16		15	

^aFrom rating curve extended above 11,000 ft³/s on basis of step-backwater computations

^bAlso Sept. 4



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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
NOV 05...	0815	80513	81213	29	46	6.6	753	12.6	9.8	93	K11	--
JAN 14...	0730	80513	81213	62	36	7.1	750	7.7	10.8	92	K5	--
MAR 12...	0750	80513	81213	134	31	7.0	742	10.7	9.8	91	K15	--
JUN 09...	1015	80513	81213	34	44	7.6	747	26.7	7.9	101	K6	--
JUL 08...	1430	80513	81213	43	46	8.1	745	28.9	6.3	84	K11	K2
AUG 25...	0800	80513	81213	14	68	7.5	746	24.6	6.0	74	K21	K15

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 05...	K89	19	5.3	1.5	1.7	15	.2	.70	17	4.0	1.9	<.10
JAN 14...	K21	12	3.1	1.1	1.8	23	.2	.50	90	3.3	1.5	<.10
MAR 12...	K9	9	2.3	.80	1.6	26	.2	.50	90	3.2	1.4	<.10
JUN 09...	35	16	4.3	1.3	1.8	19	.2	.80	17	3.1	1.5	<.10
JUL 08...	2100	14	3.6	1.2	1.8	21	.2	.80	11	2.9	1.6	--
AUG 25...	120	27	8.0	1.8	2.0	13	.2	.80	28	3.4	1.9	--

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
NOV 05...	8.7	36	34	.05	2.82	<.010	<.020	.020	.03	--	<.20	--
JAN 14...	7.3	27	73	.04	4.52	<.010	<.020	.012	.02	--	<.20	--
MAR 12...	7.7	26	72	.04	9.41	<.010	<.020	<.010	--	--	<.20	--
JUN 09...	7.4	35	30	.05	3.21	<.010	<.020	.020	.03	--	<.20	--
JUL 08...	--	30	19	.04	3.48	<.010	<.020	.030	.04	<.20	--	<.020
AUG 25...	--	41	35	.06	1.55	<.010	.020	<.010	--	<.20	--	<.020

[illegible]

RED RIVER BASIN

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07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	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)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 05...	<4	3.7	<2.0	<1.0	<1.0	18	<1	1.1	9	.70	100
JAN 14...	<4	1.4	<2.0	<1.0	<1.0	12	<1	2.2	5	.84	94
MAR 12...	<4	1.9	<2.0	<1.0	<1.0	9.0	<1	3.5	5	1.8	100
JUN 09...	1	6.6	<2.0	<1.0	<1.0	16	<1	1.4	8	.73	91
JUL 08...	--	--	--	--	--	--	--	--	7	.81	98
AUG 25...	--	--	--	--	--	--	--	--	7	.26	91

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 mi².

PERIOD OF RECORD.--June 1963 to current year.

REVISED RECORDS.--WRD Ark. 1978: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above sea level (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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	56	145	525	137	310	779	46	43	19	19
2	14	23	54	2650	935	115	263	760	43	32	19	19
3	29	28	44	1400	919	90	314	720	41	28	19	19
4	25	19	498	401	990	84	1680	394	49	26	19	16
5	17	17	1340	760	788	81	1330	468	64	24	19	14
6	691	16	283	916	356	82	1520	230	68	23	19	14
7	543	17	229	888	555	79	1050	180	59	27	19	13
8	137	20	732	867	518	86	1030	130	57	105	19	13
9	71	21	765	847	615	218	1190	105	56	69	19	13
10	48	26	748	825	706	264	1030	119	44	37	19	12
11	32	73	634	810	712	250	918	376	29	173	20	12
12	24	56	634	802	702	290	840	364	27	54	20	12
13	20	40	343	748	402	2890	667	495	27	30	19	16
14	19	33	197	294	365	2040	528	399	26	25	19	22
15	18	30	706	264	350	515	847	237	25	23	19	15
16	17	26	754	212	341	780	587	217	25	21	18	13
17	16	24	737	203	257	877	396	209	24	21	18	13
18	17	23	493	199	217	841	354	145	24	20	19	14
19	17	23	713	192	210	811	335	79	23	20	19	14
20	16	25	446	153	205	810	324	84	23	19	18	14
21	16	29	459	140	204	798	310	91	23	19	19	14
22	15	29	835	150	190	774	188	74	23	19	19	14
23	15	27	714	253	189	813	172	62	25	19	19	13
24	15	25	656	220	161	877	126	58	30	20	19	13
25	15	24	613	179	148	878	173	55	29	19	19	13
26	15	23	588	166	147	709	591	53	28	19	19	13
27	15	23	573	158	146	360	1010	51	28	19	21	13
28	14	23	530	151	143	317	819	41	25	19	20	13
29	14	22	288	285	---	316	863	33	26	19	19	13
30	14	34	268	1510	---	323	806	34	47	19	19	13
31	14	---	155	1810	---	317	---	36	---	19	19	---
TOTAL	1947	815	16085	18598	11996	17822	20571	7078	1064	1030	591	429
MEAN	62.8	27.2	519	600	428	575	686	228	35.5	33.2	19.1	14.3
MAX	691	73	1340	2650	990	2890	1680	779	68	173	21	22
MIN	14	16	44	140	143	79	126	33	23	19	18	12
AC-FT	3860	1620	31900	36890	23790	35350	40800	14040	2110	2040	1170	851

RED RIVER BASIN

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07341200 SALINE RIVER NEAR LOCKESBURG--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1999, BY WATER YEAR (WY)

MEAN	176	391	683	534	645	793	589	511	342	215	53.9	56.7
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	17.5	8.03
(WY)	1978	1996	1990	1996	1996	1996	1998	1987	1988	1978	1997	1981

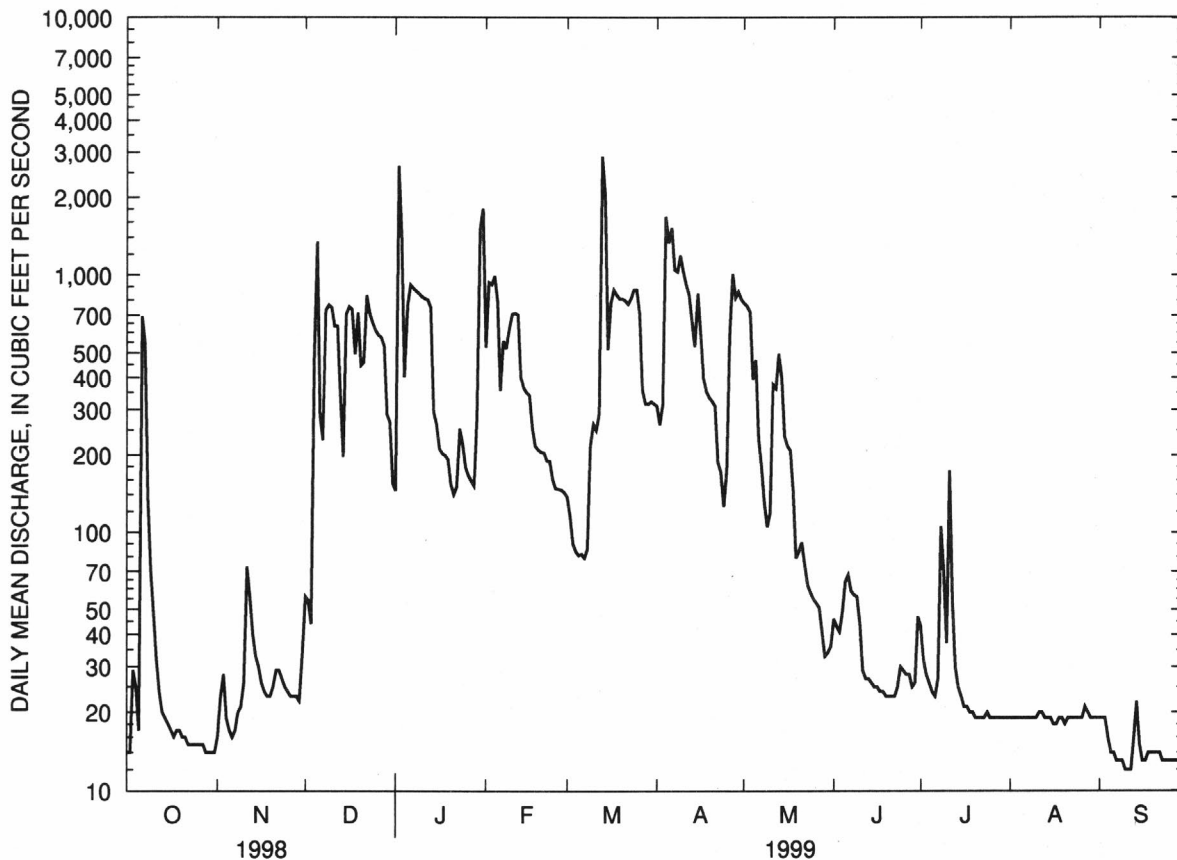
SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1975 - 1999	
ANNUAL TOTAL	103542		98026			
ANNUAL MEAN	284		269		^a 415	
HIGHEST ANNUAL MEAN					733	
LOWEST ANNUAL MEAN					87.0	
HIGHEST DAILY MEAN	3910	Feb 11	2890	Mar 13	36800	Dec 3 1982
LOWEST DAILY MEAN	14	Oct 1	12	Sep 10	^b 2.3	Oct 16 1977
ANNUAL SEVEN-DAY MINIMUM	14	Oct 25	13	Sep 6	2.4	Oct 14 1977
INSTANTANEOUS PEAK FLOW			4100	Mar 13	^c 59600	Dec 3 1982
INSTANTANEOUS PEAK STAGE			15.26	Mar 13	^d 20.52	Dec 3 1982
ANNUAL RUNOFF (AC-FT)	205400		194400		300500	
10 PERCENT EXCEEDS	830		810		1010	
50 PERCENT EXCEEDS	44		58		115	
90 PERCENT EXCEEDS	19		16		16	

^aPrior to regulation, water years 1963-74, 382 ft³/s

^bMinimum discharge for period of record, 0.20 ft³/s, Nov. 6, 1963, and Oct. 29, 1969

^cMaximum discharge for period of record, 64,700 ft³/s, May 14, 1968, from rating extended above 23,000 ft³/s on basis of contracted opening measurement of peak flow

^dMaximum gage height, 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 SE1/4SW1/4 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 mi².

PERIOD OF RECORD.--November 1941 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: 1947(m). WRD Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 655.14 ft above sea level. 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.--No estimated daily discharges. Records good. As of August 1977, flow from 34.3 mi² 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	109	376	564	1350	197	427	755	459	1040	36	23
2	49	172	352	5750	1020	184	402	606	589	758	34	24
3	1310	180	311	2580	812	174	478	518	678	572	35	23
4	927	186	4810	1570	679	165	1790	515	457	440	51	27
5	964	157	5160	1150	569	157	2440	3810	359	351	42	26
6	26800	140	2220	971	511	160	3690	1650	294	295	38	53
7	6900	133	1640	840	1990	156	2020	996	244	293	35	44
8	2660	149	1310	719	1690	230	1420	715	210	230	33	42
9	1900	167	1020	627	1200	1120	1080	551	215	214	33	47
10	1320	1280	840	531	964	814	843	529	183	218	33	55
11	862	1400	728	471	827	631	685	1700	156	204	37	51
12	640	869	1390	436	836	670	555	3680	305	221	38	58
13	508	678	2380	408	658	10700	469	3040	379	213	34	73
14	422	565	1520	372	565	5780	930	1650	1090	165	48	66
15	358	482	1120	338	510	2780	2320	1080	688	143	43	59
16	308	419	893	314	467	1840	1350	796	455	127	35	53
17	290	360	738	298	429	1320	939	626	341	114	30	48
18	354	317	634	284	392	1010	737	515	282	104	27	44
19	391	287	2250	258	360	807	612	434	230	96	25	39
20	325	280	1750	242	329	697	526	361	192	85	23	36
21	269	327	1630	232	301	614	451	461	165	78	21	34
22	228	308	1520	231	275	526	393	588	145	72	21	33
23	198	266	1130	240	266	498	354	823	132	65	20	32
24	177	248	940	222	267	558	521	680	129	60	19	30
25	160	235	782	206	257	505	2140	490	131	57	19	30
26	148	220	679	192	236	496	1640	395	5740	54	18	30
27	138	205	601	183	224	426	4100	336	2990	53	20	29
28	129	194	537	179	213	393	2330	287	1090	52	23	28
29	123	187	482	190	---	456	1420	246	812	47	27	27
30	116	206	428	666	---	496	994	225	1060	44	26	27
31	110	---	383	2100	---	449	---	270	---	40	25	---
TOTAL	49134	10726	40554	23364	18197	35009	38056	29328	20200	6505	949	1191
MEAN	1585	358	1308	754	650	1129	1269	946	673	210	30.6	39.7
MAX	26800	1400	5160	5750	1990	10700	4100	3810	5740	1040	51	73
MIN	49	109	311	179	213	156	354	225	129	40	18	23
AC-FT	97460	21280	80440	46340	36090	69440	75480	58170	40070	12900	1880	2360

RED RIVER BASIN

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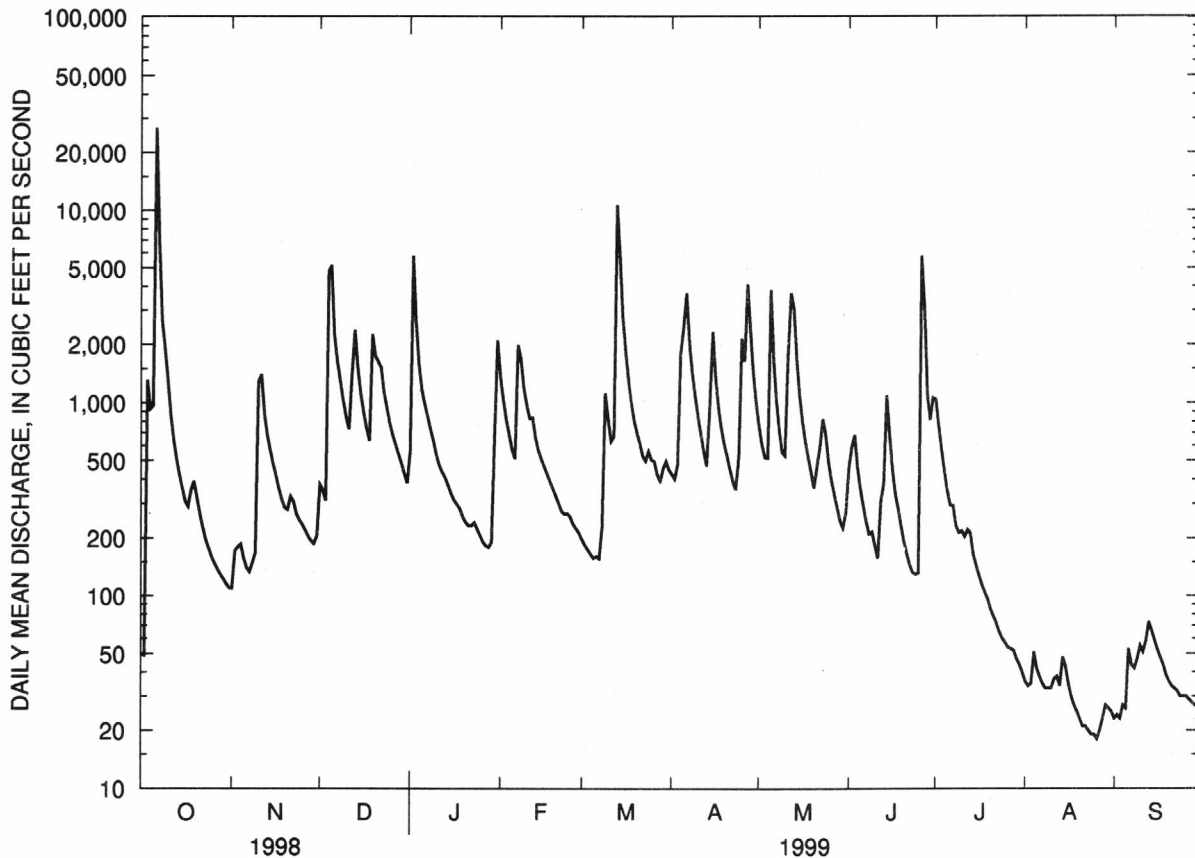
07356000 OUACHITA RIVER NEAR MOUNT IDA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1999, BY WATER YEAR (WY)

MEAN	383	742	1043	910	1119	1351	1133	1122	503	237	93.4	197
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 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1942 - 1999	
ANNUAL TOTAL	305521.8		273213			
ANNUAL MEAN	837		749		734	
HIGHEST ANNUAL MEAN					1499	
LOWEST ANNUAL MEAN					263	
HIGHEST DAILY MEAN	26800	Oct 6	26800	Oct 6	79800	Dec 3 1982
LOWEST DAILY MEAN	6.1	Sep 8	18	Aug 26	2.5	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	7.2	Sep 3	20	Aug 21	2.8	Aug 19 1954
INSTANTANEOUS PEAK FLOW			34300	Oct 6	102000	Dec 3 1982
INSTANTANEOUS PEAK STAGE			25.38	Oct 6	^a 39.78	Dec 3 1982
INSTANTANEOUS LOW FLOW			18	Aug 25-27	2.3	Aug 25 1954
ANNUAL RUNOFF (AC-FT)	606000		541900		531900	
10 PERCENT EXCEEDS	1760		1640		1600	
50 PERCENT EXCEEDS	353		354		250	
90 PERCENT EXCEEDS	29		35		32	

^aFrom floodmark



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 Remmel Dam at Jones Mill and at mile 455.1.

DRAINAGE AREA.--1,550 mi².

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 Remmel 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. WRD Ark. 1979: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 248.16 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 Remmel 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.--No Estimated daily discharges. 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	503	2690	640	4370	3630	1380	3340	466	3850	2770	2030	1750
2	1550	3980	1050	22700	3610	983	6190	531	1070	3160	2910	1490
3	554	3960	847	9080	3610	749	3780	2120	578	2210	3020	1550
4	508	2420	1050	7520	3600	700	5940	3830	750	1690	2770	1090
5	1730	4000	1540	5620	3590	472	8510	2700	684	1690	2360	1060
6	9600	3740	1210	4900	3580	503	4620	3480	693	2760	2550	1080
7	3070	3410	3300	3470	3590	571	4590	3840	878	3120	1110	1210
8	2940	3760	3770	3600	3810	512	8140	3400	2470	3380	1050	1300
9	2500	2410	3760	5080	2650	732	6990	569	1020	1650	2800	1300
10	1130	696	3790	5140	3590	501	6400	2270	563	1100	2640	1550
11	473	973	3780	3180	3600	737	6050	2600	566	1090	2380	1150
12	1260	958	3780	2560	3610	837	6090	4600	558	2780	2650	1080
13	2810	523	3770	3010	3620	8340	6800	5880	563	2980	1630	895
14	585	544	3340	2820	3610	3910	8040	2980	764	2700	573	1570
15	1470	465	3750	3630	3610	1590	7340	578	562	2820	585	2060
16	3260	693	3750	3620	3610	2170	6940	600	589	3070	1490	1940
17	4020	934	3270	3610	3610	1450	6790	3310	670	1130	2260	720
18	4020	968	4650	3610	3600	2240	6490	2870	553	1100	2170	1240
19	4030	931	5230	3620	2010	600	3390	559	1250	2790	2250	1070
20	2860	619	5180	3620	3580	2140	1320	603	618	3280	2090	692
21	3830	669	4540	4280	3600	438	1310	527	1030	33240	570	746
22	3760	619	3940	7840	3610	2400	3030	607	964	3430	1160	838
23	3990	1050	4860	4740	3600	526	1870	2960	1090	3140	1710	1100
24	3980	1460	5250	3620	3610	2750	1180	3840	1640	1600	1370	762
25	3990	1350	5250	3600	3600	1670	1030	3570	1560	1050	1100	855
26	3880	744	4620	3580	3610	1290	5760	2740	572	2580	1040	849
27	3990	554	3720	3180	3600	1950	6800	540	1450	2980	1590	743
28	3980	727	3720	3590	3600	884	7470	721	2430	2680	1270	704
29	2710	504	3260	3660	---	3770	5020	537	4010	2430	1080	563
30	3830	823	3710	7020	---	3770	1340	678	3190	3560	881	600
31	1710	---	3720	5290	---	3780	---	2630	---	2360	1470	---
TOTAL	88523	47174	108047	155160	98550	54345	152560	67136	37185	76320	54559	33557
MEAN	2856	1572	3485	5005	3520	1753	5085	2166	1240	2462	1760	1119
MAX	9600	4000	5250	22700	3810	8340	8510	5880	4010	3560	3020	2060
MIN	473	465	640	2560	2010	438	1030	466	553	1050	570	563
AC-FT	175600	93570	214300	307800	195500	107800	302600	133200	73760	151400	108200	66560

RED RIVER BASIN

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07359002 OUACHITA RIVER BELOW REMMEL DAM AT JONES MILL--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1999, BY WATER YEAR (WY)

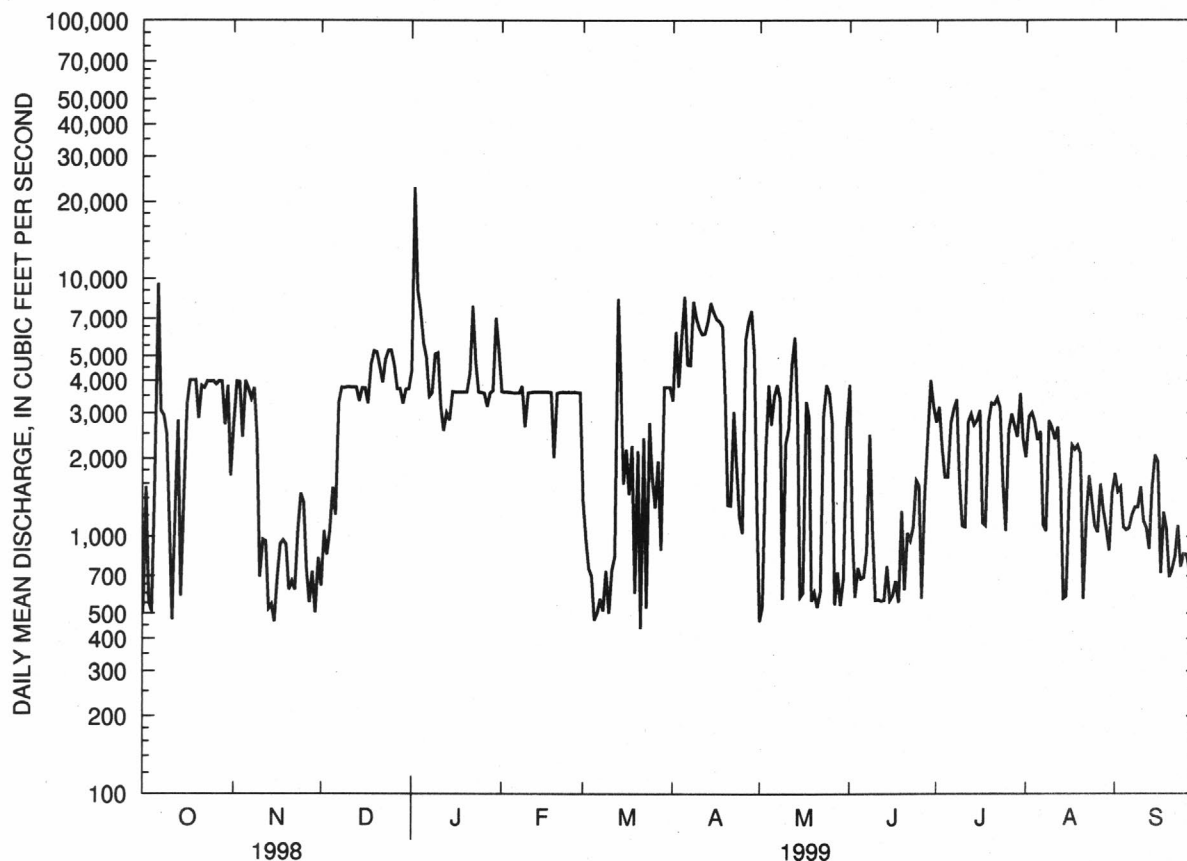
MEAN	1335	2173	3252	3758	3438	3446	3690	3500	1797	1178	1083	1148
MAX	6425	9717	13790	13560	11880	17230	13620	12550	9436	3602	2850	4224
(WY)	1985	1985	1983	1949	1950	1945	1952	1946	1974	1967	1966	1950
MIN	126	97.1	395	87.1	417	442	403	263	161	98.2	93.5	95.7
(WY)	1933	1944	1940	1931	1936	1966	1963	1936	1934	1930	1930	1943

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1929 - 1999	
ANNUAL TOTAL	986470		973116			
ANNUAL MEAN	2703		2666		2479	
HIGHEST ANNUAL MEAN					5209	
LOWEST ANNUAL MEAN					746	
HIGHEST DAILY MEAN	22200	Feb 11	22700	Jan 2	104000	Mar 30 1945
LOWEST DAILY MEAN	311	Aug 2	438	Mar 21	39	Jun 22 1929
ANNUAL SEVEN-DAY MINIMUM	507	Sep 5	570	Mar 4	58	Nov 13 1943
INSTANTANEOUS PEAK FLOW			32200	Jan 2	^a 166000	May 20 1990
INSTANTANEOUS PEAK STAGE			14.64	Jan 2	^b ^c 30.30	May 15 1923
INSTANTANEOUS LOW FLOW			11	Mar 5	11	Mar 5 1999
ANNUAL RUNOFF (AC-FT)	1957000		1930000		1796000	
10 PERCENT EXCEEDS	6460		4790		5710	
50 PERCENT EXCEEDS	1730		2560		1450	
90 PERCENT EXCEEDS	619		585		278	

^aFrom rating curve extended above 120,000 ft³/s on basis of computation of peak flow over Remmel Dam, 0.8 mi upstream, adjusted for flow from intervening area

^bFrom floodmark

^cMaximum gage height for period of record at different site and datum



RED RIVER BASIN

07359610 CADDO RIVER NEAR CADDO GAP

LOCATION.--Lat 34°22'59", long 93°36'21", in SW1/4NE1/4 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 mi².

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 sea level.

REMARKS.--No estimated daily discharges. Records good, except those above 10,000 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	62	92	863	554	99	269	209	303	82	36	29
2	49	99	83	4630	411	98	249	181	926	67	36	29
3	238	83	81	1090	331	93	307	164	447	59	35	29
4	148	74	2360	586	274	90	679	162	304	53	35	29
5	168	72	1250	428	233	101	1690	169	223	49	35	29
6	4570	68	552	363	216	263	1110	137	171	47	35	33
7	1060	67	417	306	1240	173	552	121	138	49	35	31
8	477	80	312	272	555	518	382	107	116	48	33	43
9	318	81	247	232	407	655	298	97	101	45	34	38
10	230	290	216	203	339	386	241	142	90	75	34	31
11	173	255	207	185	343	304	200	202	85	174	34	30
12	134	183	446	174	328	490	170	366	80	93	34	31
13	110	147	470	161	278	4960	151	314	99	67	32	125
14	93	126	336	145	246	1470	559	226	151	58	32	69
15	82	111	266	136	223	794	718	182	108	53	31	39
16	91	99	222	130	205	560	388	153	89	49	31	33
17	263	89	189	125	186	448	285	133	77	48	31	31
18	541	83	174	117	174	375	232	135	70	47	30	31
19	380	80	636	111	159	321	197	107	65	76	30	31
20	258	131	388	109	146	302	171	96	64	47	30	30
21	190	108	1150	111	133	265	153	115	60	45	29	30
22	143	97	985	132	123	237	138	123	57	44	29	30
23	115	91	552	226	125	251	126	254	60	43	28	30
24	100	87	391	183	116	235	305	157	66	42	29	30
25	88	83	305	161	112	263	364	122	69	41	28	29
26	79	78	255	147	111	242	1030	110	72	41	28	30
27	73	74	218	138	109	229	850	98	72	41	42	29
28	68	71	191	134	103	219	464	87	64	40	32	29
29	65	70	166	168	---	306	321	152	99	38	30	29
30	63	91	145	1500	---	306	251	141	116	37	29	29
31	61	---	131	1010	---	287	---	244	---	37	29	---
TOTAL	10476	3130	13433	14276	7780	15340	12850	5006	4442	1735	996	1066
MEAN	338	104	433	461	278	495	428	161	148	56.0	32.1	35.5
MAX	4570	290	2360	4630	1240	4960	1690	366	926	174	42	125
MIN	48	62	81	109	103	90	126	87	57	37	28	29
AC-FT	20780	6210	26640	28320	15430	30430	25490	9930	8810	3440	1980	2110
CFSM	2.48	.77	3.19	3.39	2.04	3.64	3.15	1.19	1.09	.41	.24	.26
IN.	2.87	.86	3.67	3.90	2.13	4.20	3.51	1.37	1.22	.47	.27	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	201	401	476	427	364	444	344	368	157	111	70.1	86.7
MAX	405	1149	1289	799	697	886	578	1176	286	266	203	177
(WY)	1994	1997	1994	1994	1989	1990	1991	1990	1989	1995	1994	1994
MIN	40.3	52.5	50.9	143	112	182	111	103	80.6	39.0	30.9	36.4
(WY)	1996	1990	1990	1996	1996	1996	1992	1997	1994	1998	1999	1999

RED RIVER BASIN

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07359610 CADDO RIVER NEAR CADDO GAP--CONTINUED

SUMMARY STATISTICS

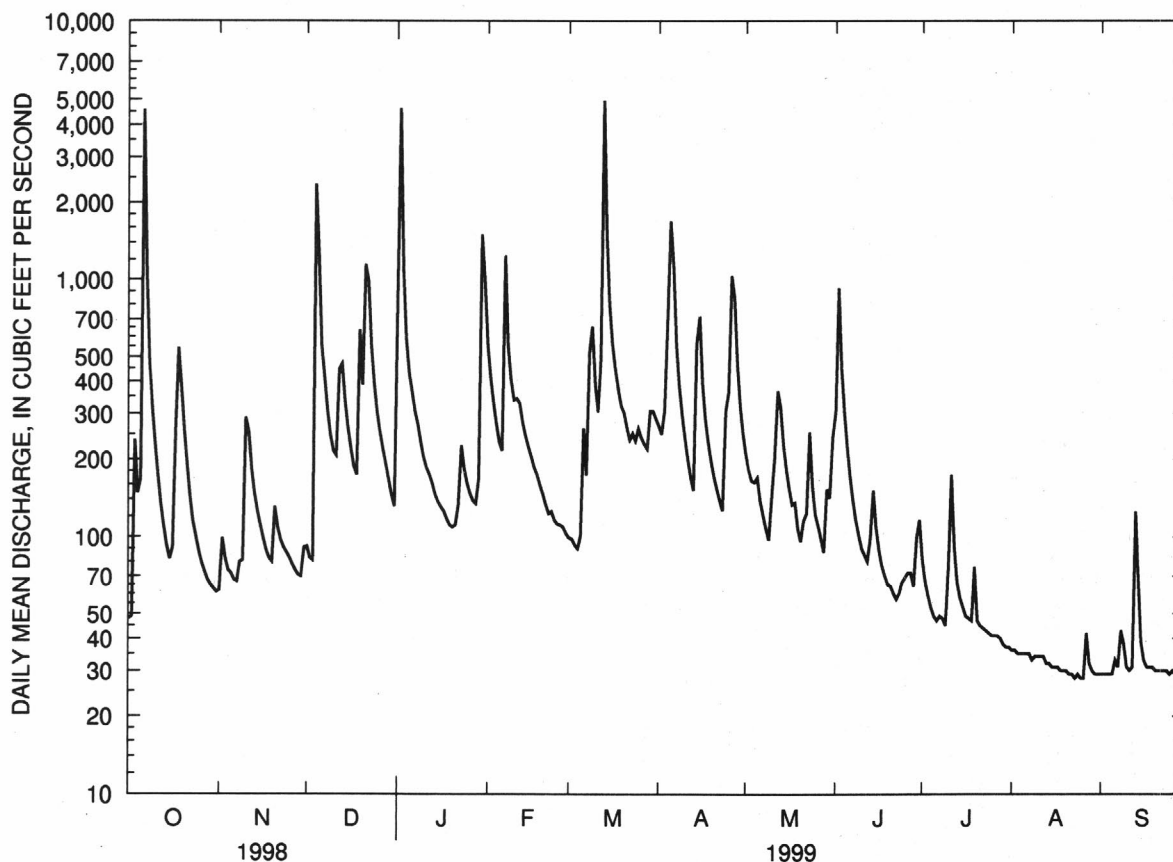
FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1989 - 1999

ANNUAL TOTAL	104294		90530			
ANNUAL MEAN	286		248		287	
HIGHEST ANNUAL MEAN					389	1994
LOWEST ANNUAL MEAN					157	1996
HIGHEST DAILY MEAN	5500	Jan 5	4960	Mar 13	28600	Dec 3 1993
LOWEST DAILY MEAN	26	Aug 1	28	Aug 23	26	Aug 1 1998
ANNUAL SEVEN-DAY MINIMUM	28	Jul 28	29	Aug 20	28	Jul 28 1998
INSTANTANEOUS PEAK FLOW			13300	Mar 13	^a 97200	Dec 3 1993
INSTANTANEOUS PEAK STAGE			14.55	Mar 13	26.27	Dec 3 1993
INSTANTANEOUS LOW FLOW			28	at times	26	Jul 31 1998
ANNUAL RUNOFF (AC-FT)	206900		179600		208200	
ANNUAL RUNOFF (CFSM)	2.10		1.82		2.11	
ANNUAL RUNOFF (INCHES)	28.53		24.76		28.72	
10 PERCENT EXCEEDS	552		473		516	
50 PERCENT EXCEEDS	169		125		123	
90 PERCENT EXCEEDS	37		31		45	

^aFrom rating curve extended above 10,000 ft³/s on basis of slope-conveyance study



RED RIVER BASIN

07360200 LITTLE MISSOURI RIVER NEAR LANGLEY

LOCATION.--Lat 34°18'41", long 93°53'58", in NW1/4SW1/4 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 mi².

PERIOD OF RECORD.--September 1998 to current year. Occasional low-flow measurements water years 1919-63, 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	45	70	314	319	55	92	137	79	137	17	13
2	38	99	68	2760	222	55	88	112	625	92	17	14
3	129	71	66	664	162	53	130	97	217	69	17	14
4	89	60	2350	380	126	51	410	92	121	56	17	24
5	76	54	917	254	104	55	842	87	86	48	16	27
6	2220	50	454	190	99	110	765	77	68	43	16	26
7	706	47	355	145	870	87	430	72	58	51	16	21
8	346	51	254	123	450	216	284	65	52	45	20	31
9	208	50	180	105	293	433	206	60	47	44	26	30
10	137	185	140	92	206	260	152	78	44	141	19	20
11	101	199	119	85	183	179	119	100	43	183	20	17
12	85	131	353	81	172	267	97	380	41	85	19	20
13	71	102	435	79	146	2850	86	317	99	63	17	103
14	64	84	275	72	127	858	292	178	105	52	17	50
15	58	72	186	68	114	445	485	121	69	46	15	31
16	55	64	138	67	105	297	299	96	54	41	14	24
17	55	58	111	66	93	221	206	82	47	37	14	21
18	156	52	99	63	86	163	150	78	43	35	13	19
19	153	51	429	60	81	127	121	66	40	33	13	19
20	111	85	302	59	75	114	103	60	38	32	12	17
21	88	81	806	59	70	97	91	57	36	27	12	19
22	72	72	712	62	65	88	84	61	34	23	12	18
23	62	67	414	75	65	92	78	58	38	23	12	16
24	56	63	264	70	62	85	382	54	39	24	12	16
25	52	58	179	66	61	95	519	51	44	22	12	15
26	49	55	136	62	59	95	1050	50	203	22	12	15
27	44	51	113	61	59	92	878	49	109	21	21	15
28	43	50	97	62	57	88	476	46	70	20	22	15
29	42	48	86	72	---	94	293	47	128	19	16	14
30	41	63	77	340	---	92	193	50	277	18	14	13
31	40	---	72	506	---	93	---	74	---	17	13	---
TOTAL	5484	2218	10257	7162	4531	7907	9401	2952	2954	1569	493	697
MEAN	177	73.9	331	231	162	255	313	95.2	98.5	50.6	15.9	23.2
MAX	2220	199	2350	2760	870	2850	1050	380	625	183	26	103
MIN	37	45	66	59	57	51	78	46	34	17	12	13
AC-FT	10880	4400	20340	14210	8990	15680	18650	5860	5860	3110	978	1380
CFSM	2.59	1.08	4.84	3.38	2.37	3.73	4.58	1.39	1.44	.74	.23	.34
IN.	2.98	1.21	5.58	3.90	2.46	4.30	5.11	1.61	1.61	.85	.27	.38

RED RIVER BASIN

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07360200 LITTLE MISSOURI RIVER NEAR LANGLEY--CONTINUED

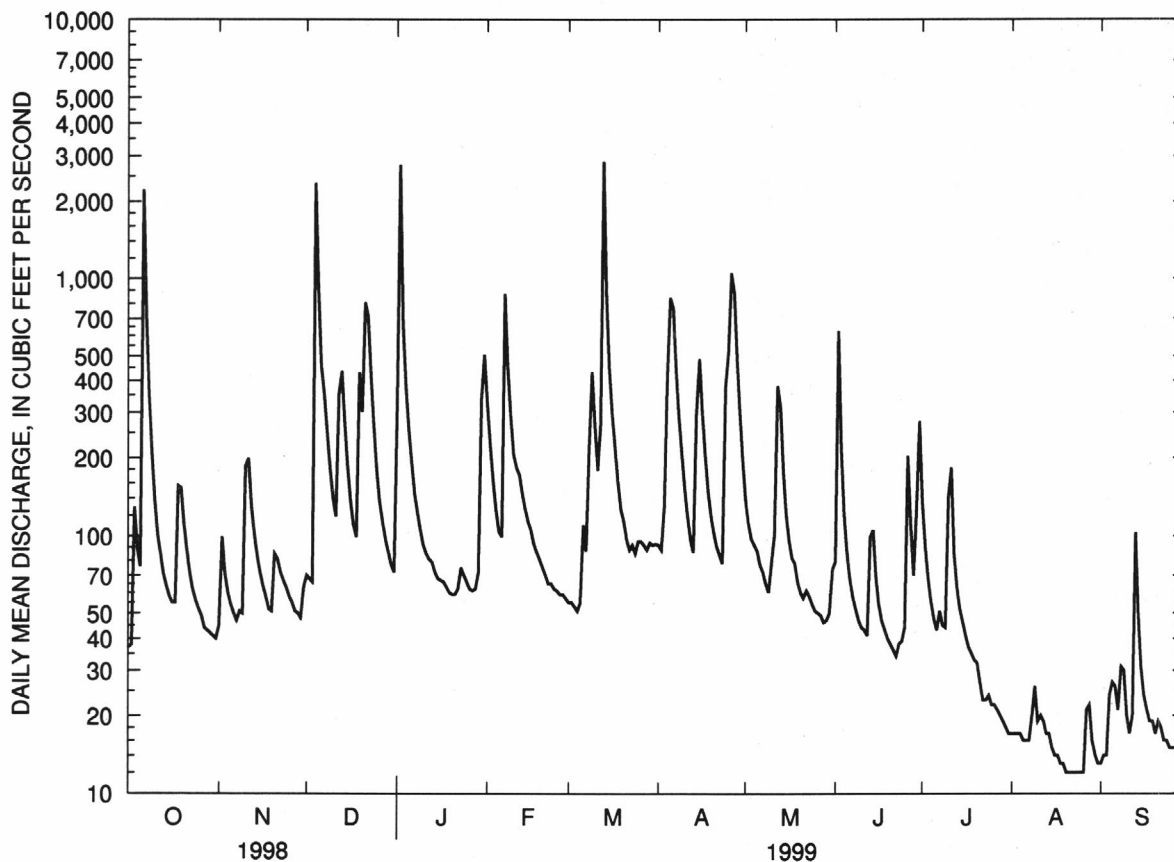
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 1999, BY WATER YEAR (WY)

MEAN	177	73.9	331	231	162	247	313	95.2	95.0	49.7	15.9	23.2
MAX	177	73.9	331	231	162	247	313	95.2	95.0	49.7	15.9	23.2
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	177	73.9	331	231	162	247	313	95.2	95.0	49.7	15.9	23.2
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 WATER YEAR

ANNUAL TOTAL	55625	
ANNUAL MEAN	152	
HIGHEST DAILY MEAN	2850	Mar 13
LOWEST DAILY MEAN	12	Aug 20
ANNUAL SEVEN-DAY MINIMUM	12	Aug 20
INSTANTANEOUS PEAK FLOW	^a 8620	Dec 4
INSTANTANEOUS PEAK STAGE	10.80	Dec 4
INSTANTANEOUS LOW FLOW	12	Aug 23
ANNUAL RUNOFF (AC-FT)	110300	
ANNUAL RUNOFF (CFSM)	2.23	
ANNUAL RUNOFF (INCHES)	30.25	
10 PERCENT EXCEEDS	327	
50 PERCENT EXCEEDS	71	
90 PERCENT EXCEEDS	17	

^aFrom rating curve extended above 2,300 ft³/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 NW1/4NW1/4 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 mi².

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). WRD Ark. 1973: 1972. WRD Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 229.33 ft above sea level. Prior to Oct. 22, 1954, at site 75 ft upstream at present datum.

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

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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	21	85	219	1130	50	290	236	32	16	.58	1.4
2	5.0	76	73	7320	786	46	244	187	125	19	.58	1.7
3	34	84	57	2350	569	44	314	155	119	12	.75	1.2
4	215	60	73	1070	436	40	1700	136	57	8.9	.94	1.1
5	135	49	993	750	344	38	4470	517	35	6.6	.76	1.1
6	3290	41	537	603	299	39	1740	242	24	5.3	.64	2.2
7	2380	36	608	503	602	55	951	131	17	4.3	.58	2.9
8	735	70	518	515	438	66	675	83	13	3.4	.54	2.9
9	413	94	341	573	351	280	558	61	9.9	3.0	.57	2.9
10	280	241	354	407	305	153	411	81	7.9	3.7	.61	2.2
11	203	377	972	349	287	104	322	381	6.3	6.7	15	2.1
12	144	235	877	313	380	453	244	344	5.1	45	17	2.4
13	104	178	1030	282	268	5120	198	314	4.4	30	14	5.9
14	81	146	632	230	235	2000	1120	168	4.1	21	13	5.9
15	66	120	429	198	215	984	1570	103	5.8	16	9.0	26
16	55	95	323	180	196	647	741	71	6.2	12	7.6	30
17	125	81	259	165	171	465	485	58	4.4	8.9	5.2	23
18	364	70	207	140	143	353	354	68	3.1	7.5	3.7	21
19	265	62	775	114	123	276	279	68	2.4	5.8	2.6	19
20	183	96	667	103	104	275	228	43	2.2	4.0	1.4	17
21	130	198	481	176	91	232	184	33	2.2	2.8	.66	17
22	97	105	547	2740	80	183	141	27	2.0	2.0	.58	17
23	75	82	414	1250	76	214	117	27	2.2	1.4	.58	16
24	60	73	362	733	73	242	101	40	3.2	.99	.63	15
25	49	68	292	524	65	299	256	31	4.0	.84	.60	14
26	42	60	259	412	62	273	1470	23	5.8	.87	.56	14
27	37	53	231	335	60	214	1450	18	4.9	.84	1.3	11
28	32	47	207	424	56	186	715	15	5.3	.81	1.6	9.4
29	28	45	183	2370	---	374	445	15	6.3	.71	1.4	8.0
30	25	55	148	4570	---	411	314	23	8.1	.63	1.3	5.3
31	23	---	118	2250	---	338	---	28	---	.58	1.4	---
TOTAL	9680.5	3018	13052	32168	7945	14454	22087	3727	527.8	251.57	105.66	298.6
MEAN	312	101	421	1038	284	466	736	120	17.6	8.12	3.41	9.95
MAX	3290	377	1030	7320	1130	5120	4470	517	125	45	17	30
MIN	5.0	21	57	103	56	38	101	15	2.0	.58	.54	1.1
AC-FT	19200	5990	25890	63810	15760	28670	43810	7390	1050	499	210	592
CFSM	1.75	.57	2.37	5.83	1.59	2.62	4.14	.68	.10	.05	.02	.06
IN.	2.02	.63	2.73	6.72	1.66	3.02	4.62	.78	.11	.05	.02	.06

RED RIVER BASIN

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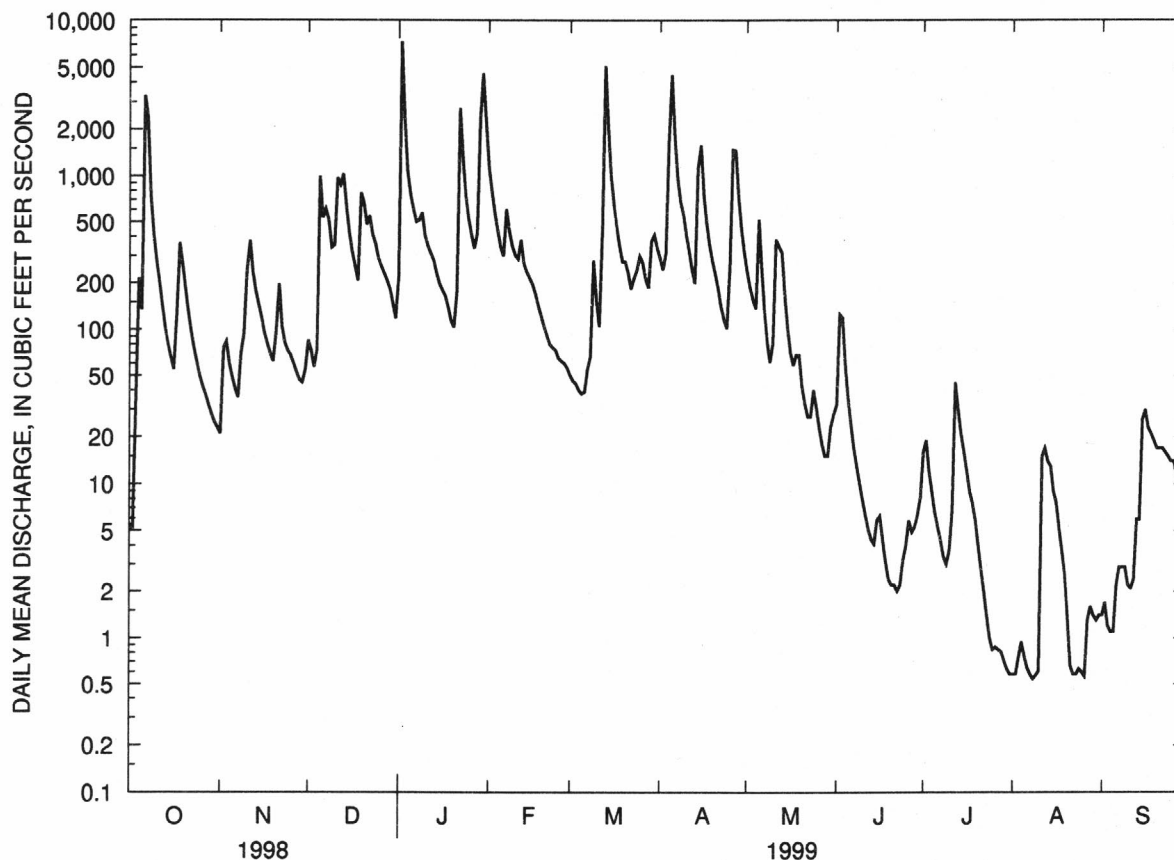
07361500 ANTOINE RIVER AT ANTOINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1999, BY WATER YEAR (WY)

MEAN	111	302	433	360	450	526	474	413	177	91.5	38.0	39.1
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	.000	.37	1.48	21.4	76.3	74.0	32.7	15.1	3.34	.13	.013	.020
(WY)	1957	1957	1966	1966	1963	1972	1972	1988	1966	1998	1956	1956

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1955 - 1999

ANNUAL TOTAL	108926.01	107315.13	
ANNUAL MEAN	298	294	284
HIGHEST ANNUAL MEAN			551 1973
LOWEST ANNUAL MEAN			109 1971
HIGHEST DAILY MEAN	6510 Feb 11	7320 Jan 2	20500 May 2 1958
LOWEST DAILY MEAN	.00 Jul 20	.54 Aug 8	.00 Aug 4 1956
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 20	.66 Jul 28	.00 Aug 4 1956
INSTANTANEOUS PEAK FLOW		11500 Jan 2	35500 May 2 1958
INSTANTANEOUS PEAK STAGE		22.14 Jan 2	28.75 May 2 1958
INSTANTANEOUS LOW FLOW		.54 ^a Aug 8,9	.00 at times
ANNUAL RUNOFF (AC-FT)	216100	212900	205500
ANNUAL RUNOFF (CFSM)	1.68	1.65	1.59
ANNUAL RUNOFF (INCHES)	22.76	22.43	21.65
10 PERCENT EXCEEDS	777	638	603
50 PERCENT EXCEEDS	75	76	68
90 PERCENT EXCEEDS	.36	1.9	1.5

^aAlso Aug. 25, 26

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 79 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 mi².

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 sea level. Aug. 8, 1928, to July 10, 1935, and July 11, 1935, to Jan. 4, 1945, nonrecording gage at present site and datum. Jan. 5, 1945, to Oct. 27, 1947, nonrecording gage at site 0.4 mi downstream at present datum. Aug. 10, 1938, to May 31, 1949, supplementary nonrecording 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	3730	1620	8450	37700	5470	13700	11100	1690	5630	4150	1140
2	1570	2720	1980	12300	44500	5740	12200	6680	3880	4400	3440	1530
3	1610	3340	2530	21800	44700	4160	10900	4020	5750	3970	3160	1910
4	1610	4270	2900	29900	37800	4050	13200	3220	3850	3700	3290	1640
5	1650	4240	2850	37400	28000	3790	16500	6210	2770	2630	3800	1580
6	1730	3470	5010	40900	20600	3930	21600	8000	2050	2160	3580	1390
7	9500	5160	6070	38000	15500	3300	26300	8430	1690	1960	3250	1220
8	17000	4570	7880	30500	13500	2640	28900	6970	1530	2930	3560	1320
9	15700	4240	11000	23600	13100	3660	30400	6040	1670	3420	2490	2250
10	11300	4470	11500	20100	13000	6840	29400	4610	3110	3580	2040	2240
11	6750	3660	12900	18500	12100	6890	25000	2570	2470	2150	3080	1820
12	3790	3170	15800	17300	11900	4840	21100	4610	1720	1610	3140	1650
13	2310	3100	17200	13500	12000	11800	18100	7600	1470	1770	3400	1430
14	2560	2760	17600	10300	11700	25100	15200	9220	1420	2950	4130	1320
15	3260	2050	16700	9270	11500	38500	16600	8500	1610	3070	2900	1120
16	2040	1990	13800	9040	10800	49700	22900	5730	1770	3290	1670	1590
17	2320	1850	10700	7940	9160	50100	26400	3610	1370	3550	1270	2530
18	4110	1770	9540	6860	8020	41300	25500	4480	1190	3100	1480	2120
19	5660	1840	9280	6610	8340	29200	21200	6670	1120	1910	2580	1520
20	6400	1820	12100	6790	7930	21300	16100	4980	1060	1560	3200	1460
21	5650	1880	13800	6490	7290	17800	10700	2740	1260	2880	3460	1280
22	4670	2480	14000	7700	6810	15100	8120	1980	1190	3650	2870	1200
23	4740	2750	15500	15600	6390	12100	6940	1740	1570	3790	1650	1080
24	4610	2010	14900	20500	6460	10500	6820	2780	1980	4290	1670	1090
25	4610	2050	14900	20300	6110	9310	5270	5140	1950	4710	2270	1180
26	4530	2190	12700	19000	6370	10800	5170	6270	1920	2840	2150	1140
27	4470	2440	10500	16200	6400	9930	10300	6500	2080	1930	2030	1100
28	4390	2310	8860	12600	5620	8670	17100	4320	1510	3120	1770	1090
29	4400	1620	8280	12300	---	7460	18500	2110	2460	3780	1890	1110
30	4270	1580	7830	19700	---	10100	16600	1900	3310	4310	1620	1180
31	3630	---	7430	28000	---	13800	---	1490	---	4200	1280	---
TOTAL	152180	85530	317660	547450	423300	447880	516720	160220	62420	98840	82270	44230
MEAN	4909	2851	10250	17660	15120	14450	17220	5168	2081	3188	2654	1474
MAX	17000	5160	17600	40900	44700	50100	30400	11100	5750	5630	4150	2530
MIN	1340	1580	1620	6490	5620	2640	5170	1490	1060	1560	1270	1080
AC-FT	301800	169600	630100	1086000	839600	888400	1025000	317800	123800	196000	163200	87730

RED RIVER BASIN

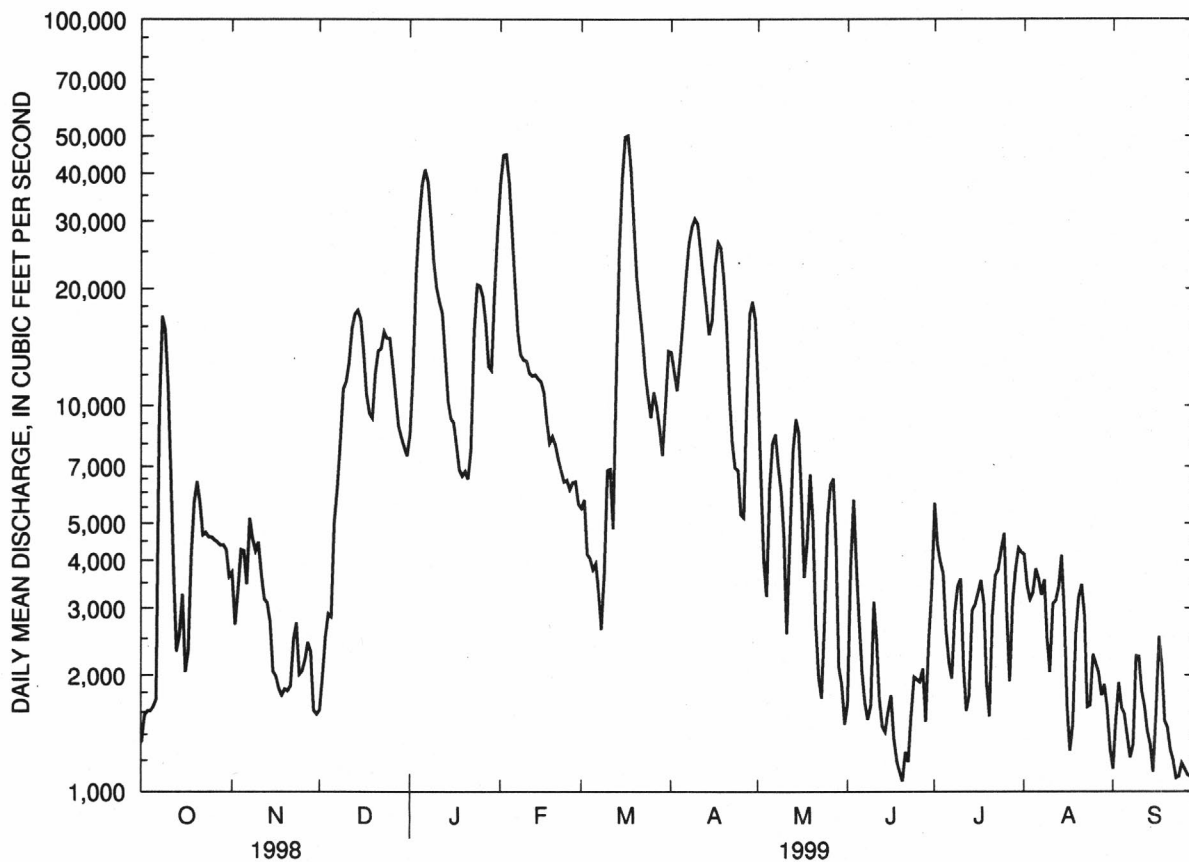
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07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1999, BY WATER YEAR (WY)

MEAN	2495	5284	9418	12310	12410	12920	13130	12610	5146	2832	1974	2250
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 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1929 - 1999	
ANNUAL TOTAL	2842843		2938700			
ANNUAL MEAN	7789		8051		7709	
HIGHEST ANNUAL MEAN					16120	
LOWEST ANNUAL MEAN					2292	
HIGHEST DAILY MEAN	43100	Jan 15	50100	Mar 17	238000	Apr 3 1945
LOWEST DAILY MEAN	822	Sep 11	1060	Jun 20	125	Sep 16 1943
ANNUAL SEVEN-DAY MINIMUM	870	Sep 5	1110	Sep 23	132	Sep 11 1943
INSTANTANEOUS PEAK FLOW			52700	Mar 17	243000	Apr 3 1945
INSTANTANEOUS PEAK STAGE			34.51	Mar 17	44.82	Apr 3 1945
INSTANTANEOUS LOW FLOW			950	Jun 19	125	Sep 16, 24-26 1943
ANNUAL RUNOFF (AC-FT)	5639000		5829000		5585000	
10 PERCENT EXCEEDS	19600		19300		19300	
50 PERCENT EXCEEDS	3840		4310		3450	
90 PERCENT EXCEEDS	1130		1570		775	



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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV 04...	0845	80513	81213	4560	69	6.6	761	17.8	8.8	92
JAN 13...	0830	80513	81213	15700	55	7.3	760	7.7	11.0	92
MAR 11...	0720	80513	81213	7610	80	6.6	762	12.2	9.3	87
JUN 08...	1115	80513	81213	1330	69	7.8	765	28.7	5.9	76
JUL 08...	0730	80513	81213	2950	82	7.6	766	30.4	6.6	88
AUG 24...	0815	80513	81213	1650	60	7.8	754	28.2	6.8	88

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)
NOV 04...	K17	K19	20	22	6.2	1.6	4.3	29	.4
JAN 13...	41	22	25	17	4.8	1.2	2.9	26	.3
MAR 11...	390	190	<1	27	8.8	1.3	4.1	24	.3
JUN 08...	K14	K6	K10	21	5.8	1.5	4.9	32	.5
JUL 08...	24	K13	80	23	6.5	1.6	5.3	32	.5
AUG 24...	22	K15	K16	18	4.7	1.4	4.0	32	.4

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV 04...	1.1	8.5	3.0	48	<.010	.180	.026	.03	--
JAN 13...	1.1	5.4	2.7	42	<.010	.170	.047	.06	.23
MAR 11...	1.3	7.4	5.3	60	<.010	.200	.030	.04	.37
JUN 08...	1.4	6.0	5.8	55	<.010	.170	.010	.01	.27
JUL 08...	1.3	8.0	4.3	49	<.010	.100	.050	.06	.25
AUG 24...	1.1	6.2	2.7	39	<.010	.050	.020	.03	.27

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 04...	<.20	--	<.020	<.020	.020	.06	26	320	87
JAN 13...	.28	.45	<.020	<.020	<.010	--	27	1140	95
MAR 11...	.40	.60	.100	E.040	.020	.06	75	1540	98
JUN 08...	.28	.45	.070	E.020	.010	.03	63	226	70
JUL 08...	.30	.40	.040	E.020	<.010	--	25	199	96
AUG 24...	.29	.34	.020	<.020	<.010	--	18	80	100

RED RIVER BASIN

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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 mi².

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.--WRD Ark. 1967: 1965. WRD Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.56 ft above sea level (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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1938, that of June 8, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	120	460	8080	205	369	171	112	106	5.3	3.9
2	15	27	151	2050	4220	183	319	135	112	81	4.9	6.4
3	22	38	154	3660	2400	163	334	115	93	62	4.6	6.6
4	28	41	119	3380	1740	149	1600	111	72	53	4.3	5.8
5	41	37	97	2350	1240	137	4050	273	53	44	4.0	4.4
6	317	32	87	1830	769	130	5640	1290	41	36	3.7	5.6
7	778	30	91	1390	499	125	4450	1190	34	31	3.4	10
8	726	48	204	850	468	122	2690	486	28	44	3.2	5.4
9	378	94	409	542	454	132	1860	178	24	46	3.1	4.3
10	157	119	515	448	396	141	1330	125	22	61	4.5	4.3
11	91	111	960	368	350	172	792	102	20	694	4.3	4.0
12	64	131	1480	308	341	187	416	95	37	332	4.1	3.5
13	49	139	1740	290	342	1460	296	103	58	122	3.7	3.3
14	41	138	1690	266	303	2950	276	101	75	73	3.8	3.1
15	35	170	1420	242	263	3360	578	82	70	49	2.9	2.7
16	30	164	1040	218	237	2540	693	68	51	38	2.4	2.3
17	27	133	491	204	231	1940	650	60	41	30	2.2	2.2
18	32	103	274	202	224	1410	475	95	29	23	2.0	2.1
19	95	83	378	192	212	794	276	123	24	19	1.9	2.0
20	105	76	615	176	199	465	222	118	20	16	1.9	1.9
21	86	89	587	168	190	500	198	89	17	15	1.9	1.9
22	64	118	463	263	184	403	177	67	15	14	1.8	1.9
23	47	115	447	683	178	309	157	64	21	12	1.8	1.8
24	38	91	561	831	173	272	144	58	39	11	1.8	1.8
25	31	76	630	791	170	291	134	51	285	9.9	2.9	1.7
26	27	66	565	679	163	351	132	54	1130	8.8	11	1.6
27	24	59	515	390	167	336	199	50	1780	8.2	11	1.6
28	22	56	535	316	210	265	367	48	1480	7.4	13	1.6
29	20	53	606	2190	---	228	418	45	543	7.1	10	1.7
30	19	60	603	7930	---	248	283	50	151	6.4	6.8	1.7
31	19	---	497	11200	---	344	---	63	---	5.8	4.9	---
TOTAL	3444	2516	18044	44867	24403	20312	29525	5660	6477	2065.6	137.1	101.1
MEAN	111	83.9	582	1447	872	655	984	183	216	66.6	4.42	3.37
MAX	778	170	1740	11200	8080	3360	5640	1290	1780	694	13	10
MIN	15	19	87	168	163	122	132	45	15	5.8	1.8	1.6
AC-FT	6830	4990	35790	88990	48400	40290	58560	11230	12850	4100	272	201
CFSM	.29	.22	1.51	3.76	2.26	1.70	2.56	.47	.56	.17	.01	.01
IN.	.33	.24	1.74	4.34	2.36	1.96	2.85	.55	.63	.20	.01	.01

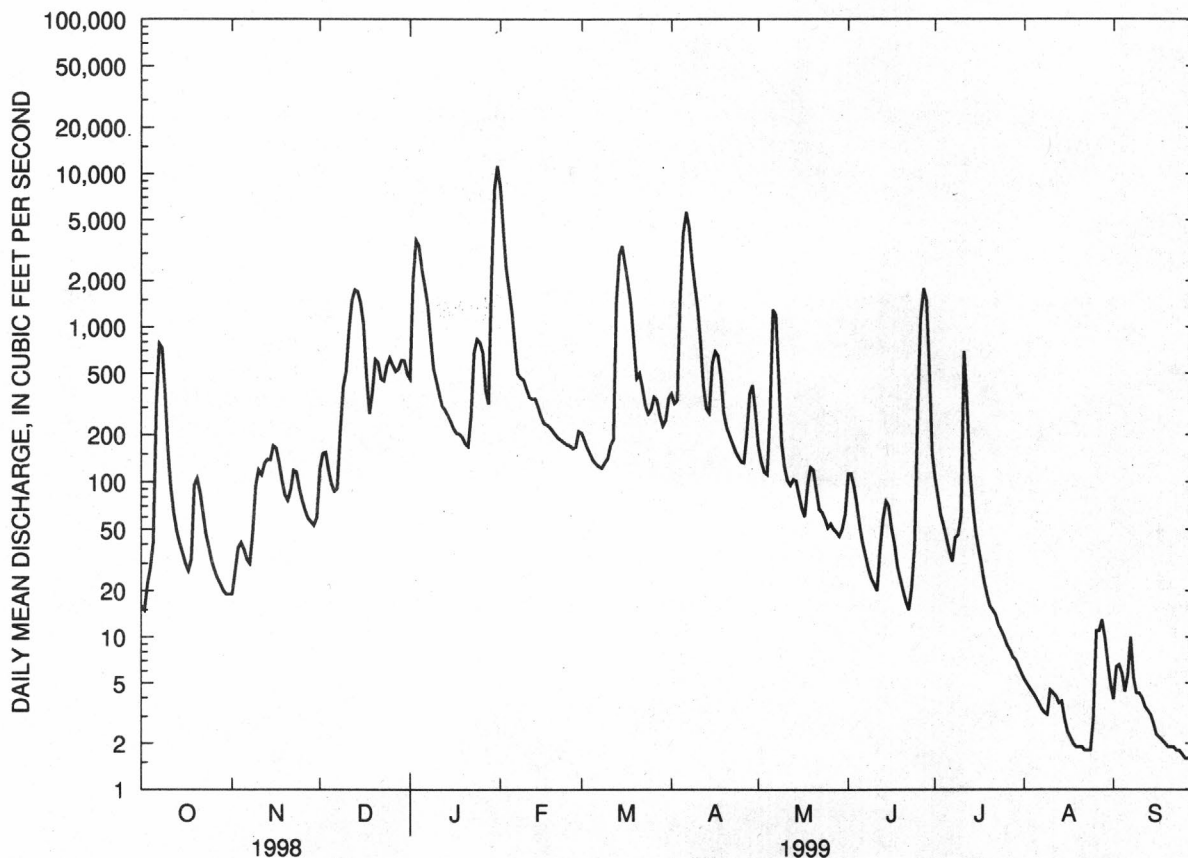
RED RIVER BASIN

07362100 SMACKOVER CREEK NEAR SMACKOVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

MEAN	119	249	570	665	821	825	758	492	412	131	52.5	96.1
MAX	1784	1143	1998	1980	2366	2467	4078	1701	2864	1949	346	2174
(WY)	1985	1975	1983	1962	1990	1990	1991	1966	1974	1989	1971	1974
MIN	1.51	3.66	33.5	52.3	44.6	112	90.6	33.6	8.91	1.81	1.78	1.58
(WY)	1996	1996	1982	1996	1996	1967	1971	1996	1972	1964	1969	1969

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1962 - 1999	
ANNUAL TOTAL	153546.2		157551.8			
ANNUAL MEAN	421		432		430	
HIGHEST ANNUAL MEAN					1074	1974
LOWEST ANNUAL MEAN					94.4	1963
HIGHEST DAILY MEAN	3810	Jan 9	11200	Jan 31	35300	Apr 6 1997
LOWEST DAILY MEAN	2.4	Aug 3	1.6	Sep 26	.00	Aug 24 1978
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 5	1.7	Sep 24	.05	Aug 22 1978
INSTANTANEOUS PEAK FLOW			11700	Jan 31	^a 52700	Jun 8 1974
INSTANTANEOUS PEAK STAGE			18.57	Jan 31	24.97	Jun 8 1974
INSTANTANEOUS LOW FLOW			1.5	Sep 26, 27, 28	.00	Aug 9 1964
ANNUAL RUNOFF (AC-FT)	304600		312500		311600	
ANNUAL RUNOFF (CFSM)	1.09		1.12		1.12	
ANNUAL RUNOFF (INCHES)	14.84		15.22		15.18	
10 PERCENT EXCEEDS	1640		1080		1220	
50 PERCENT EXCEEDS	89		112		96	
90 PERCENT EXCEEDS	5.5		3.9		6.1	

^aFrom rating curve extended above 31,000 ft³/s

RED RIVER BASIN

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07362587 ALUM FORK SALINE RIVER NEAR REFORM

LOCATION.--Lat 34°47'50", long 92°56'00", in NW1/4NE1/4 sec.29, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, 100 ft above low-water bridge on forest road, 5.7 mi west of Reform.

DRAINAGE AREA.--27.0 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	3.2	5.0	293	121	6.9	33	e18	81	10	.00	.00
2	.54	3.5	5.0	1490	88	6.3	28	e11	56	5.3	.00	.00
3	2.4	2.9	5.1	176	65	5.5	90	e10	43	3.1	.00	.00
4	2.6	2.5	116	99	49	5.0	223	e19	28	1.9	.00	.00
5	2.4	2.2	136	67	38	7.3	129	35	18	1.2	.00	.00
6	1070	2.0	71	55	34	22	106	19	11	1.4	.00	.00
7	120	2.1	49	42	177	14	76	13	7.4	1.0	.00	.00
8	47	2.9	34	35	102	49	58	9.5	5.2	.55	.00	.00
9	26	2.9	26	28	72	95	47	7.3	3.9	.31	.00	.00
10	17	19	23	22	56	54	35	6.4	2.9	2.9	.00	.00
11	12	21	21	19	52	40	27	8.8	2.1	7.3	.00	.00
12	8.6	15	71	18	47	83	21	9.1	1.6	1.8	.00	.00
13	6.5	11	116	16	38	1220	17	7.6	1.6	1.3	.00	.00
14	5.0	9.5	71	13	33	284	101	5.7	4.3	.76	.00	.00
15	3.9	7.9	50	11	30	169	154	4.5	3.9	.46	.00	.00
16	7.7	6.6	37	11	26	109	82	3.8	2.3	.25	.00	.00
17	25	5.5	28	9.8	22	78	56	69	1.5	.14	.00	.00
18	155	4.6	23	8.5	19	56	42	163	1.0	.07	.00	.00
19	88	4.2	132	7.3	17	43	32	51	.70	.02	.00	.00
20	49	4.7	87	6.5	14	46	25	29	.57	.00	.00	.00
21	32	4.1	469	23	12	36	19	36	.41	.00	.00	.00
22	21	3.6	283	330	11	29	15	153	.25	.00	.00	.00
23	15	3.2	130	159	11	29	13	251	.15	.00	.00	.00
24	12	3.0	87	94	9.5	25	23	83	.13	.00	.00	.00
25	9.2	2.8	63	66	8.7	22	26	48	.20	.00	.00	.00
26	7.4	2.5	50	50	8.1	18	285	34	.14	.00	.00	.00
27	6.0	2.3	40	40	8.6	16	214	23	.09	.00	.00	.00
28	5.0	2.1	32	33	8.1	15	93	16	.04	.00	.00	.00
29	4.3	2.0	27	53	---	43	e55	13	.24	.00	.00	.00
30	3.8	3.9	21	317	---	43	e40	30	36	.00	.00	.00
31	3.4	---	18	208	---	38	---	94	---	.00	.00	---
TOTAL	1768.38	162.7	2326.1	3800.1	1177.0	2707.0	2165	1280.7	313.62	39.76	0.00	0.00
MEAN	57.0	5.42	75.0	123	42.0	87.3	72.2	41.3	10.5	1.28	.000	.000
MAX	1070	21	469	1490	177	1220	285	251	81	10	.00	.00
MIN	.54	2.0	5.0	6.5	8.1	5.0	13	3.8	.04	.00	.00	.00
AC-FT	3510	323	4610	7540	2330	5370	4290	2540	622	79	.00	.00
CFSM	2.11	.20	2.78	4.54	1.56	3.23	2.67	1.53	.39	.05	.00	.00
IN.	2.44	.22	3.20	5.24	1.62	3.73	2.98	1.76	.43	.05	.00	.00

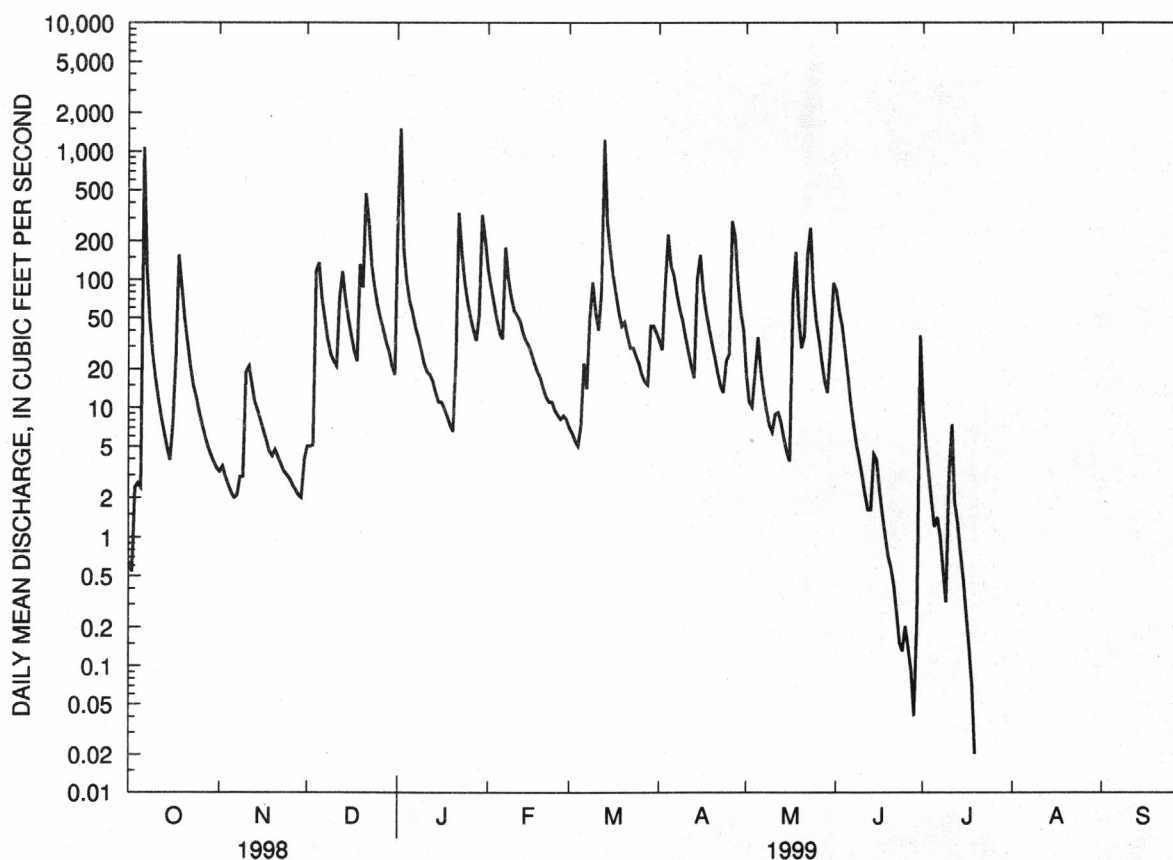
RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	27.6	61.4	111	79.4	71.6	100	93.1	54.2	16.1	4.57	2.32	2.62
MAX	77.5	222	336	135	145	265	296	157	61.5	24.0	18.3	10.7
(WY)	1997	1997	1991	1991	1990	1990	1991	1990	1992	1994	1994	1996
MIN	.007	2.22	1.37	31.7	8.81	37.8	8.10	1.18	1.32	.024	.000	.000
(WY)	1996	1990	1990	1996	1996	1996	1992	1992	1998	1998	1991	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1990 - 1999	
ANNUAL TOTAL	16732.03		15740.36			
ANNUAL MEAN	45.8		43.1		52.0	
HIGHEST ANNUAL MEAN					84.8	
LOWEST ANNUAL MEAN					19.8	
HIGHEST DAILY MEAN	1380	Feb 11	1490	Jan 2	5800	Dec 21 1990
LOWEST DAILY MEAN	.00	Jul 6	.00	Jul 20	.00	Aug 21 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 16	.00	Jul 20	.00	Aug 21 1990
INSTANTANEOUS PEAK FLOW			^a 5490	Jan 2	^a 13500	Dec 21 1990
INSTANTANEOUS PEAK STAGE			11.88	Jan 2	^b 15.30	Dec 21 1990
INSTANTANEOUS LOW FLOW			.00 at times		.00 at times	
ANNUAL RUNOFF (AC-FT)	33190		31220		37650	
ANNUAL RUNOFF (CFSM)	1.70		1.60		1.92	
ANNUAL RUNOFF (INCHES)	23.05		21.69		26.15	
10 PERCENT EXCEEDS	98		94		103	
50 PERCENT EXCEEDS	7.6		9.8		9.1	
90 PERCENT EXCEEDS	.01		.00		.00	

^aFrom rating curve extended above 262 ft³/s on basis of step-backwater computations^bFrom floodmark^cEstimated

RED RIVER BASIN

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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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV 09...	0915	80513	81213	2.7	18	5.9	749	11.8	10	1.2	9.7
DEC 21...	2220	80513	81213	701	20	5.8	758	9.5	60	9.6	10.8
FEB 08...	0945	80513	81213	108	14	6.7	746	10.2	20	4.4	10.3
MAY 04...	1130	80513	81213	13	16	6.2	741	17.6	10	2.4	9.4
DATE		OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV 09...	91	K12	160	7	1.1	1.1	1.1	24	.2	.40	
DEC 21...	95	480	3500	7	1.3	1.0	.80	18	.1	.60	
FEB 08...	94	K7	K18	6	.90	.80	.90	25	.2	.20	
MAY 04...	101	K2	55	6	1.0	.90	1.0	25	.2	.30	
DATE		ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT DAY) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
NOV 09...	4	2.0	1.5	<.10	5.6	18	15	.02	.13	--	
DEC 21...	3	2.9	1.1	<.10	4.9	34	15	.05	64.4	.015	
FEB 08...	4	2.4	1.2	<.10	5.6	16	14	.02	4.67	.000	
MAY 04...	4	2.2	1.2	<.10	5.5	17	15	.02	.60	.008	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV 09...	--	<.001	--	.008	.006	.01	--	<.20	--	.005	
DEC 21...	.07	.003	.01	.018	.024	.03	.38	.40	.42	.018	
FEB 08...	.00	.004	.01	.004	.008	.01	--	<.20	--	.005	
MAY 04...	.04	.002	.01	.010	.005	.01	.25	.25	.26	.007	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 09...	<.001	.70	.60	83	110	4	2.9	<.10	8	.06	
DEC 21...	<.001	8.3	8.3	130	300	24	12	<.10	21	40	
FEB 08...	<.001	1.5	.90	35	110	3	1.6	<.10	4	1.2	
MAY 04...	<.001	1.0	.90	55	80	4	2.4	<.10	5	.18	

RED RIVER BASIN

07362588 LAKE WINONA DOWNSTREAM FROM STILLHOUSE CREEK NEAR REFORM

LOCATION.--Lat 34°48'28", long 92°54'06", in NE1/4 sec.22, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, 0.5 mi downstream from Stillhouse Creek, and 3.4 mi upstream from dam.

PERIOD OF RECORD.--May 1989 to August 1990. December 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	RESER-VOIR DEPTH (FEET) (72025)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM HG) (00025)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV												
10...	1120	80513	80513	--	15.0	--	--	742	2.10	--	--	--
10...	1128	80513	80513	.00	15.0	17	5.3	742	--	15.3	8.4	86
10...	1129	80513	80513	5.00	15.0	17	5.9	742	--	15.2	8.3	85
10...	1130	80513	80513	10.0	15.0	17	5.9	742	--	15.2	8.2	84
10...	1131	80513	80513	15.0	15.0	17	5.9	742	--	15.2	8.2	84
10...	1145	80513	81213	--	15.0	--	--	742	--	--	--	--
FEB												
08...	1200	80513	80513	--	21.0	--	--	748	1.80	--	--	--
08...	1201	80513	80513	.00	21.0	16	E6.6	748	--	10.4	10.3	94
08...	1202	80513	80513	5.00	21.0	16	E6.7	748	--	9.5	10.4	92
08...	1203	80513	80513	10.0	21.0	16	E6.7	748	--	8.8	10.2	90
08...	1204	80513	80513	15.0	21.0	16	E6.6	748	--	8.3	9.9	86
08...	1205	80513	80513	20.0	21.0	16	E6.7	748	--	8.1	10.0	86
08...	1206	80513	80513	21.0	21.0	16	E6.7	748	--	8.1	10.0	86
08...	1210	80513	81213	--	21.0	--	--	748	--	--	--	--
MAY												
04...	1000	80513	80513	--	25.0	--	--	744	2.00	--	--	--
04...	1005	80513	80513	.00	25.0	17	6.3	744	--	20.1	10.6	119
04...	1006	80513	80513	5.00	25.0	17	6.4	744	--	20.4	10.8	122
04...	1007	80513	80513	10.0	25.0	17	6.4	744	--	19.7	10.9	122
04...	1008	80513	80513	15.0	25.0	18	6.3	744	--	18.3	10.2	111
04...	1009	80513	80513	16.0	25.0	17	5.6	744	--	16.7	8.5	90
04...	1010	80513	80513	18.0	25.0	18	6.0	744	--	15.5	8.6	88
04...	1011	80513	80513	20.0	25.0	18	6.0	744	--	14.3	8.3	83
04...	1012	80513	80513	25.0	25.0	18	5.9	744	--	13.2	7.9	77
04...	1015	80513	81213	--	25.0	--	--	744	--	--	--	--
AUG												
18...	1120	80513	80513	--	21.0	--	--	764	1.80	--	--	--
18...	1122	80513	80513	.00	21.0	22	6.4	764	--	29.5	7.0	92
18...	1124	80513	80513	5.00	21.0	22	6.3	764	--	29.0	6.8	89
18...	1125	80513	80513	10.0	21.0	22	6.2	764	--	28.6	6.1	78
18...	1127	80513	80513	12.0	21.0	22	5.9	764	--	27.4	3.4	43
18...	1128	80513	80513	13.0	21.0	22	5.8	764	--	26.8	2.4	30
18...	1129	80513	80513	15.0	21.0	23	5.9	764	--	24.0	1.8	21
18...	1131	80513	80513	16.0	21.0	23	5.7	764	--	22.8	.3	3
18...	1132	80513	80513	17.0	21.0	24	5.7	764	--	21.9	.2	3
18...	1133	80513	80513	18.0	21.0	27	5.7	764	--	20.6	.2	2
18...	1134	80513	80513	19.0	21.0	27	5.7	764	--	19.6	.2	2
18...	1135	80513	80513	20.0	21.0	31	5.8	764	--	18.0	.2	2
18...	1136	80513	80513	21.0	21.0	31	5.8	764	--	16.7	.2	2
18...	1140	80513	81213	--	21.0	--	--	764	--	--	--	--
18...	1145	80513	81213	--	21.0	--	--	764	--	--	--	--

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER-VAL (FT) (72015)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT) (72016)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV									
10...	1145	.00	15	10	2.1	K6	K4	4	18
FEB									
08...	1210	.00	21	20	2.6	K3	K1	4	21
MAY									
04...	1015	.00	24	10	1.1	K3	8	6	20
AUG									
18...	1140	.00	9.0	5	1.4	<1	<1	5	10
18...	1145	15	21	10	1.6	<1	<1	5	23

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV									
10...	.010	.04	.002	.01	.012	.026	.03	--	<.20
FEB									
08...	.023	.10	.006	.02	.029	.016	.02	.19	.21
MAY									
04...	.004	.02	.002	.01	.006	.010	.01	--	<.20
AUG									
18...	--	--	.001	.00	<.002	.008	.01	.50	.51
18...	--	--	.001	.00	<.002	.008	.01	.38	.39

RED RIVER BASIN

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07362588 LAKE WINONA DOWNSTREAM FROM STILLHOUSE CREEK NEAR REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
NOV								
10...	--	.009	<.001	1.5	1.3	180	37	2.10
FEB								
08...	.24	.006	--	1.9	1.8	130	49	1.00
MAY								
04...	--	.009	<.001	3.1	3.0	110	17	1.10
AUG								
18...	--	.005	<.001	3.3	2.9	180	34	2.30
18...	--	.008	<.001	2.9	2.5	290	100	--

RED RIVER BASIN

07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM

LOCATION.--Lat 34°48'16", long 92°51'16", in SE1/4 sec.24, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, 0.1 mi downstream from Gillis Branch, and 1.3 mi upstream from dam.

PERIOD OF RECORD.--May 1989 to August 1990. December 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	RESER-VOIR DEPTH (FEET) (72025)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	BARO-METRIC PRES-SURE (MM HG) (00025)	TRANS-ENCY PAR-ENCY (SECCHI DISK) (M) (00078)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV												
10...	1030	80513	80513	--	34.0	--	--	742	2.10	--	--	--
10...	1040	80513	80513	.00	34.0	17	5.9	742	--	15.4	8.0	82
10...	1041	80513	80513	5.00	34.0	17	5.9	742	--	15.5	7.8	81
10...	1042	80513	80513	10.0	34.0	17	5.9	742	--	15.5	7.8	80
10...	1043	80513	80513	15.0	34.0	17	5.9	742	--	15.5	7.8	80
10...	1044	80513	80513	20.0	34.0	17	5.9	742	--	15.5	7.8	80
10...	1045	80513	80513	25.0	34.0	17	5.9	742	--	15.5	7.7	80
10...	1046	80513	80513	29.0	34.0	19	5.6	742	--	14.5	3.9	40
10...	1048	80513	80513	30.0	34.0	19	5.5	742	--	13.0	1.1	11
10...	1049	80513	80513	34.0	34.0	20	5.4	742	--	12.5	.4	3
10...	1055	80513	81213	--	34.0	--	--	742	--	--	--	--
10...	1100	80513	81213	--	34.0	--	--	742	--	--	--	--
FEB												
08...	1130	80513	80513	--	43.0	--	--	748	1.70	--	--	--
08...	1131	80513	80513	.00	43.0	16	E6.8	748	--	11.2	10.3	96
08...	1132	80513	80513	5.00	43.0	16	E6.8	748	--	9.8	10.5	95
08...	1133	80513	80513	10.0	43.0	16	E6.8	748	--	9.4	10.6	94
08...	1134	80513	80513	15.0	43.0	16	E6.8	748	--	8.9	10.4	92
08...	1135	80513	80513	20.0	43.0	16	E6.8	748	--	8.2	10.5	90
08...	1136	80513	80513	25.0	43.0	16	E6.8	748	--	8.1	10.5	91
08...	1137	80513	80513	30.0	43.0	16	E6.8	748	--	8.0	10.5	90
08...	1138	80513	80513	35.0	43.0	16	E6.8	748	--	7.9	10.4	90
08...	1139	80513	80513	40.0	43.0	16	E6.8	748	--	7.9	10.4	89
08...	1140	80513	80513	43.0	43.0	16	E6.8	748	--	7.8	10.3	88
08...	1145	80513	81213	--	43.0	--	--	748	--	--	--	--
MAY												
04...	0935	80513	80513	--	43.0	--	--	744	2.00	--	--	--
04...	0936	80513	80513	.00	43.0	17	6.4	744	--	19.7	11.3	127
04...	0937	80513	80513	5.00	43.0	17	6.5	744	--	19.7	11.5	129
04...	0938	80513	80513	10.0	43.0	17	6.5	744	--	19.2	11.4	126
04...	0939	80513	80513	13.0	43.0	17	6.4	744	--	18.1	10.8	117
04...	0940	80513	80513	15.0	43.0	17	6.3	744	--	17.0	10.6	113
04...	0941	80513	80513	18.0	43.0	17	6.2	744	--	14.9	10.3	104
04...	0942	80513	80513	20.0	43.0	17	6.3	744	--	14.0	9.8	97
04...	0943	80513	80513	25.0	43.0	17	6.2	744	--	12.9	9.8	95
04...	0944	80513	80513	30.0	43.0	17	6.1	744	--	12.1	9.4	89
04...	0945	80513	80513	35.0	43.0	17	6.1	744	--	11.7	9.1	86
04...	0947	80513	80513	40.0	43.0	17	6.0	744	--	10.9	8.6	80
04...	0950	80513	81213	--	43.0	--	--	744	--	--	--	--
AUG												
18...	1025	80513	80513	--	37.0	--	--	756	2.70	--	--	--
18...	1035	80513	80513	.00	37.0	21	6.5	756	--	29.3	7.2	95
18...	1036	80513	80513	5.00	37.0	21	6.4	756	--	28.7	7.1	93
18...	1037	80513	80513	10.0	37.0	21	6.4	756	--	28.5	7.1	92
18...	1040	80513	80513	14.0	37.0	21	6.3	756	--	27.1	5.6	71
18...	1041	80513	80513	15.0	37.0	21	6.2	756	--	24.3	4.7	57
18...	1042	80513	80513	16.0	37.0	21	6.0	756	--	21.9	4.0	46
18...	1043	80513	80513	17.0	37.0	21	5.9	756	--	19.9	3.9	43
18...	1044	80513	80513	18.0	37.0	21	5.9	756	--	18.5	4.4	47
18...	1045	80513	80513	19.0	37.0	20	5.8	756	--	17.5	4.8	51
18...	1046	80513	80513	20.0	37.0	20	5.8	756	--	17.0	4.3	45
18...	1047	80513	80513	21.0	37.0	21	5.8	756	--	15.8	3.7	37
18...	1049	80513	80513	23.0	37.0	21	5.7	756	--	14.1	2.7	27
18...	1052	80513	80513	25.0	37.0	21	5.6	756	--	13.6	2.9	28
18...	1053	80513	80513	30.0	37.0	21	5.7	756	--	12.3	3.2	30
18...	1054	80513	80513	35.0	37.0	22	5.6	756	--	11.8	3.0	28
18...	1055	80513	80513	37.0	37.0	22	5.6	756	--	11.5	2.8	26
18...	1100	80513	80513	--	37.0	--	--	756	--	--	--	--
18...	1110	80513	81213	--	37.0	--	--	756	--	--	--	--

RED RIVER BASIN

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07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	
DATE	TIME									
NOV										
10...	1055	.00	24	10	1.6	33	K5	5	20	
10...	1100	25	34	10	2.3	K8	K8	5	18	
FEB										
08...	1145	.00	42	20	1.8	K5	K2	4	16	
MAY										
04...	0950	.00	42	10	.87	<1	K10	2	19	
AUG										
18...	1100	.00	15	5	.98	3	180	6	14	
18...	1110	15	36	10	1.5	<1	K10	5	20	
DATE		NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV										
10...	.007	.03	.002	.01	.009	.018	.02	--	<.20	
10...	.009	.04	.003	.01	.012	.024	.03	--	<.20	
FEB										
08...	.027	.12	.004	.01	.031	.019	.02	--	--	
MAY										
04...	.006	.03	.002	.01	.008	.012	.02	--	<.20	
AUG										
18...	.001	.00	.001	.00	.002	.007	.01	.59	.60	
18...	.012	.05	.001	.00	.013	.008	.01	.23	.24	
DATE		NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
NOV										
10...	--	.005	<.001	--	1.4	1.3	180	59	2.00	
10...	--	.006	<.001	--	2.6	2.5	300	120	--	
FEB										
08...	--	.006	.002	.01	2.2	2.0	140	65	.800	
MAY										
04...	--	.008	<.001	--	3.0	2.8	100	13	1.10	
AUG										
18...	.60	.004	<.001	--	2.9	2.4	80	21	1.40	
18...	.25	.008	<.001	--	3.5	2.9	140	120	--	

RED RIVER BASIN

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 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	RESER- VOIR DEPTH (FEET) (72025)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV												
10...	0920	80513	80513	--	64.0	--	--	740	2.40	--	--	--
10...	0926	80513	80513	.00	64.0	17	5.7	740	--	15.6	7.8	81
10...	0927	80513	80513	5.00	64.0	17	5.8	740	--	15.6	7.7	80
10...	0928	80513	80513	10.0	64.0	17	5.8	740	--	15.6	7.7	79
10...	0929	80513	80513	15.0	64.0	17	5.8	740	--	15.6	7.7	79
10...	0930	80513	80513	20.0	64.0	14	5.8	740	--	15.6	7.6	79
10...	0931	80513	80513	25.0	64.0	14	5.8	740	--	15.6	7.6	79
10...	0932	80513	80513	30.0	64.0	17	5.8	740	--	15.6	7.5	78
10...	0935	80513	80513	32.0	64.0	19	5.4	740	--	14.2	2.1	21
10...	0936	80513	80513	35.0	64.0	19	5.3	740	--	13.1	.3	3
10...	0938	80513	80513	37.0	64.0	19	5.3	740	--	11.9	.6	5
10...	0939	80513	80513	40.0	64.0	18	5.3	740	--	11.3	1.1	11
10...	0940	80513	80513	45.0	64.0	19	5.4	740	--	10.8	1.5	14
10...	0941	80513	80513	50.0	64.0	19	5.3	740	--	10.4	1.4	13
10...	0942	80513	80513	55.0	64.0	20	2.3	740	--	10.2	1.4	12
10...	0943	80513	80513	60.0	64.0	22	5.4	740	--	9.8	.6	5
10...	0944	80513	80513	64.0	64.0	28	5.6	740	--	9.7	.3	3
10...	0950	80513	81213	--	64.0	--	--	740	--	--	--	--
10...	1000	80513	81213	--	64.0	--	--	740	--	--	--	--
FEB												
08...	1045	80513	80513	--	84.0	--	--	748	2.90	--	--	--
08...	1046	80513	80513	.00	84.0	16	E6.9	748	--	10.6	10.7	98
08...	1047	80513	80513	5.00	84.0	16	E6.9	748	--	9.9	10.7	96
08...	1048	80513	80513	10.0	84.0	16	E6.9	748	--	9.5	10.7	95
08...	1049	80513	80513	15.0	84.0	16	E6.9	748	--	9.1	10.7	95
08...	1050	80513	80513	20.0	84.0	16	E6.8	748	--	8.8	10.7	94
08...	1051	80513	80513	25.0	84.0	16	E6.9	748	--	8.6	10.7	93
08...	1052	80513	80513	30.0	84.0	16	E6.0	748	--	8.3	10.6	92
08...	1053	80513	80513	35.0	84.0	16	E6.8	748	--	7.9	10.5	90
08...	1054	80513	80513	40.0	84.0	16	E6.8	748	--	7.9	10.5	90
08...	1055	80513	80513	45.0	84.0	16	E6.8	748	--	7.8	10.4	89
08...	1056	80513	80513	50.0	84.0	16	E6.8	748	--	7.6	10.4	88
08...	1057	80513	80513	55.0	84.0	16	E6.7	748	--	7.5	10.3	87
08...	1058	80513	80513	60.0	84.0	16	E6.7	748	--	7.4	10.2	87
08...	1059	80513	80513	65.0	84.0	16	E6.7	748	--	7.4	10.2	86
08...	1100	80513	80513	70.0	84.0	16	E6.7	748	--	7.4	10.2	86
08...	1101	80513	80513	75.0	84.0	16	E6.7	748	--	7.4	10.2	86
08...	1102	80513	80513	80.0	84.0	16	E6.7	748	--	7.4	10.1	86
08...	1103	80513	80513	84.0	84.0	16	E6.7	748	--	7.4	10.1	85
08...	1105	80513	81213	--	84.0	--	--	748	--	--	--	--
MAY												
04...	0835	80513	80513	--	84.0	--	--	744	2.00	--	--	--
04...	0840	80513	80513	.00	84.0	17	6.5	744	--	19.2	11.5	128
04...	0841	80513	80513	5.00	84.0	17	6.4	744	--	19.2	11.9	132
04...	0842	80513	80513	10.0	84.0	17	6.3	744	--	18.0	11.2	121
04...	0843	80513	80513	15.0	84.0	17	6.2	744	--	16.3	10.6	111
04...	0844	80513	80513	16.0	84.0	17	5.9	744	--	15.6	10.7	110
04...	0845	80513	80513	18.0	84.0	17	5.9	744	--	14.8	10.7	108
04...	0846	80513	80513	20.0	84.0	17	5.8	744	--	14.2	10.3	103
04...	0847	80513	80513	25.0	84.0	17	5.8	744	--	12.8	9.8	95
04...	0849	80513	80513	30.0	84.0	17	5.8	744	--	12.3	9.6	92
04...	0850	80513	80513	35.0	84.0	17	5.7	744	--	11.9	9.3	88
04...	0851	80513	80513	40.0	84.0	17	5.7	744	--	11.4	9.3	87
04...	0852	80513	80513	45.0	84.0	17	5.6	744	--	10.9	9.2	85
04...	0853	80513	80513	50.0	84.0	17	5.6	744	--	10.2	9.0	82
04...	0854	80513	80513	55.0	84.0	17	5.6	744	--	9.7	9.1	82
04...	0855	80513	80513	60.0	84.0	17	5.6	744	--	9.4	9.0	81
04...	0856	80513	80513	65.0	84.0	17	5.6	744	--	9.2	9.2	82
04...	0857	80513	80513	70.0	84.0	17	5.6	744	--	9.1	8.9	79
04...	0858	80513	80513	75.0	84.0	17	5.5	744	--	9.0	8.9	78
04...	0859	80513	80513	80.0	84.0	18	5.5	744	--	8.9	8.6	76
04...	0900	80513	80513	84.0	84.0	24	6.1	744	--	8.8	5.5	49
04...	0905	80513	81213	--	84.0	--	--	744	--	--	--	--

RED RIVER BASIN

07362590 LAKE WINONA AT REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHODIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
NOV 10...	.006	<.001	1.5	1.3	75	170	73	41	<.10	2.20
NOV 10...	.007	<.001	1.5	1.4	120	340	230	190	<.10	--
FEB 08...	.007	<.001	2.7	2.4	85	140	81	71	<.10	2.00
MAY 04...	.007	<.001	2.8	2.7	48	100	12	2.6	<.10	.400

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
AUG 18...	1000	.00	60	5	.92	<1	<1	7	1.4	.90	.90
AUG 18...	1010	60	78	10	1.4	<1	<36	7	1.3	.90	.90

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)
AUG 18...	20	.1	.50	3	2.3	1.1	<.10	2.8	15	12	.02
AUG 18...	21	.1	.40	4	2.4	1.0	<.10	3.5	15	13	.02

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
AUG 18...	.018	.08	.001	.00	.019	.007	.01	.26	.27	.29	.005
AUG 18...	.058	.26	.002	.01	.060	.006	.01	--	<.20	--	.006

DATE	PHOS- PHORUS ORTHODIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHODIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
AUG 18...	<.001	--	3.2	3.2	33	80	49	31	<.10	1.60
AUG 18...	.002	.01	2.6	2.1	93	220	170	150	<.10	--

RED RIVER BASIN

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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 mi².

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

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	25	38	89	1730	e65	e400	366	332	81	1.0	.00
2	8.6	16	36	463	1820	e60	e390	252	369	87	.84	.00
3	9.3	11	36	974	1530	e55	e400	215	294	46	.45	.00
4	11	10	101	995	970	e55	e650	197	220	25	.40	.00
5	20	9.5	123	1100	516	e75	e800	220	119	16	.40	.00
6	41	9.4	136	1240	377	e85	e890	372	72	11	.40	.00
7	148	9.6	151	737	361	e105	e920	563	49	23	.40	.00
8	222	10	164	381	462	e135	e950	468	35	23	.40	.00
9	92	11	218	375	532	e230	e660	251	26	14	.25	.00
10	42	11	183	377	462	e280	e570	186	21	9.8	.20	.00
11	33	13	195	346	373	e340	e470	147	20	8.3	.20	.00
12	48	28	279	305	358	e400	e390	105	27	7.4	.20	.00
13	46	52	313	278	415	e550	e390	89	255	59	.20	.00
14	44	37	281	265	422	e630	e540	86	193	46	.20	.00
15	44	24	215	248	330	e870	e700	76	131	22	.20	.00
16	46	17	152	231	281	e1200	e850	63	93	13	.20	.00
17	46	12	118	220	255	e1150	e990	57	59	8.9	.15	.00
18	49	10	101	206	234	e840	e920	111	37	7.5	.00	.00
19	52	9.7	105	197	214	e690	663	212	27	6.8	.00	.00
20	80	13	238	187	199	e570	366	179	22	6.0	.00	.00
21	63	23	362	185	159	e430	286	99	19	5.3	.00	.00
22	54	38	305	212	129	e330	242	73	17	4.2	.00	.00
23	51	62	319	488	e115	e260	211	72	15	3.4	.00	.00
24	47	48	339	628	e105	e220	195	78	14	2.8	.00	.00
25	37	41	259	701	e90	e190	240	79	14	2.1	.00	.00
26	41	37	208	688	e85	e170	417	64	22	1.6	.00	.00
27	81	36	189	440	e75	e160	761	49	42	1.4	.00	.00
28	84	35	181	320	e70	e240	890	32	64	1.3	.00	.00
29	74	35	181	600	---	e330	977	22	58	1.2	.00	.00
30	41	38	169	1050	---	e390	785	17	37	1.0	.00	.00
31	31	---	115	1560	---	e470	---	28	---	1.0	.00	---
TOTAL	1695.1	731.2	5810	16086	12669	11575	17913	4828	2703	546.0	6.09	0.00
MEAN	54.7	24.4	187	519	452	373	597	156	90.1	17.6	.20	.000
MAX	222	62	362	1560	1820	1200	990	563	369	87	1.0	.00
MIN	8.6	9.4	36	89	70	55	195	17	14	1.0	.00	.00
AC-FT	3360	1450	11520	31910	25130	22960	35530	9580	5360	1080	12	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	35.7	105	203	416	465	553	684	136	174	52.6	38.9	23.5
MAX	64.9	284	375	723	836	1021	2035	259	538	95.7	131	55.9
(WY)	1997	1997	1997	1998	1997	1997	1997	1997	1997	1997	1996	1998
MIN	.000	3.42	12.5	40.2	47.6	102	98.5	20.7	5.63	2.19	.20	.000
(WY)	1996	1996	1996	1996	1996	1996	1998	1998	1998	1998	1999	1999

RED RIVER BASIN

07363400 HURRICANE CREEK BELOW SHERIDAN--CONTINUED

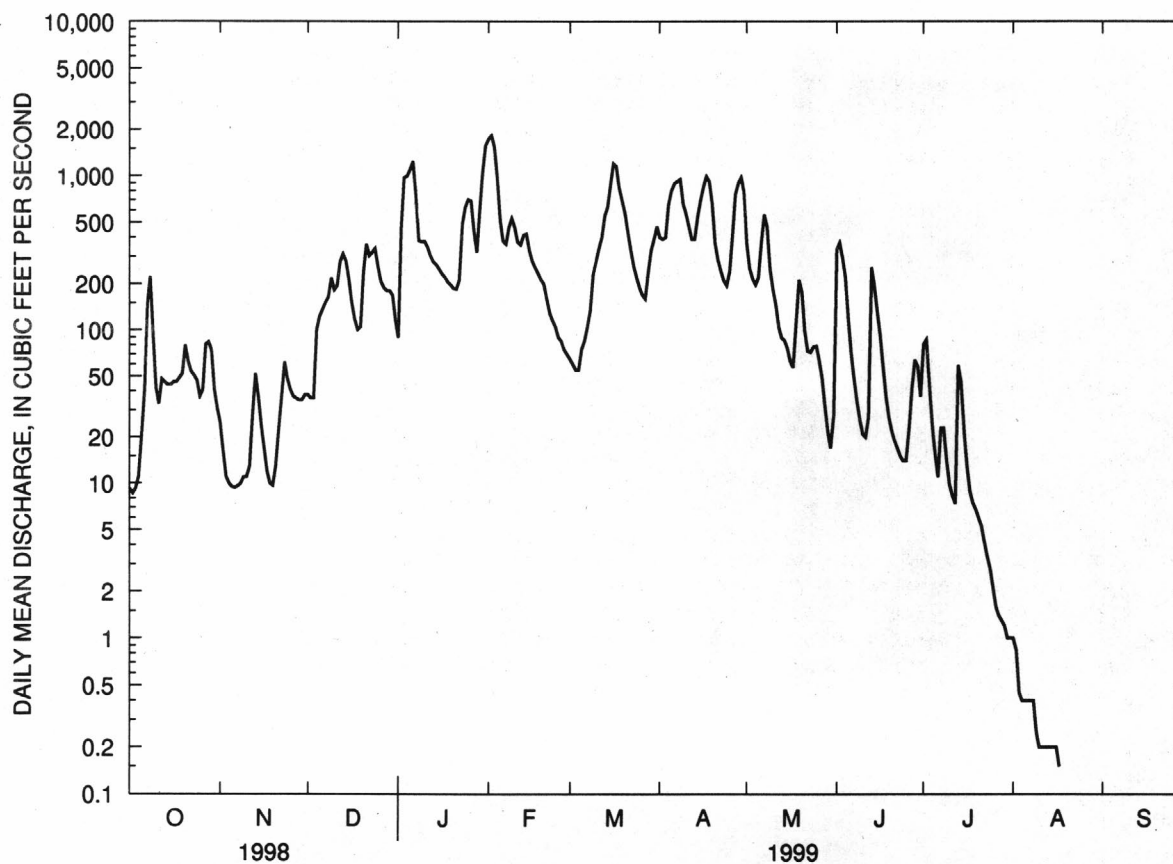
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1996 - 1999

ANNUAL TOTAL	74472.71		74562.39		
ANNUAL MEAN	204		204		239
HIGHEST ANNUAL MEAN					488
LOWEST ANNUAL MEAN					64.8
HIGHEST DAILY MEAN	2060	Mar 10	1820	Feb 2	20100
LOWEST DAILY MEAN	.00	Jul 31	.00	Aug 18	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 31	.00	Aug 18	.00
INSTANTANEOUS PEAK FLOW			1870	Feb 2	^a 26400
INSTANTANEOUS PEAK STAGE			11.54	Feb 2	16.34
INSTANTANEOUS LOW FLOW			.00	at times	.00
ANNUAL RUNOFF (AC-FT)	147700		147900		173100
10 PERCENT EXCEEDS	678		582		596
50 PERCENT EXCEEDS	42		73		51
90 PERCENT EXCEEDS	2.2		.00		2.2

^aFrom rating curve extended above 2,300 ft³/s on basis of contracted-opening measurement of peak flow^eEstimated

RED RIVER BASIN

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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.--WRD Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.06 ft above sea level. Prior to May 30, 1939, nonrecording gage at present site and datum.

REMARKS.--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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	338	240	1620	10800	979	4680	4080	672	356	85	17
2	165	301	223	2830	11100	937	5070	4310	710	336	78	20
3	152	262	216	4870	11200	893	5390	4640	1390	448	74	28
4	133	234	223	e5440	11000	834	8000	5130	1980	630	77	29
5	124	217	246	e5480	10800	780	9530	5510	2240	601	79	30
6	139	206	268	e5480	10700	734	10200	5740	2300	507	74	38
7	409	207	335	e5550	10900	675	10200	5260	2210	401	67	40
8	585	215	496	5870	10800	705	9930	3480	1750	313	59	42
9	910	205	1020	6630	10400	1060	9630	2610	1140	249	58	41
10	1700	199	1490	7650	9450	1360	9320	2430	788	218	52	32
11	2130	191	1730	8520	8160	1600	9030	2000	604	210	49	29
12	2390	203	2080	8920	6680	2130	8860	1460	489	203	47	28
13	2600	214	2480	8750	5260	5430	8660	1110	421	188	42	28
14	2680	248	2700	7870	4270	9270	8270	919	410	179	39	41
15	2020	343	2640	6160	3680	10500	7540	807	605	269	39	53
16	1050	416	2450	3470	3210	11100	6260	784	737	401	49	44
17	663	392	2240	1980	2760	11400	4700	772	679	377	53	37
18	537	346	1990	1580	2310	11800	4020	835	742	295	50	35
19	491	307	1640	1390	1950	12900	4040	1380	686	238	57	40
20	428	281	1340	1260	1720	14400	4320	1510	538	198	65	46
21	447	258	1310	1160	1560	14900	4930	1290	416	171	57	43
22	790	244	1640	1310	1430	14200	5760	1140	331	156	45	41
23	1020	248	2150	2270	1320	12700	6340	989	287	140	37	45
24	905	299	2540	2890	1210	11200	6480	1070	252	132	33	45
25	714	357	2750	3390	1120	9670	5820	1140	271	123	26	43
26	594	367	2850	3660	1050	8000	3960	1100	346	118	25	39
27	513	329	2930	3790	1020	6320	2820	1210	286	114	24	35
28	450	292	2960	4040	1010	4730	3020	1220	261	110	23	36
29	399	266	2770	6090	---	3750	3510	1010	266	106	20	43
30	380	258	2290	8940	---	3600	3870	796	306	98	17	32
31	362	---	1870	10400	---	4100	---	716	---	91	17	---
TOTAL	26071	8243	52107	149260	156870	192657	194160	66448	24113	7976	1517	1100
MEAN	841	275	1681	4815	5602	6215	6472	2143	804	257	48.9	36.7
MAX	2680	416	2960	10400	11200	14900	10200	5740	2300	630	85	53
MIN	124	191	216	1160	1010	675	2820	716	252	91	17	17
AC-FT	51710	16350	103400	296100	311200	382100	385100	131800	47830	15820	3010	2180
CFSM	.40	.13	.80	2.29	2.67	2.96	3.08	1.02	.38	.12	.02	.02
IN.	.46	.15	.92	2.64	2.78	3.41	3.44	1.18	.43	.14	.03	.02

RED RIVER BASIN

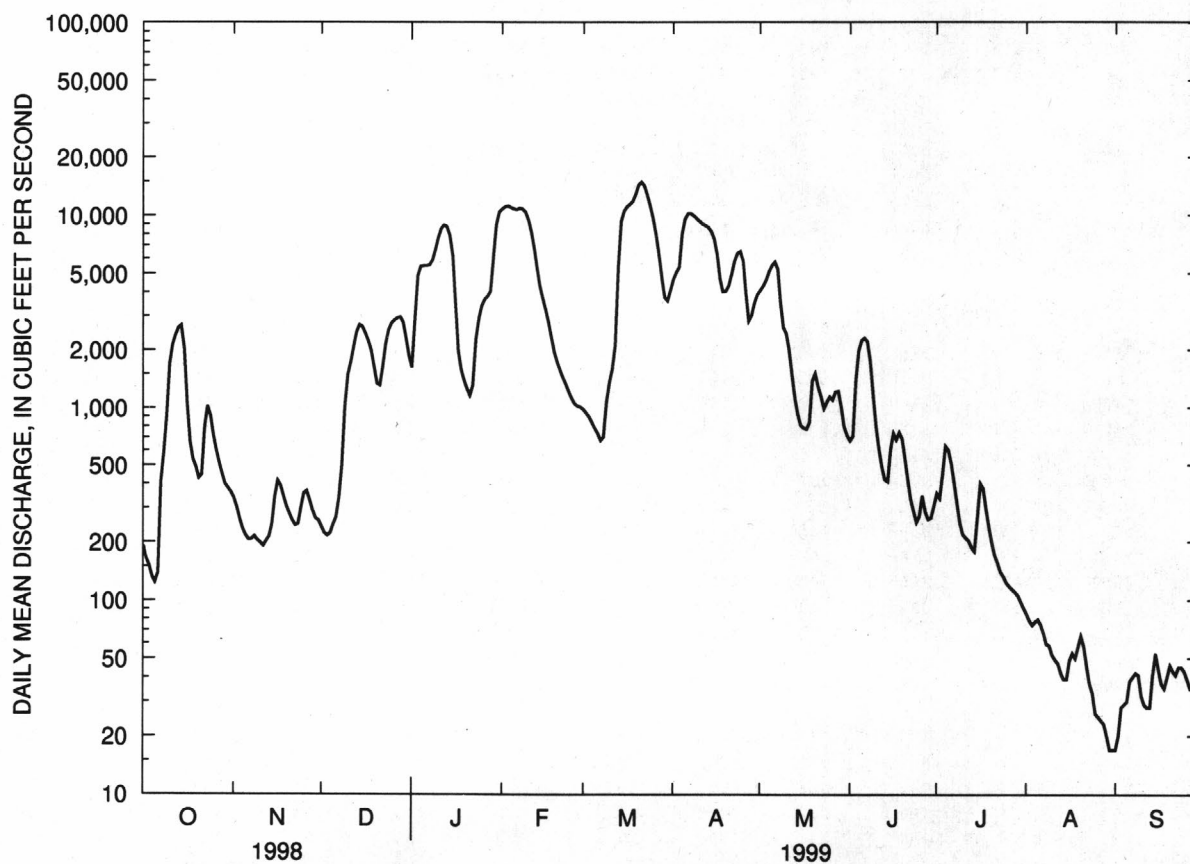
07363500 SALINE RIVER NEAR RYE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	501	1217	2913	3870	5121	5382	5354	4663	1485	590	289	347
MAX	10570	9690	13280	14830	16710	13920	16340	21470	11950	8191	1573	4511
(WY)	1985	1958	1974	1946	1950	1945	1973	1958	1974	1989	1971	1950
MIN	15.4	50.7	111	143	516	706	640	352	80.5	32.5	10.6	4.95
(WY)	1939	1940	1940	1956	1996	1940	1972	1992	1972	1954	1954	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL TOTAL	691863		880522			
ANNUAL MEAN	1896		2412		2632	
HIGHEST ANNUAL MEAN					5436	
LOWEST ANNUAL MEAN					704	
HIGHEST DAILY MEAN	12800	Feb 21	14900	Mar 21	72500	May 18 1968
LOWEST DAILY MEAN	31	Sep 11	17	Aug 30	3.8	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	36	Sep 5	20	Aug 27	4.0	Sep 15 1954
INSTANTANEOUS PEAK FLOW			15000	Mar 21	74500	May 18 1968
INSTANTANEOUS PEAK STAGE			23.67	Mar 21	31.40	May 18 1968
INSTANTANEOUS LOW FLOW			14	Sep 1	3.5	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	1372000		1747000		1906000	
ANNUAL RUNOFF (CFSM)	.90		1.15		1.25	
ANNUAL RUNOFF (INCHES)	12.24		15.58		17.01	
10 PERCENT EXCEEDS	6820		8370		7510	
50 PERCENT EXCEEDS	458		807		686	
90 PERCENT EXCEEDS	65		43		65	

eEstimated



RED RIVER BASIN

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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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage 144.13 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	16	356	3120	120	990	430	162	290	82	29
2	13	16	17	662	3160	102	933	394	221	242	80	29
3	14	16	17	1080	3060	116	887	378	250	200	73	24
4	13	15	16	1500	2890	162	1410	379	229	159	64	20
5	13	14	16	1790	2690	158	2070	398	183	118	57	23
6	13	13	16	1880	2480	125	2510	426	137	88	55	29
7	13	13	21	1820	2290	96	2690	489	98	76	61	25
8	32	15	40	1710	2090	85	2650	570	73	71	66	27
9	136	15	44	1630	1890	107	2480	561	57	72	68	34
10	148	15	125	1560	1690	125	2270	496	44	72	66	26
11	100	15	222	1490	1470	118	2060	423	54	69	72	24
12	52	16	367	1390	1280	106	1850	355	75	95	81	27
13	27	17	531	1270	1100	805	1660	296	80	184	83	25
14	17	18	668	1130	933	1820	1470	242	96	234	76	22
15	12	17	738	1070	781	2190	1300	192	103	218	77	18
16	11	17	719	847	653	2440	1120	153	113	166	77	15
17	18	20	652	713	559	2570	952	124	112	127	68	13
18	33	21	579	585	480	2530	791	120	99	111	62	11
19	40	21	531	461	411	2410	649	150	80	101	52	10
20	56	23	493	345	363	2290	513	216	71	87	50	9.0
21	97	22	479	256	322	2190	387	213	67	75	55	7.9
22	89	32	480	295	272	2080	292	158	65	71	54	6.8
23	59	58	461	584	224	1950	222	110	71	87	52	6.0
24	38	52	442	791	200	1810	176	82	74	102	51	5.9
25	27	38	396	920	193	1690	149	64	78	102	50	5.9
26	21	31	332	955	182	1530	168	65	140	90	60	5.8
27	19	25	278	911	157	1350	222	76	257	77	71	5.7
28	17	20	258	844	143	1170	343	82	339	70	65	5.6
29	16	17	281	1530	---	1020	460	77	372	65	55	6.2
30	16	15	341	2440	---	913	472	80	349	63	50	5.8
31	15	---	370	2930	---	956	---	117	---	76	39	---
TOTAL	1190	642	9946	35745	35083	35134	34146	7916	4149	3658	1972	501.6
MEAN	38.4	21.4	321	1153	1253	1133	1138	255	138	118	63.6	16.7
MAX	148	58	738	2930	3160	2570	2690	570	372	290	83	34
MIN	11	13	16	256	143	85	149	64	44	63	39	5.6
AC-FT	2360	1270	19730	70900	69590	69690	67730	15700	8230	7260	3910	995
CFSM	.10	.06	.84	3.03	3.30	2.98	3.00	.67	.36	.31	.17	.04
IN.	.12	.06	.97	3.50	3.43	3.44	3.34	.77	.41	.36	.19	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1999, BY WATER YEAR (WY)

MEAN	112	312	620	1097	1112	1178	956	555	273	365	166	60.0
MAX	625	959	1618	2748	2861	3057	2229	1791	726	2488	419	123
(WY)	1991	1988	1992	1988	1990	1997	1991	1991	1989	1989	1989	1989
MIN	1.53	3.03	167	212	294	321	162	55.3	8.58	31.5	34.3	10.4
(WY)	1996	1996	1996	1996	1996	1988	1998	1988	1988	1990	1995	1995

RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

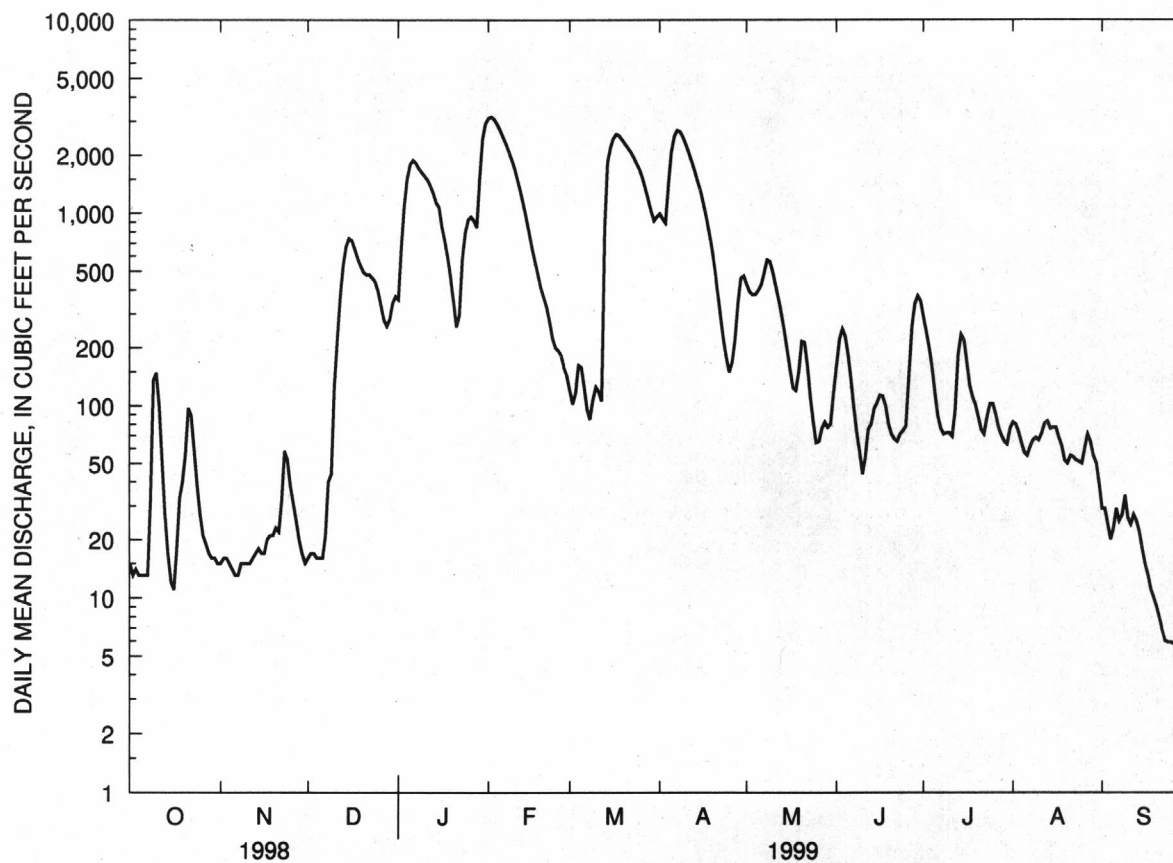
SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1988 - 1999

ANNUAL TOTAL	125315.7		170082.6			
ANNUAL MEAN	343		466		565	
HIGHEST ANNUAL MEAN					966	1989
LOWEST ANNUAL MEAN					174	1996
HIGHEST DAILY MEAN	2740	Jan 16	3160	Feb 2	5210	Mar 7 1997
LOWEST DAILY MEAN	8.3	Sep 11	5.6	Sep 28	.25	Oct 21 1995
ANNUAL SEVEN-DAY MINIMUM	11	Sep 7	5.8	Sep 24	.27	Oct 20 1995
INSTANTANEOUS PEAK FLOW			3170	Feb 2	5220	Mar 7 1997
INSTANTANEOUS PEAK STAGE			17.66	Feb 2	22.22	Feb 10,11 1990
INSTANTANEOUS LOW FLOW			5.5	Sep 27,28,29,30	.24	Oct 21 1995
ANNUAL RUNOFF (AC-FT)	248600		337400		409200	
ANNUAL RUNOFF (CFSM)	.90		1.23		1.49	
ANNUAL RUNOFF (INCHES)	12.27		16.65		20.20	
10 PERCENT EXCEEDS	1080		1670		1670	
50 PERCENT EXCEEDS	119		116		205	
90 PERCENT EXCEEDS	16		16		17	



RED RIVER BASIN

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07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV 03...	1100	80513	81213	17	213	6.9	756	17.8	4.4	47
JAN 12...	0930	80513	81213	1510	64	7.1	760	4.1	10.2	78
MAR 10...	1015	80513	81213	128	142	6.5	760	12.7	7.2	69
MAY 04...	0945	80513	81213	369	78	6.3	750	19.0	5.6	61
JUL 07...	1015	80513	81213	83	407	7.8	764	28.9	3.1	40
AUG 23...	1015	80513	81213	73	622	8.0	755	25.6	4.2	52
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 03...	420	150	350	65	16	6.0	14	30	.8	5.9
JAN 12...	120	K43	550	18	4.3	1.7	3.6	27	.4	2.9
MAR 10...	460	490	390	49	12	4.5	8.5	26	.5	3.1
MAY 04...	200	--	210	26	6.5	2.3	4.6	26	.4	2.6
JUL 07...	110	K81	K14	140	36	13	26	28	.9	3.5
AUG 23...	98	K8	K210	230	61	20	37	25	1	3.5
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV 03...	8.6	15	134	--	--	<.010	--	.090	.036	.05
JAN 12...	5.3	5.0	58	--	--	<.010	--	.160	.016	.02
MAR 10...	6.1	8.6	96	.308	1.4	.012	.04	.320	.072	.09
MAY 04...	5.2	3.6	66	--	--	<.010	--	.280	.040	.05
JUL 07...	10	35	248	1.83	8.1	.070	.23	1.90	.060	.08
AUG 23...	12	63	377	--	--	<.010	--	.130	.040	.05
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 03...	.53	.57	.66	.120	.060	.080	.25	58	2.7	89
JAN 12...	.76	.78	.94	.190	.040	.060	.18	87	355	96
MAR 10...	.79	.86	1.2	.330	E.090	.040	.12	199	69	99
MAY 04...	.70	.74	1.0	.340	E.110	.090	.28	91	91	99
JUL 07...	.75	.81	2.7	.110	E.070	.060	.18	70	16	99
AUG 23...	.61	.65	.78	.160	.110	.110	.34	103	20	97

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 mi².

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.--WRD Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 120.48 ft above sea level. 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.--Water-discharge records good except estimated daily discharges and discharges below 20 ft³/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1930, that of May 11, 1958. Flood in 1932 reached a stage of 23.4 ft, present datum, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	25	68	e660	4090	335	1370	e460	100	122	56	47
2	16	22	83	e770	4400	294	1260	e510	114	152	55	50
3	15	20	85	e920	4530	261	1180	e590	145	183	49	52
4	15	19	81	e1100	4550	230	1330	e700	177	205	43	52
5	14	18	77	e1250	4490	203	1620	e780	196	216	37	51
6	14	17	75	1370	4350	182	1940	e770	206	212	35	50
7	14	17	75	1460	4160	171	2250	e720	212	197	38	50
8	14	18	77	1550	3930	170	2530	e700	212	173	41	53
9	13	18	76	1710	3670	186	2730	e730	204	149	46	59
10	13	19	92	1790	3390	187	2830	e820	188	134	48	62
11	12	18	135	1790	3110	182	2840	e880	167	170	43	64
12	12	18	e180	1740	2810	181	2760	e960	145	269	40	60
13	11	18	e280	1670	2510	421	e2660	e1000	131	290	40	52
14	13	19	e400	1590	2220	799	e2540	e880	158	254	40	45
15	25	19	e520	1510	1960	1030	e2400	e690	195	201	44	39
16	39	18	e620	1420	1770	1330	e2240	e570	228	153	50	35
17	42	18	e700	1330	1580	1750	e1800	383	239	124	51	32
18	39	18	e780	1230	1400	2130	e1600	346	222	121	52	30
19	33	18	e850	1130	1240	2360	e1400	300	186	129	51	29
20	26	19	e900	1040	1080	2480	e1000	256	147	131	55	28
21	21	19	e880	950	938	2510	e820	221	114	124	59	27
22	18	19	e800	953	823	2490	e620	194	92	114	59	25
23	16	19	e720	1040	724	2430	e480	186	78	100	58	24
24	15	19	e640	1050	634	2370	e380	190	69	86	55	23
25	19	19	e590	1060	560	2300	e300	193	63	74	50	23
26	28	19	e540	1080	487	2180	e280	188	65	66	45	24
27	38	19	e500	1100	424	2040	e300	174	74	60	42	24
28	41	20	e470	1110	384	1910	e330	153	91	57	42	25
29	39	31	e480	1680	---	1770	e370	131	99	56	43	27
30	34	50	e520	2650	---	1630	e420	114	105	56	45	33
31	29	---	e600	3520	---	1500	---	106	---	57	45	---
TOTAL	695	610	12894	43223	66214	38012	44580	14895	4422	4435	1457	1195
MEAN	22.4	20.3	416	1394	2365	1226	1486	480	147	143	47.0	39.8
MAX	42	50	900	3520	4550	2510	2840	1000	239	290	59	64
MIN	11	17	68	660	384	170	280	106	63	56	35	23
AC-FT	1380	1210	25580	85730	131300	75400	88420	29540	8770	8800	2890	2370
CFSM	.04	.04	.72	2.42	4.11	2.13	2.58	.83	.26	.25	.08	.07
IN.	.04	.04	.83	2.79	4.28	2.45	2.88	.96	.29	.29	.09	.08

RED RIVER BASIN

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07364150 BAYOU BARTHOLOMEW NEAR MCGEEHEE--CONTINUED

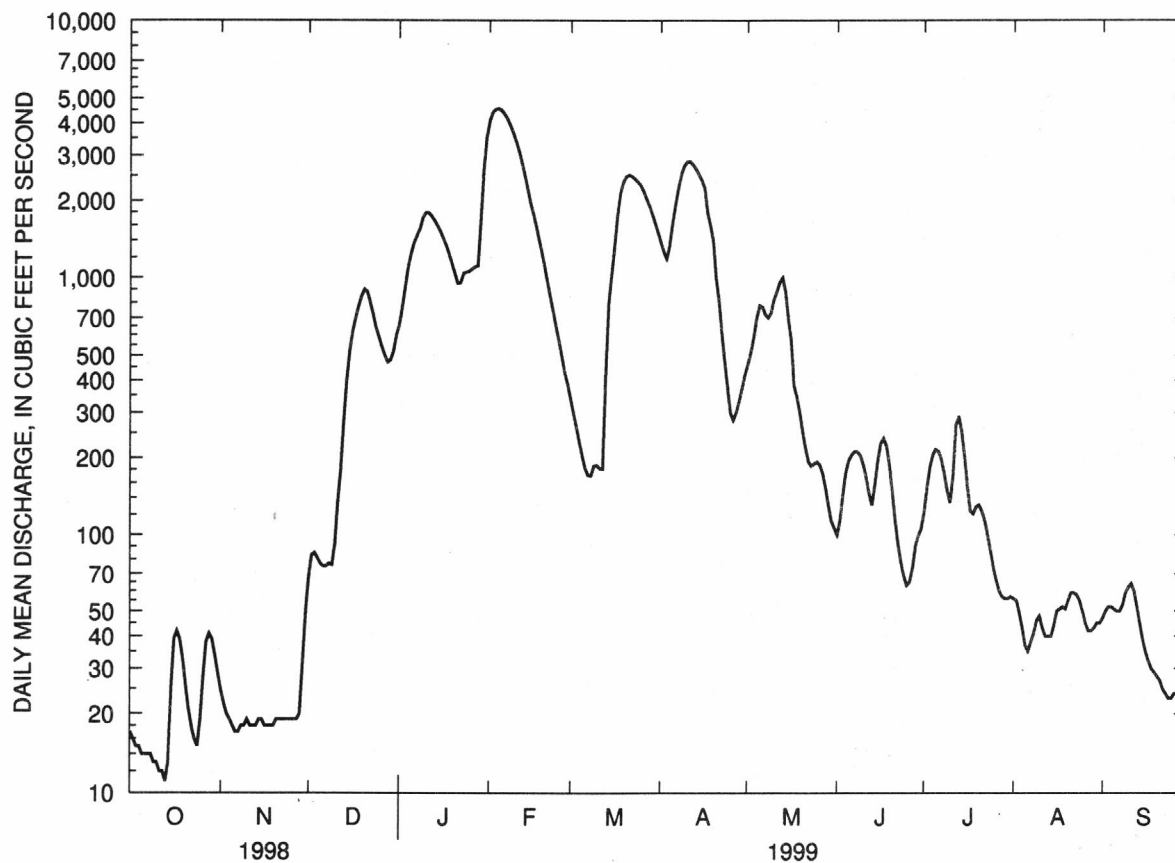
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	170	345	724	1041	1426	1401	1220	1067	461	217	153	152
MAX	1491	2240	2835	3900	5085	4006	3127	5972	2575	3688	1032	1792
(WY)	1985	1958	1973	1946	1990	1997	1991	1958	1974	1989	1989	1974
MIN	8.45	6.88	31.9	39.3	98.6	189	82.8	73.0	22.1	6.03	.44	16.9
(WY)	1996	1996	1982	1966	1963	1954	1966	1965	1972	1954	1956	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	152823		232632			
ANNUAL MEAN	419		637		694	
HIGHEST ANNUAL MEAN					1488	1973
LOWEST ANNUAL MEAN					149	1972
HIGHEST DAILY MEAN	2750	Jan 19	4550	Feb 4	6870	May 11 1958
LOWEST DAILY MEAN	11	Oct 13	11	Oct 13	.20	Aug 15 1956
ANNUAL SEVEN-DAY MINIMUM	13	Oct 8	13	Oct 8	.20	Aug 15 1956
INSTANTANEOUS PEAK FLOW			4560	Feb 4	6870	May 11 1958
INSTANTANEOUS PEAK STAGE			21.07	Feb 5	^a 25.49	May 11 1958
INSTANTANEOUS LOW FLOW			11	Oct 13,14	.20	Aug 15-23 1956
ANNUAL RUNOFF (AC-FT)	303100		461400		503100	
ANNUAL RUNOFF (CFSM)	.73		1.11		1.21	
ANNUAL RUNOFF (INCHES)	9.87		15.02		16.38	
10 PERCENT EXCEEDS	1300		1990		2010	
50 PERCENT EXCEEDS	100		181		249	
90 PERCENT EXCEEDS	18		19		31	

^aAt present datum

^eEstimated



RED RIVER BASIN

07364150 BAYOU BARTHOLOMEW NEAR MCGEEH--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 1998 TO SEPTEMBER 1999

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV 03...	1300	80513	81213	20	285	6.9	756	18.8	5.4	59
JAN 12...	1120	80513	81213	1730	69	7.0	760	4.6	9.9	77
MAR 10...	1235	80513	81213	182	107	6.8	760	13.0	7.3	69
MAY 04...	1135	80513	81213	555	81	6.3	750	19.0	5.6	61
JUL 07...	1215	80513	81213	202	379	7.7	762	29.1	4.1	54
AUG 23...	1245	80513	81213	59	457	8.0	755	26.9	4.4	56
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 03...	73	55	K69	93	23	8.6	14	23	.6	7.5
JAN 12...	80	K63	1100	20	4.7	1.9	3.9	27	.4	2.8
MAR 10...	140	80	190	33	8.3	3.1	5.7	25	.4	3.2
MAY 04...	150	--	260	27	6.8	2.4	4.2	23	.4	2.8
JUL 07...	140	61	30	120	29	11	26	31	1	4.5
AUG 23...	32	K13	K72	160	41	14	28	27	1	3.9
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
NOV 03...	16	24	176	--	--	<.010	--	.090	.039	.05
JAN 12...	4.6	4.8	52	--	--	<.010	--	.340	.020	.03
MAR 10...	6.2	7.6	77	.240	1.1	.010	.03	.250	.100	.13
MAY 04...	4.4	3.5	69	--	--	<.010	--	.300	.040	.05
JUL 07...	13	42	233	1.45	6.4	.050	.16	1.50	.090	.12
AUG 23...	9.4	42	257	--	--	<.010	--	.150	.030	.04
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 03...	.58	.62	.71	.080	.040	.060	.18	45	2.4	91
JAN 12...	.79	.81	1.1	.280	.060	.080	.25	163	761	99
MAR 10...	.61	.71	.96	.310	E.190	.120	.37	74	36	100
MAY 04...	.83	.87	1.2	.400	E.120	.110	.34	99	148	99
JUL 07...	.46	.55	2.0	.100	E.050	.040	.12	63	34	98
AUG 23...	.53	.56	.71	.140	.090	.090	.28	68	11	100

RED RIVER BASIN

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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 278, 1.4 mi west of Portland.

DRAINAGE AREA.--1,109 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 96.85 ft above sea level. Auxiliary water-stage recorder 7.8 mi upstream.

REMARKS.--Records good except discharges below 100 ft³/s, which are poor. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period August to September, 1998 219 ft³/s Aug. 17, gage height 14.61 ft; minimum 51 ft³/s, Sept. 28-29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	125
2	---	---	---	---	---	---	---	---	---	---	---	112
3	---	---	---	---	---	---	---	---	---	---	---	105
4	---	---	---	---	---	---	---	---	---	---	---	e90
5	---	---	---	---	---	---	---	---	---	---	---	e82
6	---	---	---	---	---	---	---	---	---	---	---	e74
7	---	---	---	---	---	---	---	---	---	---	---	e68
8	---	---	---	---	---	---	---	---	---	---	---	e65
9	---	---	---	---	---	---	---	---	---	---	---	63
10	---	---	---	---	---	---	---	---	---	---	117	61
11	---	---	---	---	---	---	---	---	---	---	117	60
12	---	---	---	---	---	---	---	---	---	---	113	65
13	---	---	---	---	---	---	---	---	---	---	122	67
14	---	---	---	---	---	---	---	---	---	---	156	65
15	---	---	---	---	---	---	---	---	---	---	171	64
16	---	---	---	---	---	---	---	---	---	---	212	64
17	---	---	---	---	---	---	---	---	---	---	219	64
18	---	---	---	---	---	---	---	---	---	---	214	63
19	---	---	---	---	---	---	---	---	---	---	207	63
20	---	---	---	---	---	---	---	---	---	---	198	63
21	---	---	---	---	---	---	---	---	---	---	188	62
22	---	---	---	---	---	---	---	---	---	---	179	61
23	---	---	---	---	---	---	---	---	---	---	173	59
24	---	---	---	---	---	---	---	---	---	---	172	58
25	---	---	---	---	---	---	---	---	---	---	175	56
26	---	---	---	---	---	---	---	---	---	---	177	54
27	---	---	---	---	---	---	---	---	---	---	177	53
28	---	---	---	---	---	---	---	---	---	---	172	52
29	---	---	---	---	---	---	---	---	---	---	164	52
30	---	---	---	---	---	---	---	---	---	---	153	55
31	---	---	---	---	---	---	---	---	---	---	140	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	2045
MEAN	---	---	---	---	---	---	---	---	---	---	---	68.2
MAX	---	---	---	---	---	---	---	---	---	---	---	125
MIN	---	---	---	---	---	---	---	---	---	---	---	52
AC-FT	---	---	---	---	---	---	---	---	---	---	---	4060

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

MEAN	---	---	---	---	---	---	---	---	---	---	---	68.2
MAX	---	---	---	---	---	---	---	---	---	---	---	68.2
(WY)	---	---	---	---	---	---	---	---	---	---	---	1998
MIN	---	---	---	---	---	---	---	---	---	---	---	68.2
(WY)	---	---	---	---	---	---	---	---	---	---	---	1998

^eEstimated

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)[illegible]

RED RIVER BASIN

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07364185 BAYOU BARTHOLOMEW NEAR PORTLAND--CONTINUED

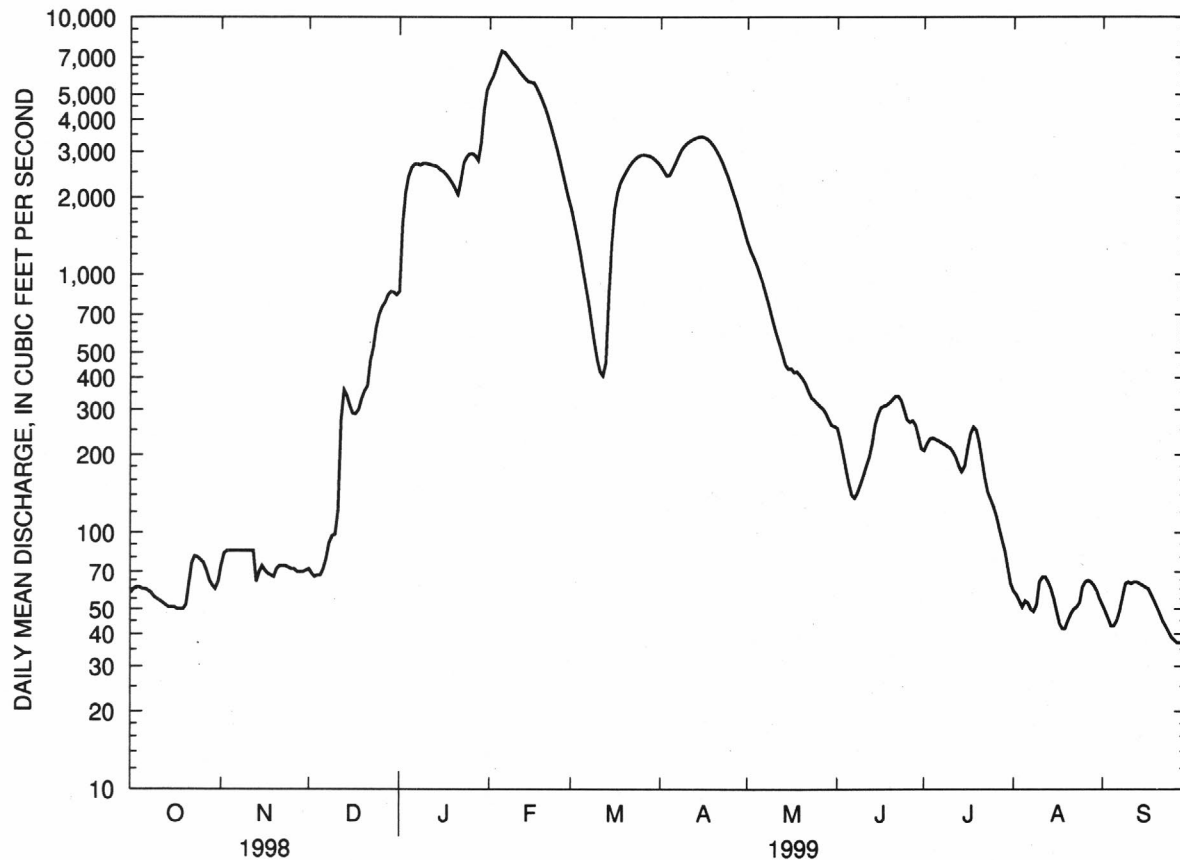
SUMMARY STATISTICS

FOR 1999 WATER YEAR

WATER YEARS 1998 - 1999

ANNUAL TOTAL	414466			
ANNUAL MEAN	1136		1136	
HIGHEST ANNUAL MEAN			1136	1999
LOWEST ANNUAL MEAN			1136	1999
HIGHEST DAILY MEAN	7400	Feb 5	7400	Feb 5 1999
LOWEST DAILY MEAN	36	Sep 30	36	Sep 30 1999
ANNUAL SEVEN-DAY MINIMUM	38	Sep 24	38	Sep 24 1999
INSTANTANEOUS PEAK FLOW	7510	Feb 5	7510	Feb 5 1999
INSTANTANEOUS PEAK STAGE	35.69	Feb 5,6	35.69	Feb 5,6 1999
INSTANTANEOUS LOW FLOW	36	Sep 30	36	Sep 30 1998
ANNUAL RUNOFF (AC-FT)	822100		822600	
10 PERCENT EXCEEDS	3160		2940	
50 PERCENT EXCEEDS	262		208	
90 PERCENT EXCEEDS	52		53	

^eEstimated



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 mi².

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 sea level. Satellite telemeter at station.

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

COOPERATION.--Gage-height record provided by the U.S. Army Corps of Engineers.

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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e180	64	e57	328	3310	e150	79	e79	340	109	349	116
2	e150	61	e56	1520	2990	e95	78	e77	192	98	343	e110
3	e130	62	e57	2030	2590	e600	84	e75	118	93	328	e130
4	e100	e63	e55	1540	e2100	e550	e450	73	96	98	321	190
5	e88	e60	e55	917	1680	e250	689	249	e95	104	234	187
6	e64	e59	e56	506	1180	e200	804	221	e93	200	193	185
7	53	e58	e240	408	785	e150	479	133	92	307	205	185
8	54	e60	e300	545	592	e160	313	92	76	333	205	201
9	56	e62	e220	1380	510	e600	221	76	e74	339	e206	275
10	58	e65	e170	1010	448	e500	162	67	e70	347	e208	244
11	57	e70	e500	526	414	e300	126	305	63	352	209	218
12	59	e69	e1500	390	384	e170	109	353	89	353	186	200
13	59	e70	e1600	323	336	e270	98	190	e95	347	160	184
14	60	e300	e1300	274	274	489	220	118	133	352	e140	123
15	62	e420	e700	228	228	302	1660	119	151	353	e130	109
16	61	e250	e300	195	201	193	1480	112	124	349	128	107
17	62	e210	180	171	197	156	784	102	94	351	132	90
18	62	e170	154	154	198	136	427	102	77	372	e130	80
19	61	e110	161	144	140	e120	336	97	62	363	e125	79
20	61	e150	154	144	e110	e110	267	94	60	357	e120	79
21	61	e230	141	141	e95	e90	207	e90	60	367	e110	78
22	62	e180	502	794	e90	e85	157	87	59	374	e100	78
23	62	e100	500	1840	e85	e90	127	91	61	376	e90	77
24	64	e90	749	1560	e83	90	105	87	108	e370	e80	77
25	65	e80	697	e1200	e81	90	92	83	286	e360	e90	77
26	65	e70	521	e800	e83	83	84	87	876	358	e120	76
27	66	e62	485	388	e92	80	83	81	995	333	130	76
28	66	e61	684	334	e200	77	82	64	565	318	e140	76
29	66	e60	574	1800	---	77	82	59	229	331	122	78
30	66	e58	417	3500	---	80	81	114	124	358	116	77
31	66	---	320	3560	---	81	---	382	---	354	113	---
TOTAL	2246	3424	13405	28650	19476	6424	9966	3959	5557	9476	5263	3862
MEAN	72.5	114	432	924	696	207	332	128	185	306	170	129
MAX	180	420	1600	3560	3310	600	1660	382	995	376	349	275
MIN	53	58	55	141	81	77	78	59	59	93	80	76
AC-FT	4450	6790	26590	56830	38630	12740	19770	7850	11020	18800	10440	7660

RED RIVER BASIN

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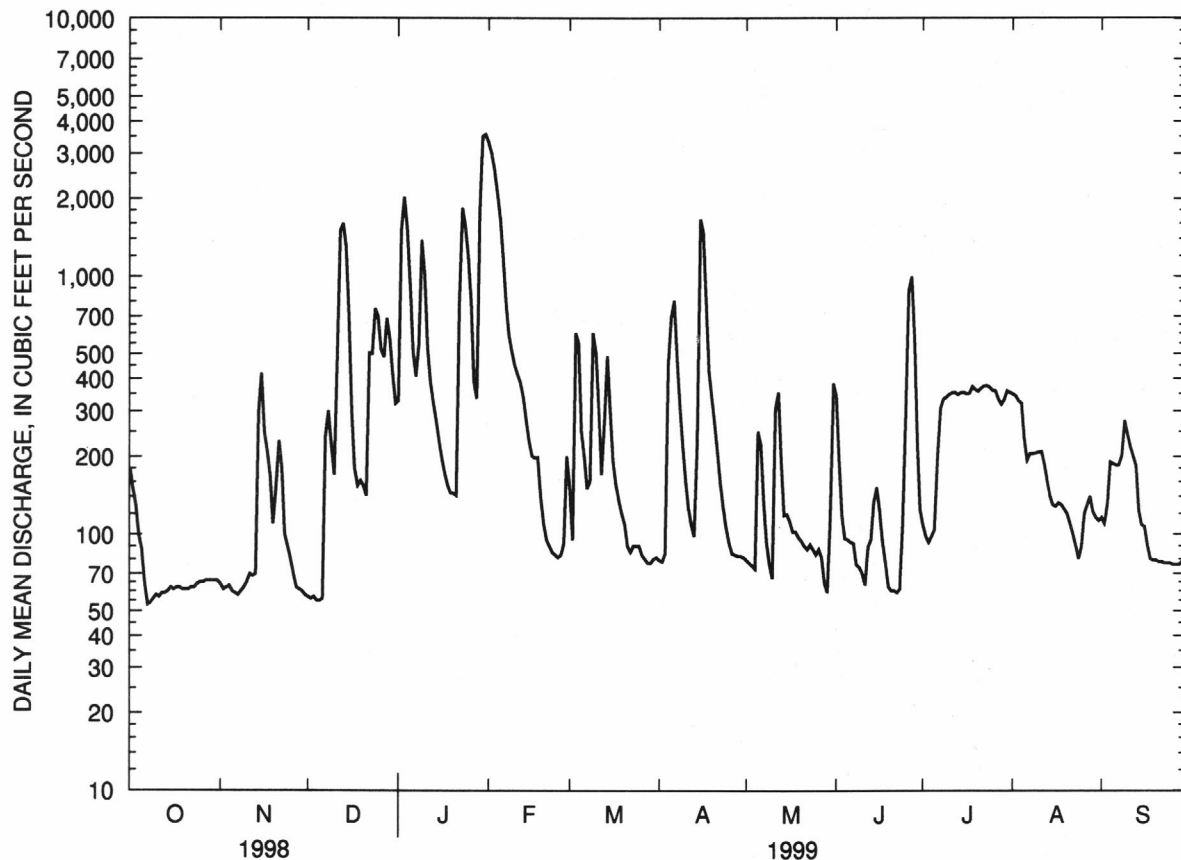
07369680 BAYOU MACON AT EUDORA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1999, BY WATER YEAR (WY)

MEAN	94.6	121	296	515	551	396	402	327	196	289	171	95.5
MAX	297	218	651	924	1174	858	1053	1510	330	847	425	150
(WY)	1995	1992	1991	1999	1991	1995	1991	1991	1989	1994	1994	1994
MIN	41.8	51.5	66.8	122	70.1	98.1	63.0	72.0	112	90.5	83.7	61.8
(WY)	1994	1996	1994	1996	1996	1993	1998	1992	1996	1997	1997	1997

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	96409		111708			
ANNUAL MEAN	264		306		287	
HIGHEST ANNUAL MEAN					493	
LOWEST ANNUAL MEAN					130	
HIGHEST DAILY MEAN	3270	May 30	3560	Jan 31	4170	Apr 23 1995
LOWEST DAILY MEAN	45	Apr 27	53	Oct 7	1.7	Sep 23 1988
ANNUAL SEVEN-DAY MINIMUM	48	Apr 21	56	Nov 30	34	Sep 28 1988
INSTANTANEOUS PEAK FLOW			3640	Jan 30	4280	Apr 23 1995
INSTANTANEOUS PEAK STAGE			22.21	Jan 30	24.41	Apr 29 1991
INSTANTANEOUS LOW FLOW			59	at times	32	May 21-23 1995
ANNUAL RUNOFF (AC-FT)	191200		221600		207700	
10 PERCENT EXCEEDS	546		600		645	
50 PERCENT EXCEEDS	120		140		112	
90 PERCENT EXCEEDS	57		62		56	

^eEstimated



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 1999 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
ST. FRANCIS RIVER BASIN								
07047823 Murray Creek Tributary near Jonesboro	Lat 35°51'51", long 90°38'27", in SW ¹ / ₄ SW ¹ / 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 ² .	1986-99	1-22-99 2-16-98 9-24-97 5-6-96 5-1-95 3-27-94 2-22-94 3-18-92 12-25-87 2-28-87	9.52 8.93 10.48 9.06 9.16 8.74 8.74 10.70 10.00 10.78	98 63 167 69 75 53 53 185 132 198	4-13-91	11.46	254
07047860 Higginbotham Creek at Jonesboro	Lat 35°48'48", long 90°42'29", in NE ¹ / ₄ NW ¹ / ₄ sec.30, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203. Drainage area is 0.95 mi ² .	1992-99	1-22-99	16.88	a	08-20-97	18.03	a
07047880 Pope Creek Tributary at Birdeye	Lat 35°22'35", long 90°42'00", in NE ¹ / ₄ SE ¹ / 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 ² .	1963-99	—	<3.73	—	09-13-78	7.73	253
070479475 Spring Creek at Forrest City	Lat 35°00'56", long 90°47'34", in SE ¹ / ₄ NW ¹ / 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 ² .	1990-99	6-3-99	15.18	a	4-5-97	16.94	a
WHITE RIVER BASIN								
07048900 Whitener Branch Tributary near Spring Valley	Lat 36°10'24", long 93°54'59", in SE ¹ / ₄ NW ¹ / 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 ² .	1960-99	10-5-98 1-5-98	5.53 8.13	97 328	07-25-60	17.60	1,410
07050285 Osage Creek at Osage	Lat 36°11'19", long 93°24'51", in NW ¹ / ₄ SE ¹ / 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 ² .	1989-99	2-07-99	9.47	6,250	05-03-90	14.91	27,000
07053207 Long Creek at Denver	Lat 36°23'23" long 93°19'01" in NW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ , sec. 16, T.20N., R.22 W., Carroll County Hydrologic Unit 11010001, on left bank, at the downstream side of county road, 0.2 mi southwest of Denver, and 0.4 mi upstream from Dry Creek. Drainage area is 104 mi ² .	1995-99	2-7-99	8.37	3,520	04-22-96	14.03	12,000
07054410 Bear Creek near Omaha	Lat 36°26'50", long 92°56'00", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.26, T.21 N., R.20 W., Boone County, Hydrologic Unit 11010003, attached to downstream end of bridge pier near right bank on State Highway 14, 6.5 mi east of Omaha. Drainage area is 133 mi ² .	1995-99	5-4-99	6.26	4,310	11-7-96	9.20	9,870
07054450 East Sugarloaf Tributary near Lead Hill	Lat 36°22'28", long 92°49'52", in NW ¹ / ₄ NW ¹ / 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 ² .	1962-99	7-1-99	8.01	200	10-13-68	15.30	2,480

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
WHITE RIVER BASIN--CONTINUED								
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 ² .	1928-80' 1981-91 1992-99 ^a	8-17-99	13.14 --	04-17-45	39.82 215,000		
07055608 Crooked Creek at Yellville	Lat 33°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 is 406 mi ² .	1958-88 1988-94' 1995-99	5-5-99	10.04 4,710	05-03-90	25.20 38,700		
07058980 Bennett's River at Vidette	Lat 36°25'19", long 92°07'07", in SW1/4SE1/4SE1/4 sec.2, T.20 N., R.11 W., Fulton County, Hydrologic Unit 11010006, on State Highway 87, 2.9 mi north from intersection with State Highway 62, 0.8 mi south of Vidette. Drainage area is 68.2 mi ² .	1995-99	2-7-99	5.87 602	11-05-94	10.99 a		
07059450 Big Creek near Elizabeth	Lat 36°21'25" long 92°06'51", in NE1/4SE1/4NW1/4 sec.36, T.20 N., R.11 W., Fulton County, Hydrologic Unit 11010006, at downstream right bank bridge abutment on State Highway 87, 1.9 mi northwest of Elizabeth.	1995-99	10-6-98	10.03 777	11-05-94	15.15 a		
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 ² .	1997-99 ^a	4-12-99	298.72 --	3-20-98	303.33 --		
07061000 White River at Batesville	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 is 11,070 mi ² .	1937-58' 1978-85 1986-94' 1995-99 ^a	4-12-99	12.01 --	04-16-45	29.43 324,000		
07069000 Black River at Pocahontas	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, at bridge on U.S. Highway 67 at Pocahontas. Drainage area is 4,845 mi ² .	1937-70' 1971-78 1981-94 1995-99 ^a	4-20-99	19.71 --	12-07-82	25.22 66,300		
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 ² .	1961-99	--	<6.93 --	04-22-73	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 ² .	1989-99	4-3-99	5.58 440	4-28-98	10.02 ^b 3,200		
07069500 Spring River at Imboden	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 is 1,183 mi ² .	1936-94' 1995-99	4-15-99	14.91 12,600	12-03-82	^b 38.12 244,000		
07072000 Eleven Point River near Ravenden Springs	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 Hincha Creek, 1.9 mi upstream from Eassis Creek, 6.6 mi northeast of Ravenden Springs and at mile 21.2. Drainage area is 1,134 mi ² .	1929-33' 1935-94' 1995-99	4-15-99	8.24 4,380	12-03-82	^b 29.06 162,000		
07074000 Strawberry River near Poughkeepsie	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 of 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 is 473 mi ² .	1936-94' 1995-99	10-6-98	14.08 11,100	12-03-82	^b 35.90 158,000		

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
WHITE RIVER BASIN--CONTINUED								
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 ² .	1983-94 1995-99 ^a	4-14-99	31.00 --	12-07-82	38.31 250,000		
07074865 Glaize 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 ² .	1989-99	1-2-99	5.71 620	01-06-91	8.4 a		
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 ² .	1939-84 ^f 1985-94 1995-99 ^a	10-6-98	22.91 32,700	12-03-82	37.53 241,000		
07075300 South Fork Little Red River at Clinton	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, near right bank on upstream side of bridge on U.S. Highway 65 at Clinton, 0.2 mi upstream from Archey Creek, and at mile 23.7. Drainage area is 148 mi ² .	1961-94 ^f 1995-99	10-6-98	16.97 15,400	12-03-82	^b 34.27 67,900		
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 ² .	1964-99	10-6-98	9.90 252	12-03-82	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 ² .	1964-99	1-22-99	6.30 32	04-02-79	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 ² .	1961-99	3-13-99	5.11 64	11-24-73	7.79 573		
07076750 White River at Georgetown	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 ² .	1978-90 1991-94 ^f 1995-99	4-16-99	19.94 51,600	3-8-97	22.93 80,900		
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., Leno County, Hydrologic Unit 08020301, at bridge on State Highway 38, 0.6 mi west of Butlerville. Drainage area is 23.0 mi ² .	1961-99	4-4-99	9.68 800	04-21-74	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 ² .	1962-81 1993-99	10-5-98	18.66 4,450	04-19-73	19.14 4,700		
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 ² .	1962-99	10-5-98	8.27 480	07-25-98	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 ² .	1963-99	10-5-98	6.58 a	12-21-91	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 ² .	1989-99	10-5-98	14.55 a	04-05-97	^b 22.00 a		

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum	
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)
WHITE RIVER BASIN--CONTINUED						
07077655 Christian Creek at GE Drive at Jonesboro	Lat 35°50'29", long 90°43'33", in NW ¹ / ₄ SW ¹ / 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 ² .	1993-99	6-23-99	11.48 a	08-20-97	15.40 a
*07077920 Big Creek at Goodwin	Lat 34°56'22", long 91°00'55", in NE ¹ / ₄ NE ¹ / 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 ² .	1961-99	3-13-99	8.69 320	12-25-87	10.35 1,250
07077940 Spring Creek near Aubrey	Lat 34°41'16", long 90°53'45", in SW ¹ / ₄ SE ¹ / 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 ² .	1962-80 1993-99	6-30-99	13.23 1,180	4-5-97	16.11 2,050
ARKANSAS RIVER BASIN						
07249444 Mill Creek near Jenny Lind Road in Fort Smith	Lat 35°18'14", long 94°24'42", in NW ¹ / ₄ SE ¹ / 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 ² .	1997-98' 1999	6-30-99	7.42 1,600	6-30-99	7.42 1,600
07249447 Mill Creek at Fort Smith	Lat 35°20'34", long 94°25'20", in NW ¹ / ₄ NW ¹ / 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 ² .	1960-63' 1981-99	6-30-99	32.83 a	05-02-90	36.40 2,400
07249457 May Branch at Fort Smith	Lat 35°22'30", long 95°23'51", in NE ¹ / ₄ SW ¹ / 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 ² .	1981-86' 1992-99	6-30-99	7.36 465	12-02-82	8.01 580
07249490 Lee Creek near Lee Creek	Lat 35°42'12", long 95°19'37", in NW ¹ / ₄ SE ¹ / 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 ² .	1988-99	6-30-99	12.14 a	05-03-90	15.39 a
07249500 Cove Creek near Lee Creek	Lat 35°43'20", long 94°24'28", in SW ¹ / ₄ NW ¹ / 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 ² .	1951-70' 1971-99	6-30-99	8.16 3,800	05-05-60	15.60 33,600
07249950 Webber Creek Tributary near Cedarville	Lat 35°36'00", long 92°22'49", in SE ¹ / ₄ SE ¹ / 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 ² .	1962-99	6-30-99	5.61 55	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 NE ¹ / ₄ NW ¹ / 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 ² .	1997-98' 1999	6-30-99	6.02 423	6-30-99	6.02 423
07251500 Frog Bayou at Rudy	Lat 35°31'32", long 94°16'18", in SW ¹ / ₄ SW ¹ / 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 ² .	1951-70' 1971-99	6-30-99	15.54 23,500	05-30-90	18.76 41,300
07251790 Mulberry River near Oak	Lat 35°41'01", long 93°35'57", in NW ¹ / ₄ SE ¹ / 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 Oak. Drainage area is 70.2 mi ² .	1988-99	6-30-99	10.17 7,350	1-4-93	14.72 21,500
07256490 Greenbrier Creek at Clarksville	Lat 35°28'15", long 93°27'09", in NW ¹ / ₄ NW ¹ / 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 ² .	1993-99	6-30-99 1-5-98 11-7-96 4-22-96 1-27-94 1-4-93	8.11 7.63 6.65 4.25 6.08 6.82	1,510 1,250 794 126 579 864	11-05-94 8.57 1,780
*07256500 Spadra Creek at Clarksville	Lat 35°28'06", long 93°27'46", in NW ¹ / ₄ NE ¹ / 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 ² .	1953-70' 1971-99'	5-12-99	9.11 3,230	06-05-74	19.93 27,400

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
ARKANSAS RIVER BASIN—CONTINUED								
07256700 Big Shoal Creek near New Blaine	Lat 35°17'30", long 93°27'37", in NW ¹ / ₄ SE ¹ / 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 ² .	1989-99	5-12-99 1-5-98	9.53 16.51	3,500 15,500	05-03-90 19.11	26,100	
07257100 Minnow Creek Tributary near Hagarville	Lat 35°30'11", long 93°21'56", in SE ¹ / ₄ SE ¹ / 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 ² .	1962-99	6-30-99	5.92	134	04-24-70 6.62	176	
*07257200 Little Piney Creek near Lamar	Lat 35°26'54", long 93°20'17", in SW ¹ / ₄ NE ¹ / ₄ sec.9, T.9 N., R.22 W., Johnson County, Hydrologic Unit 11110202, on left bank 600 ft upstream from State Highway 359 bridge, 3.0 mi east of Lamar. Drainage area is 154 mi ² .	1978-99	6-30-99	10.83	5,870	12-03-82 15.35	13,300	
07257500 Illinois Bayou near Scottsville	Lat 35°27'58", long 93°02'28", in SE ¹ / ₄ SW ¹ / ₄ sec.32, T.10 N., R.19 W., Pope County, Hydrologic Unit 11110202, at bridge on county road, 1.3 mi north of Scottsville. Drainage area is 241 mi ² .	1948-70' 1971-99	1-2-99	11.58	7,110	12-03-82 27.49	130,000	
07258000 Arkansas River at Dardanelle	Lat 35°13'34", long 93°08'58", in SW ¹ / 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 is 153,670 mi ² .	1937-94' 1995-99	7-6-99	26.04	169,000	05-13-43, 05-14-43, 05-25-43	43.60 683,000	
07258200 Pack Saddle Creek Tributary near Waldron	Lat 34°58'18", long 95°05'42", in SE ¹ / ₄ SE ¹ / 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 ² .	1961-99	10-5-98	2.87	a	05-13-68 9.42	689	
07258500 Petit Jean River near Booneville	Lat 35°06'25", long 93°55'25", in NW ¹ / ₄ NW ¹ / 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 is 241 mi ² .	1938-84' 1985-99	5-23-99	15.88	5,770	04-16-39 23.42	43,200	
07260000 Dutch Creek at Waltreak	Lat 34°59'15", long 93°36'45", in SE ¹ / ₄ NW ¹ / ₄ sec.24, T.4 N., R.25 W., Yell County, Hydrologic Unit 11110204, on left bank 0.2 mi north of Waltreak. Drainage area is 81.4 mi ² .	1945-75' 1976-99	10-6-98	14.08	6,290	07-26-69 22.38	24,500	
07260640 Petit Jean River near Centerville	Lat 35°04'30", long 93°11'58", in NE ¹ / 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 ² .	1988-90 ² 1991-94 1995-99 ²	3-16-99	17.04	--	05-05-90 26.40	--	
*07260673 West Fork Point Remove Creek near Hattiesville	Lat 35°19'25", long 92°52'22", in NE ¹ / ₄ SE ¹ / ₄ sec.23, T.8 N., R.18 W., Pope County, Hydrologic Unit 11110203, on right bank about 300 ft upstream from State Highway 247 bridge, 0.4 mi downstream from Hackers Creek, 5.5 mi northwest of Hattiesville. Drainage area is 222 mi ² .	1978-99	10-6-98	20.71	8,990	12-03-82 26.62	64,100	
07260679 East Fork Point Remove Creek Tributary near Saint Vincent	Lat 35°16'09", long 92°44'00", in NE ¹ / ₄ NE ¹ / 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 0.09 mi ² .	1967-99	--	<5.76	--	12-03-82 8.24	102	
07260800 Arkansas River at Morrilton	Lat 35°07'39", long 92°43'55", in SE ¹ / ₄ SW ¹ / 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 ² .	1927-99 ²	7-3-99	28.40	--	5-15-43 40.8	--	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
ARKANSAS RIVER BASIN—CONTINUED								
07261500 Fourche LaFave River near Gravelly	Lat 34°52'21", long 93°39'24", in NW ¹ / ₄ NW ¹ / 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 is 410 mi ² .	1939-94 ¹ 1995-99	10-6-98	25.91	39,100	12-03-82	^b 32.45	162,000
07261800 Brogan Creek near Rover	Lat 34°54'27", long 93°24'06", in NW ¹ / ₄ SE ¹ / 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 ² .	1963-99	12-4-98	4.72	145	12-03-82	^b 10.65	1,260
07263000 South Fourche LaFave River near Hollis	Lat 34°54'41", long 93°03'21", in SE ¹ / ₄ NE ¹ / 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 ² .	1941-95 ¹ 1996-99	1-2-99	10.96	11,900	12-3-82	24.55	94,000
07263012 Fourche LaFave River near Aplin	Lat 34°57'37", long 92°58'50", in E1/2NE ¹ / 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 ² .	1980-99	1-2-99	22.49	12,300	12-03-82	36.10	a
07263100 Fourche LaFave Tributary near Perryville	Lat 35°01'14", long 92°46'06", in NW ¹ / ₄ SW ¹ / ₄ sec.1, T.4 N., R.17 W., Perry County, Hydrologic Unit 11110206, at culvert on State Highway 60, 2.2 mi northeast of Perryville. Drainage area is 1.47 mi ² .	1962-99	1-2-99	7.87	205	12-03-82	11.45	1,150
07263115 Fourche LaFave River near Houston	Lat 35°00'44", long 92°43'24", in NW ¹ / ₄ NE ¹ / ₄ sec.8, T.4 N., R.16 W., Perry County, Hydrologic Unit 11110206, at left bank at downstream side of bridge on State Highway 216, 2.4 mi southwest of Houston. Drainage area is 1,058 mi ² .	1988-94 1995-99 ^a	3-15-99	25.89	a	05-08-90	37.35	a
07263400 Little Maumelle River at Ferndale	Lat 34°46'48", long 92°33'15", in NW ¹ / ₄ SE ¹ / 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 ² .	1963-86 1993-99	1-2-99	9.07	2,480	03-10-73	15.01	10,800
07263426 Hickory Creek at Bent Tree Court in Little Rock	Lat 34°47'18", long 92°25'54", in SE ¹ / ₄ SE ¹ / 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 2.44mi ² .	1997-98 ¹ 1999	—	<6.16	—	3-1-97	4.22	1,030
07263465 Storm Ditch at Rolling Oaks Drive at Maumelle	Lat 34°52'41", long 92°24'03", in NW ¹ / ₄ SW ¹ / 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 ² .	1997-98 ¹ 1999	—	—	—	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 ² of which 22,242 mi ² is probably noncontributing (determined from "Drainage Area Data, Arkansas, White, and Red River Basins").	1928-69 ¹ 1970-99 ^a	7-3-99	15.06	—	5-27-43	30.05	536,000
07263570 Grassy Flat Creek at Little Rock	Lat 34°46'01", long 92°22'03", in SE ¹ / ₄ NE ¹ / 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 ² .	1974-87 1988-91 ^a 1996-98 ¹ 1999	—	>7.19	—	5-17-81	11.47	3,230

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
ARKANSAS RIVER BASIN--CONTINUED								
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 ² .	1990-99	4-26-99 1-6-98 10-27-96 5-27-96 4-11-95 8-19-94 4-25-93 8-5-92 4-13-91	15.71 15.63 15.55 15.14 14.11 15.47 14.16 15.47 15.26	820 °800 °780 °670 °450 °750 °460 °750 °700	05-19-90 17.50 °1,260		
07263594 Coleman Creek at West 28th Street 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 ² .	1997-98 ¹ 1999	4-26-99	11.25	1,590	9-20-96 11.86 1,800		
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 ² .	1948-99 ^a	7-4-99	38.41	--	5-28-43 33.70 553,000		
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 ² .	1997-98 ¹ 1999	--	--	--	3-5-97 4.15 --		
07264050 Bayou Two Prairie near Cabot	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 ² .	1988-99	3-13-99	8.45	700	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 ² .	1993-99 ^a	5-21-99	29.21	--	5-11-95 30.02 --		
RED RIVER BASIN								
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 ² .	1948-80 ¹ 1981-99	12-8-98	8.31	1,710	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 ² .	1938-80 ¹ 1981-99	12-4-98	10.41	5,280	05-13-68 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 ² .	1938-80 ¹ 1981-99	12-4-98	8.53	1,390	05-13-68 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 ² .	1989-99	3-12-99	8.91	860	5-28-98 9.63 1,110		
07344280 Nix Creek at E. 12th Street at Texarkana	Lat 33°26'04", long 95°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 ² .	1993-99	3-13-99	16.22	2,450	5-28-98 °20.50 8,260		
07344285 Swampoodle Creek at Broad Street at Texarkana, Texas	Lat 33°25'06", long 95°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 ² .	1993-99	10-6-98	15.46	1,630	05-28-98 19.52 °3,330		

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
RED RIVER BASIN--CONTINUED								
07348635 Big Creek Tributary at Magnolia	Lat 33°15'51", long 93°13'56", in NW ¹ / ₄ NE ¹ / ₄ sec.13, T.17 S., R.21 W., Columbia County, Hydrologic Unit 11140203, at Dudley and Grayson St. in Magnolia. Drainage area is 0.34 mi ² .	1990-99	4-3-99	16.10 a	04-28-91	17.70 a		
07355800 Lewis Creek Tributary near Mena	Lat 34°37'15", long 95°12'15", in NE ¹ / ₄ SW ¹ / 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 ² .	1961-99	10-5-98	5.35 425	10-08-90	6.23 560		
07357740 Bear Creek near Royal	Lat 34°30'30", long 93°15'21", in NE ¹ / ₄ NW ¹ / 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 ² .	1989-99	11-12-98	7.79 a	03-08-90	6.42 1,600		
07357860 Stokes Creek at Kimery Road at Hot Springs	Lat 34°28'36", long 93°04'52", in SE ¹ / ₄ NW ¹ / 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 ² .	1993-99	10-6-98	5.51 a	11-05-94	6.49 a		
07359710 Rock Creek near Glenwood	Lat 34°18'34", long 93°32'21", in NW ¹ / ₄ NE ¹ / 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 ² .	1989-99	1-1-99	7.05 1,190	05-20-90	13.58 7,450		
07359805 Valley Creek near Point Cedar	Lat 34°19'17", long 93°15'24", in NW ¹ / ₄ NE ¹ / 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 ² .	1989-99	3-8-99	6.80 645	05-20-90	16.9 10,500		
07360100 L'Eau Frais at Joan	Lat 34°06'27", long 92°55'22", in SW ¹ / ₄ NE ¹ / 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 ² .	1989-99	3-12-99 2-10-98 12-3-93 10-29-91 10-9-90 3-8-90 3-29-89	5.92 1,150 4.56 "730 6.85 "1,530 6.19 "1,250 5.62 "1,070 7.18 "1,700 6.93 "1,550	04-14-93	8.16 "2,150		
07360225 Little Blocker Creek near Langley	Lat 34°18'41", long 93°49'06", in SE ¹ / ₄ NE ¹ / 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 ² .	1989-99	1-1-99	7.69 a	12-03-93	11.79 a		
07361180 South Fork Ozan Creek near Ozan	Lat 33°49'15", long 93°42'28", in SE ¹ / ₄ SW ¹ / 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 ² .	1963-99	1-10-99	20.69 2,850	04-19-73	25.06 8,360		
07361760 Bell Creek near Hollywood	Lat 34°05'47", long 93°16'53", in NW ¹ / ₄ NE ¹ / 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 ² .	1988-99	12-10-98 2-10-98 3-13-97 5-7-96 11-5-94 12-3-93 12-15-92 3-10-92 1-6-91 3-8-90 11-20-88	7.73 590 8.50 "730 7.27 "510 6.97 "460 7.24 "500 9.82 "1,000 7.08 "470 8.73 "780 9.35 "920 11.44 "1,450 8.80 "790	12-26-87	14.0 "2,600		
07361894 Mill Creek near Holly Springs	Lat 33°46'01", long 92°39'52", in SE ¹ / ₄ SW ¹ / 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 ² .	1989-99	3-13-99	11.70 440	4-5-97	14.47 4,500		
07362330 Dunn Creek near Hampton	Lat 33°32'05", long 92°30'55", in SE ¹ / ₄ NW ¹ / 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 ² .	1962-99	1-29-99	7.67 880	05-01-66	10.11 4,240		
07362500 Moro Creek near Fordyce	Lat 33°47'32", long 92°20'00", in NW ¹ / ₄ NW ¹ / 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, 4.0 mi southeast of Fordyce. Drainage area is 240 mi ² .	1952-83' 1984-99	3-14-99	13.75 8,680	05-02-58	16.47 26,800		

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station number and name	Location and drainage area	Period of record	Water year 1999 maximum		Period of record maximum			
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)		
RED RIVER BASIN--CONTINUED								
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 ² .	1988-99	4-14-99	7.79 1,900	12-28-87	9.68 5,300		
07363000 Saline River at Benton	Lat 34°34'05", long 92°36'40", in SE1/4NE1/4 sec.9, T.2 S., R.15 W. Saline County, Hydrologic Unit 08040203, on left bank 0.8 mi west of Benton, and 3.0 mi downstream from confluence of North Fork and Alum Fork. Drainage area is 550 mi ² .	1951-79' 1980-99	1-2-99	20.37 24,800	01-30-69	29.68 100,000		
07363200 Saline River near Sheridan	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 is 1,123 mi ² .	1971-82' 1983-99	1-6-99	16.54 14,700	12-28-87	22.66 73,900		
07363435 Derriusseaux 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 ² .	1989-99	3-13-99	9.03 1,500	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 ² .	1963-99	--	--	4-14-91	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 ² .	1961-99	3-13-99	5.44 126	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 ² .	1997-98' 1999	--	--	4-5-97	4.89 --		
07364128 Deep Bayou near Grady	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 102 mi ² .	1989-99	1-29-99	14.74 1,460	7-18-89	18.1 2,350		
07364140 Ables Creek near Tyro	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 southwest of Tyro. Drainage area is 36 mi ² .	1993-99	3-13-99	12.76 5,000	4-5-97	14.28 13,700		
07364550 Caney Creek Tributary near El Dorado	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 culvert on U.S. Highway 82, 3.5 mi southeast of El Dorado. Drainage area is 0.07 mi ² .	1961-99	1-2-99 7-11-99	7.08 42 7.08 42	6-8-74	12.40 978		
07365800 Cornie Bayou near Three Creeks	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 ² .	1956-87' 1990-99	1-3-99	11.07 4,100	6-8-74	17.50 65,000		

a Not determined

b From floodmarks

c Revised

d Prior to December 20, 1989 at datum 2.00 ft higher

* Also a low-flow partial-record station

f Operated as a continuous-record gaging station

g Operated as a stage-only station

h Not previously published

i At site and datum then in use

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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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 1999

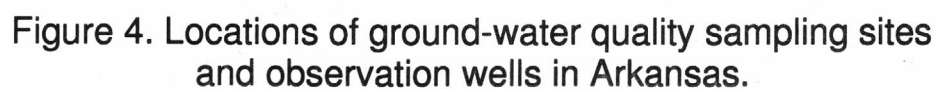
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
ST. FRANCIS RIVER BASIN						
07047947 Second Creek near Palestine	L'Anguille River	Lat 35°02'20" long 90°54'40", in SW1/4SE1/4, sec.17 T.5 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on county road, 4.0 mi north of Palestine.	a	1986-98	12-30-98 4-26-99 8-10-99	15.3 50.0 5
WHITE RIVER BASIN						
07047985 Middle Fork River near Fayetteville	White River	Lat 36°00'58" long 94°03'59", in SW1/4, sec.33, T.16 N., R.29 W., Washington County, Hydrologic Unit 11010001, at bridge on county road 6.3 mi south of Fayetteville.	73.4	1964-67 ^C 1987-89 ^C 1997-98	11-16-98 3-17-99 4-28-99	32.0 237 189
07048550 West Fork White River east of Fayetteville	White River	Lat 36°03'00", long 94°04'42", in NW1/4 sec.20, T.16 N., R.30 W., Washington County, Hydrologic Unit 11010001, at bridge on Mally Wagon Road, 0.5 mi north of State Highway 16, and 4.3 mi east of Fayetteville.	a	1985-98	11-16-98 3-3-99 5-13-99 9-13-99	49.5 37.3 449 10.5
07050206 Kings River near Alabam	White River	Lat 36°11'20", long 93°38'58", in SW1/4SE1/4SW1/4, 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	1997-98	10-27-98 3-11-99 7-8-99	24.6 227 129
07050390 Osage Creek southwest of Berryville	Kings River	Lat 36°20'55", long 93°35'26", in SE1/4SW1/4 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 ^C 1997-98	10-27-98 3-11-99 7-8-99	21.9 180 135
07069170 Warm Fork Spring River near Thayer, Missouri	Black River	Lat 36°30'10", long 92°31'31", in SE1/4SE1/4 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, 1983-98	10-22-98 12-10-98 2-8-99 5-27-99	9.68 7.29 144 70.1
07069295 South Fork Spring River at Saddle	Spring River	Lat 36°21'00", long 92°38'00", in NW1/4NW1/4 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	1974-98	2-8-99 5-27-99 9-30-99	662 92.8 3.47
07076950 Wattensaw Bayou near Hazen	White River	Lat 34°52'34", long 92°33'56", in SE1/4SE1/4 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	1984-98	9-8-98 1-7-99 4-20-99	90 466 142
07077660 Bayou DeView near Gibson	Cache River	Lat 35°47'36", long 90°50'18", in SW1/4SW1/4 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	1-21-99 8-11-99	38.0 7.01
ARKANSAS RIVER BASIN						
07195400 Illinois River near Siloam Springs	Arkansas River	Lat 36°08'41", long 94°29'41", in SW1/4SW1/4 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	1971-81 ^e 1982-85 1986 ^C 1987-98	7-20-99	379
07246940 Poteau River at Waldron	Arkansas River	Lat 34°53'46", long 94°03'57", in SW1/4SE1/4 sec.22, T.3 N., R.29 W., Scott County, Hydrologic Unit 11110105, at bridge on State Highway 80, in Waldron.	a	1986-98	11-17-98 3-30-99 8-11-99	1.18 29.2 0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at special study and miscellaneous sites during water year 1999--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN--CONTINUED						
07260620 Chickalah Creek near Chickalah	Petit Jean River	Lat 35°09'36", long 93°17'34", in SW1/4 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 ^c 1986-98	11-6-98 4-7-99 8-11-99	500 126 0
RED RIVER BASIN						
07338720 Mountain Fork near Hatfield	Little River	Lat 34°30'18", long 94°25'50", in NE1/4NE1/4 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 ^c 1971-73 1986-98	11-17-98	129
07339780 Rolling Fork near West Otis	Little River	Lat 33°58'32", long 94°26'03", in SW1/4NW1/4 sec.20, T.9 S., R.32 W., at Arkansas-Jefferson County line, Hydrologic Unit 08020402, at bridge on State Highway 11, 1.6 mi southwest of Bayou Meto.	290	1962, 1982-83, 1997-98	2-10-98 1-12-99 5-4-99 8-24-99	^d 237 317 228 21.9
07344300f Days Creek southeast of Texarkana	Sulphur River	Lat 33°19'06", long 94°00'16", in NE1/4SE1/4 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	1973-98	1-11-99 5-3-99 8-23-99	32.1 20.9 351
07349440 Bodcau Creek near Lewisville	Red Chute Bayou	Lat 33°15'42", long 93°33'05", in SE1/4 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	1-11-99 5-3-99 8-23-99	569 0 0
07359770 Caddo River near Amity	Ouachita River	Lat 34°17'05", long 93°24'56", in NW1/4SE1/4 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	1987-98	1-14-99 5-5-99 8-25-99	357 851 22.0
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 ^c 1974-98	11-5-98 1-7-99 5-6-99	^b 0.5 3060 739
07363270 Hurricane Creek near Sardis	Saline River	Lat 34°30'40", long 92°24'54", in SW1/4 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	1974-98	9-8-98 1-8-99 4-19-99	^d 5.3 215 127
07364115 Bayou Bartholomew near Ladd	Ouachita River	Lat 34°06'24", long 92°54'06", in NW1/4 sec.22, T.7 S., R.8 W., Jefferson County, Hydrologic Unit 08040205, at bridge on county road, 2.2 mi south of Ladd.	a	1968, 1974-98	11-3-98 3-1-99 8-16-99	^b 3.0 12.0 ^b 1.0
07364143 Ables Creek north of Selma	Bayou Bartholo- mew	Lat 33°44'10", long 91°33'40", in NE1/4NE1/4 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.	a	1998	1-27-98 5-20-98 11-3-98 1-5-99 8-17-99	195 3.0 0 534 8.93
07364600 Bayou DeLoutre near El Dorado	Ouachita River	Lat 33°05'55", long 92°35'32", in SE1/4NW1/4 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, 1990-98	3-2-99	28.4

^aNot determined.^bEstimated.^cOperated as a low-flow partial-record station.^dNot previously published.^eOperated as a continuous-record station.^fOperated as a stage station by U.S. Army Corps of Engineer



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ARKANSAS COUNTY

342847091345702. Local number 03S05W06ABA2

LOCATION.--Lat 34°28'47", long 91°34'57", Hydrologic Unit 08020402, near Stuttgart.

Owner: Wendell Roth.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 20-12 in, depth 123 ft, cased 0-108 ft, screened 108-123 ft.

DATUM.--Land surface, 198 ft National Geodetic Vertical Datum of 1929. Measuring point: Gravel hole in pump base, 1.90 ft above land surface.

PERIOD OF RECORD.--Water-quality records for July 1975, August 1979, June 1983, June 1988, August 1993, and July 1999; water levels for April 1974, April 1975, March 1976, and July 1988.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.70 ft below land surface, Mar. 18, 1976; lowest, 82.68 ft below land surface, June 13, 1988.

WATER-QUALITY DATA

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
JUL 1999 22...	1200	123.00	198	80513	81213	988	7.5	19.8	40	470	140	29	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
JUL 1999 22...	43	17	.9	1.9	327	130	56	.15	29	682	632	.93	
DATE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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)	
JUL 1999 22...		<.010	.030	.400	.33	.010	520	<.50	44	<.50	<1.0	<1.0	
DATE		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)	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)	
JUL 1999 22...		<1.0	4400	<1.0	11	740	<2.0	<1.0	<1.0	680	<1	<1.0	

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

305

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 sea level. Measuring point: Top of casing, 3.27 ft above land surface.

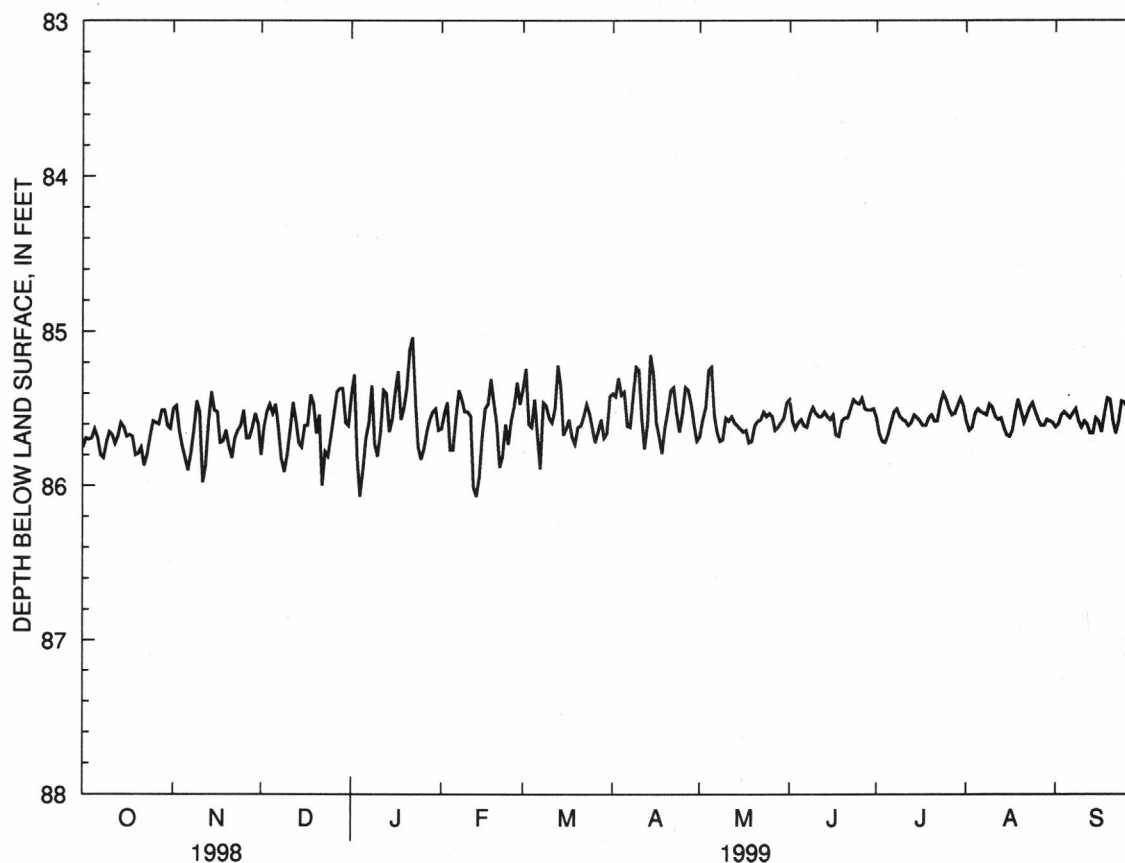
PERIOD OF RECORD.--Annual water levels June 1960 to August 1963, April 1971 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.76 ft below land surface, Oct. 8, 1996; lowest, 93.28 ft below land surface, Aug. 22, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.63	85.82	85.53	85.89	85.77	85.44	85.39	85.23	85.57	85.67	85.50	85.54
10	85.65	85.52	85.80	85.81	85.52	85.56	85.25	85.56	85.53	85.57	85.49	85.62
15	85.62	85.51	85.75	85.57	85.68	85.67	85.28	85.63	85.57	85.56	85.67	85.56
20	85.79	85.74	85.66	85.37	85.61	85.62	85.51	85.61	85.56	85.54	85.51	85.44
25	85.58	85.51	85.68	85.83	85.57	85.62	85.53	85.53	85.47	85.44	85.52	85.46
EOM	85.63	85.60	85.61	85.64	85.47	85.42	85.71	85.46	85.50	85.48	85.59	85.68
MAX	85.87	85.98	86.00	86.07	86.07	85.89	85.79	85.72	85.68	85.72	85.68	85.68
MIN	85.51	85.39	85.37	85.04	85.31	85.22	85.15	85.23	85.43	85.40	85.44	85.43
CAL YR 1998	HIGH 85.15		FEB 16		LOW 86.33		MAR 12					
WTR YR 1999	HIGH 85.04		JAN 22		LOW 86.07		JAN 4					



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ASHLEY COUNTY--CONTINUED

331730091423301. Local number 16S06W27BAA1.

LOCATION.--Lat 33°17'30", long 91°42'33", Hydrologic Unit 08040205, near Mist.

Owner: Lloyd Engelkes.

AQUIFER.--Terrace deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled irrigation well, depth 110 ft.

DATUM.--Land surface, 184 ft above sea level.

PERIOD OF RECORD.--Water-quality records for June 1972, August 1979, June 1983, June 1988, August 1993, and July 1999.

WATER-QUALITY DATA

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	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)	
JUL 1999 21...	1300	110.00	184	80513	81213	675	7.6	20.9	5	290	88	17	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)
JUL 1999 21...	34	20	.9	1.5	317	5.1	25	.17	36	410	398	.56	
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)	
JUL 1999 21...		<.010	.040	.040	<.20	.080	200	<.50	37	<.50	<1.0	<1.0	
DATE		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)	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)	
JUL 1999 21...		<1.0	7.5	<1.0	26	38	<2.0	<1.0	<1.0	400	2	1.9	

CROSS COUNTY

351544090334101. Local number 07N05E04ADD1.

LOCATION.--Lat 35°15'37", long 90°33'29", Hydrologic Unit 08020203, at Parkin.

Owner: City of Parkin.

AQUIFER.--Memphis Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 12 in, depth 462 ft, cased 0-402 ft, screened 402-462 ft.

DATUM.--Land surface, 209 ft above sea level. Measuring point: Hole in west side of pump, 2.70 ft above land surface.

PERIOD OF RECORD.--Water quality records for December 1976, June 1981, October 1981, July 1984, October 1989, August 1994, and July 1999; annual water levels March 1986 to April 1987, April 1989 to April 1990, May 1993 to March 1995, April 1999.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.56 ft below land surface, Apr. 2, 1987; lowest, 35.48 ft below land surface, August 29, 1994.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

307

CROSS COUNTY--CONTINUED

351544090334101. Local number 07N05E04ADD1.--CONTINUED

WATER-QUALITY DATA

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	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)	
JUL 1999 22...	1515	462.00	209	80513	81213	211	8.0	21.1	20	55	15	4.1	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNPLTRD FET FIELD CACO3 (MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)
JUL 1999 22...	24	46	1	5.1	116	.90	2.8	.14	13	134	137	.18	
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)	
JUL 1999 22...		<.010	<.020	.300	.23	.080	270	<.50	68	<.50	<1.0	<1.0	
DATE		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)	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)	
JUL 1999 22...		<1.0	890	<1.0	7	20	<2.0	<1.0	<1.0	710	<1	1.4	

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 sea level. Measuring point: Top of casing, 1.71 ft above land surface.

REMARKS.--Water level fluctuates largely with stage of Arkansas River.

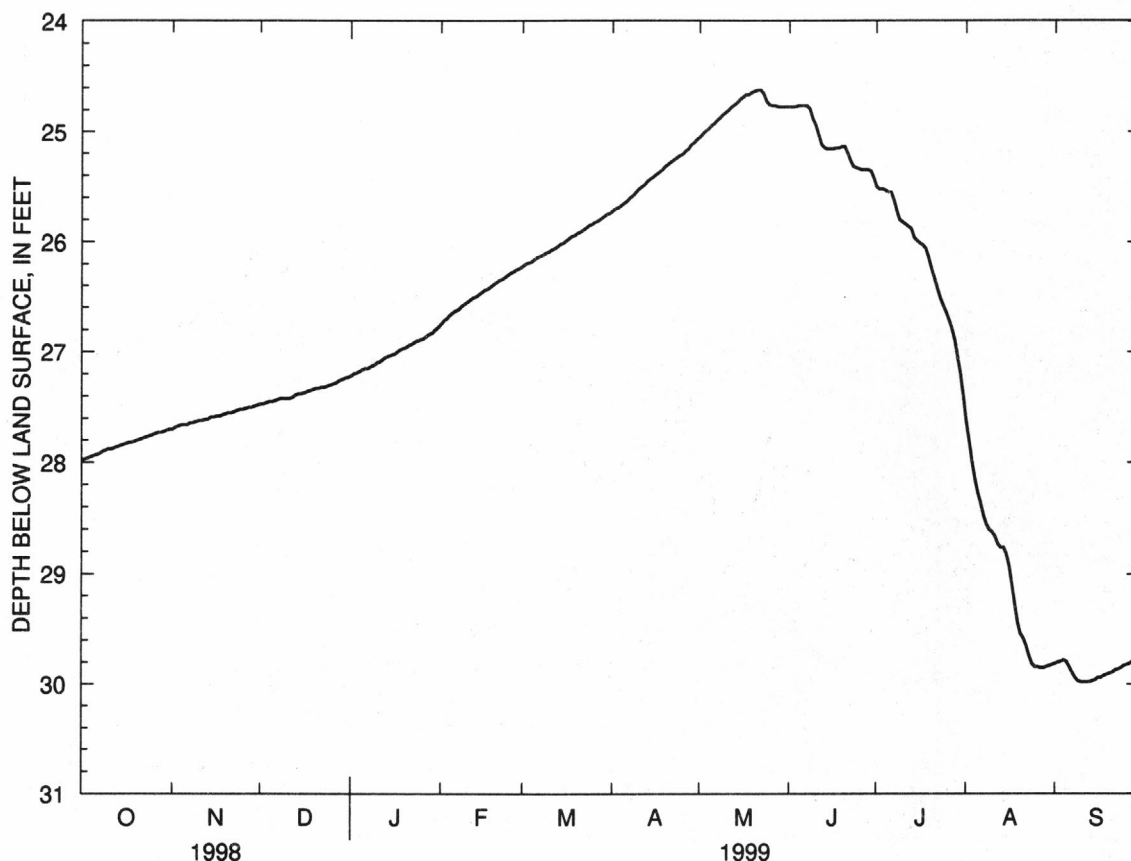
PERIOD OF RECORD.--Annual water levels October 1957 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.94 ft below land surface, Feb. 17, 1959; lowest, 29.98 ft below land surface, Sept. 10, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.94	27.66	27.45	27.16	26.65	26.16	25.65	24.94	24.76	25.55	28.27	29.79
10	27.88	27.62	27.42	27.10	26.55	26.09	25.52	24.82	24.94	25.82	28.62	29.98
15	27.84	27.59	27.38	27.03	26.46	26.01	25.41	24.70	25.16	25.99	28.82	29.96
20	27.80	27.55	27.33	26.96	26.37	25.92	25.30	24.63	25.14	26.24	29.54	29.90
25	27.75	27.52	27.30	26.89	26.28	25.84	25.21	24.75	25.34	26.64	29.84	29.83
EOM	27.70	27.48	27.23	26.78	26.24	25.74	25.07	24.77	25.42	27.39	29.82	29.77
MEAN	27.83	27.59	27.36	27.01	26.48	25.99	25.41	24.78	25.09	26.15	29.03	29.88
MAX	27.98	27.70	27.47	27.22	26.75	26.22	25.72	25.05	25.42	27.39	29.85	29.98
MIN	27.70	27.48	27.23	26.78	26.24	25.74	25.07	24.62	24.76	25.50	27.61	29.77
CAL YR 1998	MEAN 24.51	HIGH 19.18	APR 16	LOW 29.31	AUG 15							
WTR YR 1999	MEAN 26.88	HIGH 24.62	MAY 21	LOW 29.98	SEP 10							

335258091152301. Local number, 09S02W26DDC1.- -CONTINUED



GARLAND COUNTY

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 sea level. Measuring point: Top of casing, 1.30 ft above land surface.

PERIOD OF RECORD.--Annual water levels February 1991 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 93.52 ft below land surface, Aug. 15, 1998; lowest, 117.21 ft below land surface, Feb. 20, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

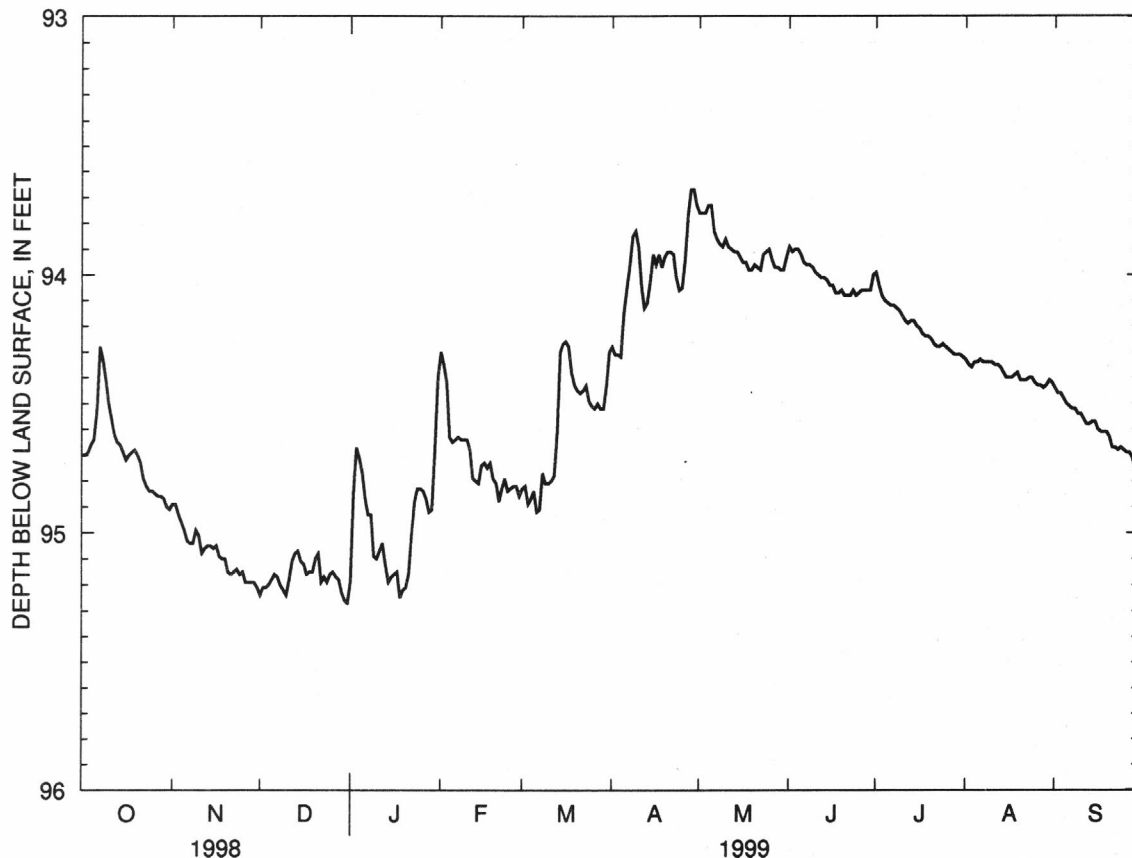
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.64	94.99	95.18	94.77	94.65	94.84	94.15	93.73	93.92	94.11	94.34	94.50
10	94.50	95.01	95.24	95.10	94.64	94.81	93.89	93.86	93.99	94.16	94.34	94.54
15	94.69	95.06	95.11	95.17	94.74	94.27	93.92	93.93	94.04	94.20	94.40	94.57
20	94.70	95.15	95.10	95.21	94.81	94.45	93.91	93.96	94.08	94.25	94.41	94.63
25	94.84	95.15	95.16	94.83	94.83	94.51	94.05	93.90	94.07	94.28	94.42	94.68
EOM	94.91	95.21	95.27	94.40	94.86	94.30	93.73	93.93	94.00	94.32	94.42	94.76
MAX	94.91	95.21	95.27	95.25	94.88	94.92	94.32	93.98	94.08	94.32	94.44	94.76
MIN	94.28	94.89	95.07	94.40	94.30	94.26	93.67	93.73	93.89	93.99	94.33	94.44
WTR YR 1999	HIGH	93.67	APR 28	LOW	95.27	DEC 31						

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

309

GARLAND COUNTY--CONTINUED

343048093030401. Local number, 02S19W33CBD1.--CONTINUED



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 sea level. Measuring point: Top of casing, 2.00 ft above land surface.

PERIOD OF RECORD.--Annual water levels August 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.98 ft below land surface, Sept. 4, 1958; lowest, 255.10 ft below land surface, Sept. 30, 1999.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	250.10	FEB 01	248.20	MAR 23	245.85	MAY 01	250.60	JUL 02	253.10	AUG 30	255.10
29	250.00	MAR 01	247.80	29	245.90	JUN 07	252.40	AUG 01	251.70	SEP 30	255.10
DEC 28	251.90										

WATER YEAR 1999 HIGHEST 245.85 MAR 23, 1999 LOWEST 255.10 SEP 30, 1999

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

JEFFERSON COUNTY--CONTINUED

341147092022301. Local number 06S09W17CCB1.

LOCATION.--Lat 34°11'47", long 92°02'23", Hydrologic Unit 08040205, at Pine Bluff..

Owner: General Water Works.

AQUIFER.--Sparta Sand of Ecocene age.

WELL CHARACTERISTICS.--Drilled public-supply artesian well, diameter 16-12 in, depth 863 ft, cased 0-783ft, screened 783-863 ft.

DATUM.--Land surface, 231 ft above sea level.

PERIOD OF RECORD.--Water-quality records for December 1968, June 1975, August 1979, June 1983, June 1988, August 1993, and July 1999.

WATER-QUALITY DATA

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	AGENCY COLLECTING SAMPLE (CODE) (00027)	AGENCY ANALYZING SAMPLE (CODE) (00028)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	
JUL 1999 22...	1005	863.00	231	80513	81213	151	6.9	26.6	50	26	7.6	1.6	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNPLTRD FET FIELD (MG/L AS CAC03) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
JUL 1999 22...	18	54	2	6.5	85	2.2	1.8	.13	18	98	110	.13	
DATE	TIME	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	
JUL 1999 22...	<.010	<.020	.300	.44	.150	83	<.50	51	<.50	<1.0	<1.0		
DATE	TIME	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)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	
JUL 1999 22...	<1.0	2000	<1.0	23	76	<2.0	<1.0	<1.0	280	<1	1.2		

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 sea level. Measuring point: Top of casing, 2.6 ft below land surface.

PERIOD OF RECORD.--Annual water levels January 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.20 ft below land surface, Feb. 22, 1999; lowest, 49.84 ft below land surface, Sept. 23, 1999.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	42.62	JUL 03	42.66	SEP 23	49.84	JAN 04	45.00	MAY 11	40.65	AUG 13	48.37
FEB 22	37.20										
WATER YEAR 1999		HIGHEST	37.20	FEB 22, 1999	LOWEST	49.84	SEP 23, 1999				

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

311

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 sea level. Measuring point: Top of casing, at land surface.

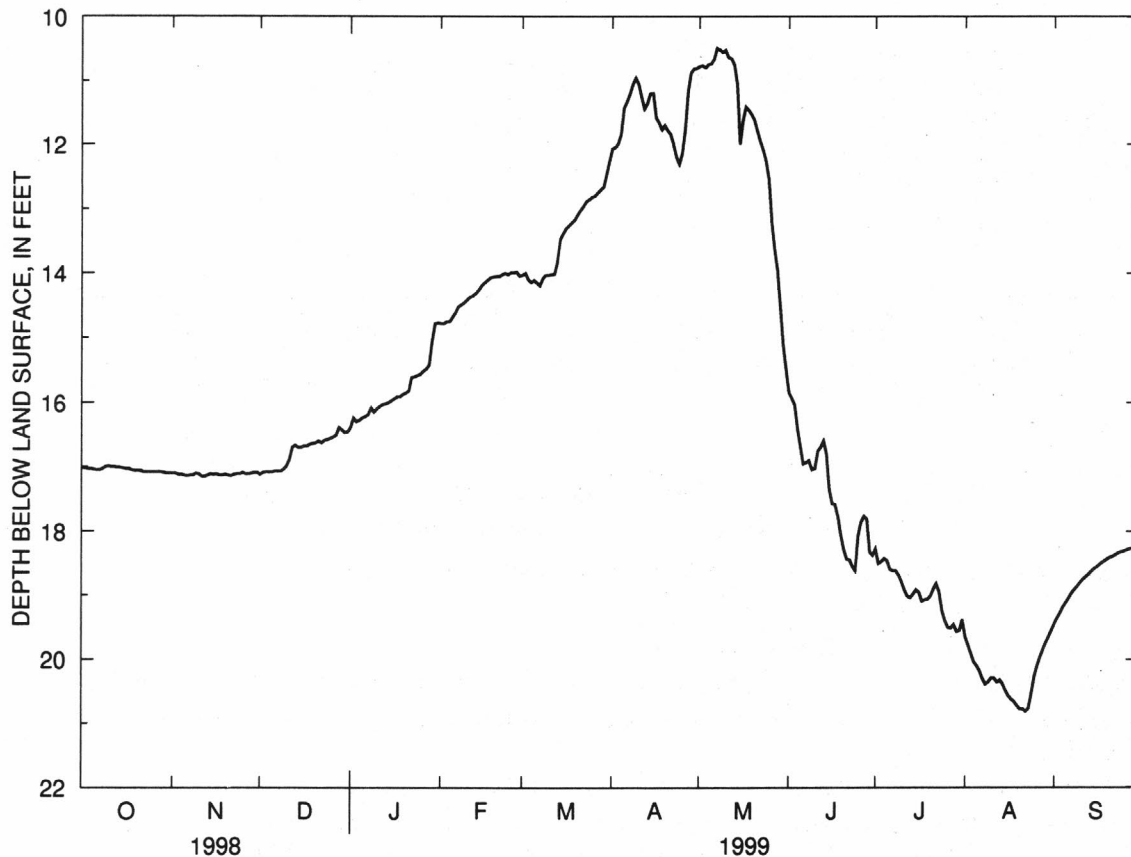
PERIOD OF RECORD.--Annual water levels March 1955, January 1957 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.61 ft below land surface, Apr. 25, 1973; lowest, 20.81 ft below land surface, Aug. 22, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.04	17.13	17.08	16.24	14.68	14.11	11.43	10.73	16.68	18.45	20.10	19.11
10	16.99	17.11	16.99	16.10	14.41	14.03	11.05	10.52	17.02	18.78	20.29	18.79
15	17.02	17.12	16.70	15.97	14.19	13.39	11.19	12.00	17.34	18.91	20.48	18.57
20	17.06	17.13	16.63	15.85	14.05	13.09	11.78	11.62	18.28	19.01	20.77	18.41
25	17.08	17.09	16.56	15.56	13.99	12.82	12.14	12.55	18.08	19.40	20.27	18.31
EOM	17.10	17.09	16.46	14.77	14.04	12.26	10.80	15.49	18.37	19.38	19.54	18.23
MAX	17.10	17.15	17.12	16.39	14.78	14.19	12.31	15.49	18.61	19.56	20.81	19.44
MIN	16.99	17.09	16.39	14.77	13.98	12.26	10.80	10.49	15.84	18.27	19.54	18.23
CAL YR 1998	HIGH 8.13 MAR 8 LOW 18.45 AUG 10											
WTR YR 1999	HIGH 10.49 MAY 7 LOW 20.81 AUG 22											



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 sea level. Measuring point: Top of casing, 0.0 ft above land surface.

PERIOD OF RECORD.--Annual 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, 66.95 ft below land surface, Sept. 15, 1999.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24	66.90	FEB 24	66.10	APR 27	65.45	JUL 21	66.67	SEP 15	66.95
WATER YEAR 1999		HIGHEST	65.45	APR 27, 1999		LOWEST	66.95	SEP 15, 1999	

UNION COUNTY

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 sea level. Measuring point: Top of casing, 2.00 ft above land surface.

PERIOD OF RECORD.--Annual water levels July 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 269.70 ft below land surface, Apr. 20, 1956; lowest, 372.92 ft below land surface, Oct. 20, 1991.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	360.62	DEC 21	360.79	FEB 22	361.01	APR 30	360.92	JUN 20	360.81	AUG 20	360.99
NOV 27	360.84	JAN 20	361.10	MAR 20	360.89	MAY 20	360.89	JUL 20	360.78	SEP 20	360.92
WATER YEAR 1999		HIGHEST	360.62	OCT 20, 1998		LOWEST	361.10	JAN 20, 1999			

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

313

UNION COUNTY--continued

331358092424301. Local number 17S16W24BDB1.

LOCATION.--Lat 33°13'58", long 92°42'48", Hydrologic Unit 08040201, at El Dorado.

Owner: City of El Dorado.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled public supply well, diameter 18-8 in., depth 615 ft, screened 493-615 ft.

DATUM.--Land surface, 205 ft above sea level. Measuring point: Hole in east side of pump base, 2.00 ft above land surface.

PERIOD OF RECORD.--Water-quality records for June 1972, August 1977, June 1981, May 1982, August 1989, August 1994, and July 1999: annual water levels April 1968 to March 1990, June 1992 to April 19893, March 1997, March 1999.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 339.29 ft below land surface, Apr. 10, 1973; lowest, 403.09 ft below land surface, Apr. 29, 1993.

WATER-QUALITY DATA

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
JUL 1999 21...	0955	615.00	205	80513	81213	425	8.4	23.1	5	3	1.0
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
JUL 1999 21...	.20	110	98	26	1.0	195	<.20	22	.23	11	261
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)
JUL 1999 21...	<.010	<.020	.400	.32	.230	8.0	<.50	140	<.50	<1.0	<1.0
DATE	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)	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)
JUL 1999 21...	<1.0	13	<1.0	7	9.2	<2.0	<1.0	<1.0	32	<1	<1.0

CHEMICAL QUALITY OF PRECIPITATION

00040380 NATIONAL TRENDS NETWORK SITE NEAR CADDO VALLEY

PRECIPITATION QUALITY

LOCATION.--Lat 34°10'45", long 93°05'54", in NW1/4NW1/4 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 January 1999.

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.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.



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