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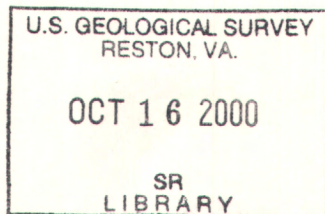
Arkansas

1998

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Water Resources Data Arkansas Water Year 1998

Water-Data Report AR-98-1



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 1998

1997

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1998

JANUARY							FEBRUARY							MARCH						
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				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
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Water Resources Data Arkansas Water Year 1998

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

Water-Data Report AR-98-1



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
U.S. Geological Survey
401 Hardin Road
Little Rock, Arkansas 72211**

1999

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.

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE February, 1999	3. REPORT TYPE AND DATES COVERED Annual-October 1, 1997 to September 30, 1998	
4. TITLE AND SUBTITLE Water Resources Data--Arkansas, Water Year 1998			5. FUNDING NUMBERS	
6. AUTHOR(S) J.E. Porter, D.A. Evans, and L.M. Remsing				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division 401 Hardin Road Little Rock, Arkansas 72211			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-AR-98-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division 401 Hardin Road Little Rock, Arkansas 72211			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS/WDR-AR-98-1	
11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Arkansas and with other agencies				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, Virginia 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) <p>The Water Resources Division of the U.S. Geological Survey, in cooperation with State, Federal, and other local governmental agencies, obtains a large amount of data pertaining to the water resources of Arkansas each year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State.</p> <p>Water resources data reported for the 1998 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 are also included. This report contains daily discharge records for 61 surface-water gaging stations and 4 daily sediment stations; water quality for 61 surface-water stations, 5 ground-water quality wells and springs, 8 ground-water-level observation wells, and 1 precipitation-quality station. Also included are data for 95 peak-discharge partial-record stations and 10 stage-only stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Information System operated by the U.S. Geological Survey in cooperation with State and Federal agencies in Arkansas.</p>				
14. SUBJECT TERMS *Arkansas, *Missouri, *Oklahoma, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses			15. NUMBER OF PAGES 358	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

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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 1998 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 are also included. This report contains daily discharge records for 61 surface-water gaging stations and 4 daily sediment stations; water quality for 61 surface-water stations, 5 ground-water quality wells and springs, 8 ground-water-level observation wells, and 1 precipitation-quality station. Also included are data for 95 peak-discharge partial-record stations and 10 stage-only partial-record stations. 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-98-1. 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 1998 are:

Arkansas Department of Pollution Control and Ecology, 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

City of Fayetteville, Jim Beavers, City Engineer

City of Fort Smith, Steve Park, 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, 1998

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Streamflow varies seasonally in Arkansas and generally reflects precipitation patterns unless a stream is regulated. Above average rainfall resulted in above average runoff over the northern part of the State and below average rainfall resulted in below average runoff over the southern part of the State during the 1998 water year. Streamflow for the year at the index station on the Buffalo River near St. Joe, in northern Arkansas, was 122 percent of median for the base period 1961-1990. Streamflow for the year at the index station on the Saline River near Rye, in southern Arkansas, was 79 percent of median for the base period 1961-1990. Monthly and annual mean discharge for the 1998 water year, and median for the monthly and annual mean discharges for the base period 1961-1990 at the St. Joe and Rye sites are shown on figure 1.

On May 28 a slow moving storm system produced up to 15 inches of rainfall in less than 24 hours in Miller County in southwestern Arkansas which caused severe local flooding. Several houses and businesses were damaged by flooding in the city of Texarkana where 10.48 inches of rainfall fell in about 15 hours. Several hundred residents had to be evacuated from their homes. Officials estimated several hundreds of thousands of dollars damage to roads, bridges, and culverts in Miller County. The peaks at two crest-stage gages in Texarkana exceeded the previous maximums for the periods of record. Before the rains late in the month, Arkansas was experiencing one of the driest Mays on record. The monthly mean of 404 ft³/s at Saline River near Rye was the lowest monthly mean for the period of record.

Streamflow statistics for the 1998 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 1998 water year (cubic feet per second)			Statistics of discharge during period of record (cubic feet per second)		
		Maximum instantaneous	Minimum instantaneous	Mean	Maximum instantaneous	Minimum instantaneous	Mean
07047942 L'Anguille River near Colt	1970-98	4,100	3.8	516	16,600	0.99	739
07060710 North Sylamore Creek near Fifty-Six	1965-98	2,570	1.2	40.8	25,200	1.2	47.3
07077380 Cache River at Egypt	1964-98	3,710	2.3	840	8,490	0	863
07196900 Baron Fork at Dutch Mills	1958-98	17,500	0	55.7	20,900	0	45.4
07249400 James Fork near Hackett	1958-98	12,400	--	198	30,000	0	146
07261000 Cadron Creek near Guy	1954-98	7,290	0	177	24,200	0	280
07264000 Bayou Meto near Lonoke	1954-98	1,210	0	209	5,750	0	295
07340300 Cossatot River near Vandervoort	1967-98	8,050	7.4	189	32,000	7.2	198
07356000 Ouachita River near Mt. Ida	1941-98	15,800	5.8	788	102,000	2.3	734
07364150 Bayou Bartholomew near McGehee	1938-42, 1945-98	2,750	10	401	6,870	0.20	695

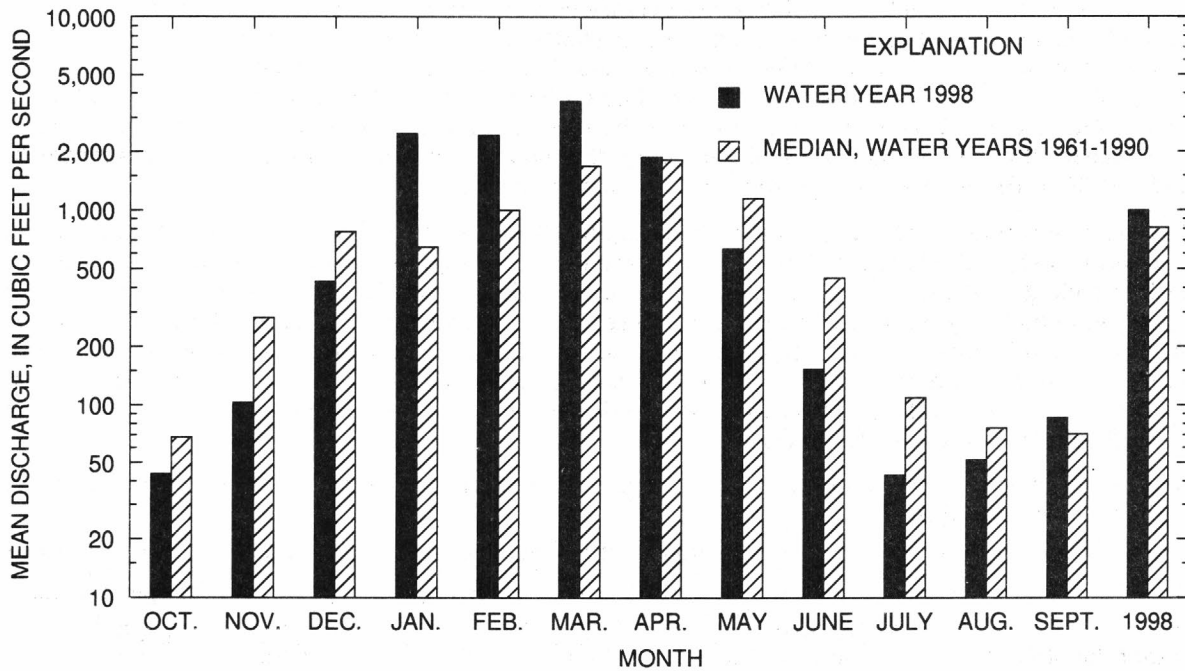
Surface-Water Quality

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.

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



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

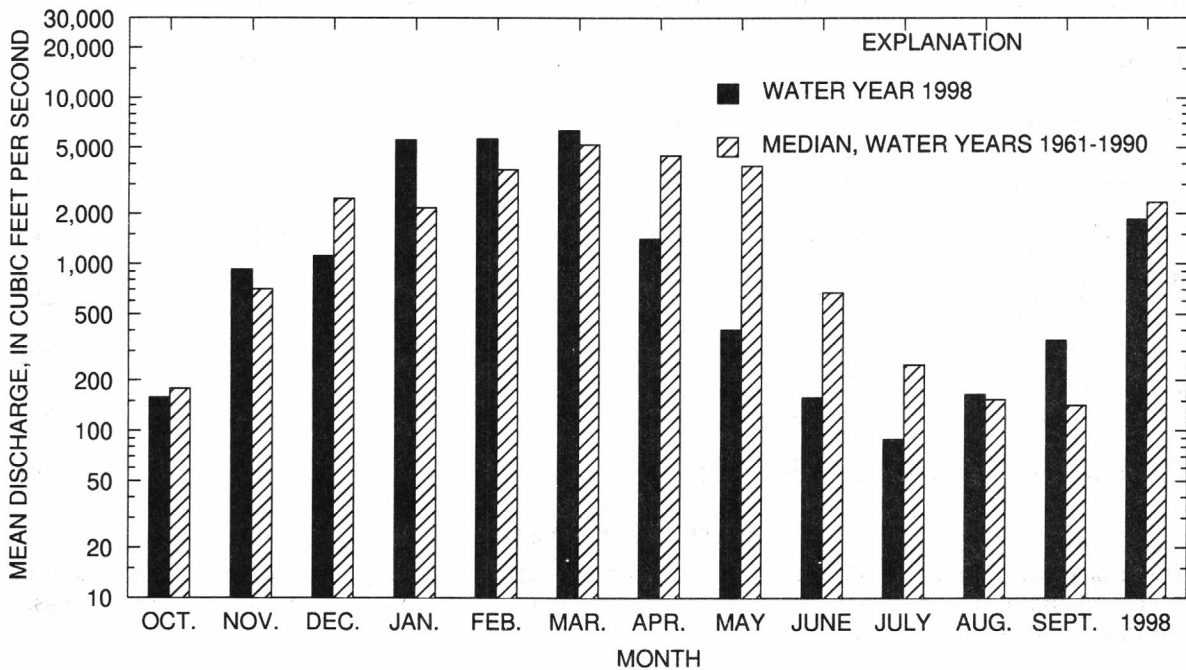


Figure 1.--Comparison of discharge at two representative long-term gaging stations for the 1998 water year with the median of the monthly and annual mean discharges for a 30-year base period.

WATER RESOURCES DATA FOR ARKANSAS, 1998

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 1998 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 1998 was 2,660 mg/L in the Red River at Index. Suspended-sediment concentrations, in milligrams per liter, for selected stream sampling sites are presented below.

	1998		Period of record through 1998	
	Minimum	Maximum	Minimum	Maximum
Right Hand Chute of Little River at Rivervale	43	234	25	1,070
L'Anguille River near Colt	44	773	4	2,410
North Sylamore Creek near Fifty-Six	12	53	0	198
Arkansas River at David D. Terry Lock and Dam below Little Rock	42	226	2	4,140
Ouachita River at Camden	20	88	6	639
Red River at Index	129	2,660	16	8,200

The highest fecal-coliform bacteria density found in selected streams in 1998 was K1,300 colonies per 100 mL in Yocum Creek near Oak Grove. 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)]

	1998		Period of record through 1998	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	<3	K490	<3	K6,800
Yocum Creek near Oak Grove	K13	K1,300	<1	K15,000
North Sylamore Creek near Fifty-Six	<1	380	<1	1,400
Ouachita River at Camden	<1	20	<1	1,300

The highest dissolved-solids concentration found in selected streams in 1998 was 490 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.

	1998		Period of record through 1998	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	91	164	46	412
Yocum Creek near Oak Grove	157	218	146	218
North Sylamore Creek near Fifty-Six	125	162	72	212
Arkansas River at David D. Terry Lock and Dam below Little Rock	214	490	85	690

The highest dissolved chloride concentration found in selected streams in 1998 was 150 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.

	1998		Period of record through 1998	
	Minimum	Maximum	Minimum	Maximum
L'Anguille River near Colt	3.9	16	1.9	47
Yocum Creek near Oak Grove	5.8	9.9	4.6	9.9
North Sylamore Creek near Fifty-Six	1.1	2.5	.3	18
Arkansas River at David D. Terry Lock and Dam below Little Rock	37	150	11	290
Ouachita River at Camden	2.6	35	2.1	79

The highest total phosphorus concentration found in selected streams in 1998 was 0.22 mg/L in Yocum Creek near Oak Grove. Total phosphorus concentrations, in milligrams per liter, for selected sampling sites are presented below.

	1998		Period of record through 1998	
	Minimum	Maximum	Minimum	Maximum
Yocum Creek near Oak Grove	0.021	0.22	<0.01	0.45
North Sylamore Creek near Fifty-Six	<.01	.02	<.01	.34
Arkansas River at David D. Terry Lock and Dam below Little Rock	.042	.162	<.01	.61
Ouachita River at Camden	<.02	.15	<.01	.31

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 deepest water level in the alluvial aquifer during the spring of 1998 was 127 feet below land surface, which occurred in Lonoke County.

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 Jefferson County. At the center of the cones, spring water levels range from about 280 feet to more than 470 feet below land surface. The deepest water level in the Sparta and Memphis aquifers during the spring and summer of 1997 was 470 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°C \pm 0.2°C and transferred to 44.5° \pm 0.2° 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°C \pm 0.2°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°C \pm 0.5°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°C \pm 0.5°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 (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 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.

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 planimeted. All areas shown are those for the stage when the map was planimeted.

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.

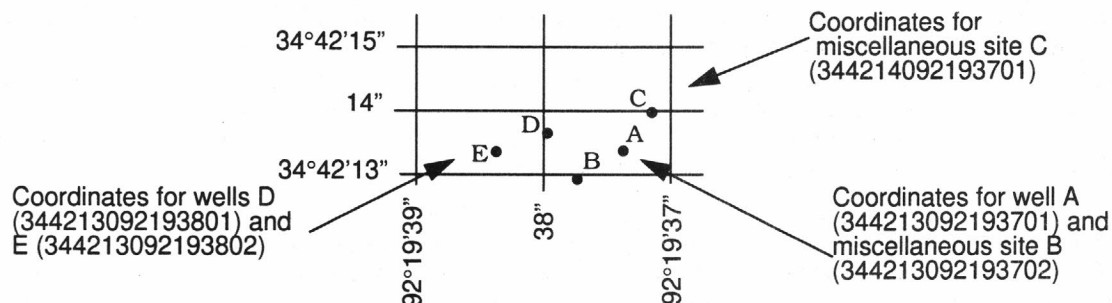
Downstream Order and Station Number

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 re-mobilization 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>

and

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

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

Assessment activities are being conducted in 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/lookup/get?nawqa/>

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 1998 with four 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) and quarterly water quality and instantaneous or daily mean discharge for two surface-water stations (Buffalo River near Boxley and Buffalo River near St. Joe). The Buffalo River samples were collected in cooperation with the National Park Service and the Arkansas Geological Commission.

The Mississippi Embayment NAWQA study of eastern Arkansas and parts of five adjacent States began in 1994. Included in this report are water-quality and daily mean discharge data for two surface-water stations on the Cache River (Cache River near Egypt and Cache River near Cotton Plant).

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 61 stations in Arkansas in 1998. Locations of surface-water stations are shown in figure 2 (page 32).

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-one stations are included for 1998. The locations of these stations are shown in figure 3 (page 33).

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 Program, Illinois State Water Survey, 2204 Griffith Drive, Champaign, Illinois 61820 (Telephone: 217-333-2210).

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

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

Data are included for eight wells in Arkansas (fig. 4, page 341). 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 11).

Data Collection and Computation

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

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number derived from the township-range location of the well.

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

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

Data Presentation

Each well record consists of the following information:

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

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

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

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

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

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

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

EXPLANATION OF GROUND-WATER QUALITY RECORDS

Collection of the Data

In an attempt to detect long-term changes in ground-water quality, a network of 25 monitoring sites has been established. The monitoring sites for sampling ground water were selected from all major aquifers. Each year two or more sites are sampled from large aquifers such as those in the Quaternary Alluvium and Sparta Sand. Water samples are collected from all monitoring sites at 5-year intervals. Sampling schedules are staggered so that five or six sites are usually sampled each year. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years. In 1998, 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://www.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 on magnetic tape or 3-1/2 inch floppy disks. 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-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
*07048600	White River near Fayetteville	400	1964-94
*07049000	War Eagle Creek near Hindsville	263	1952-79
07049500	White River near Rogers	1,020	1952-63
*07050500	Kings River near Berryville	527	1939-75, 1993-95
**07055000	White River near Flippin	6,081	1928-80
*07055608	Crooked Creek at Yellville	406	1988-94
*07055646	Buffalo River near Boxley	57	1993-95
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
*07064000	Black River near Corning	1,749	1938-95
07068890	Fourche River above Pochahontas	229	1964-70
**07069000	Black River at Pochahontas	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 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
*07251000	Frog Bayou near Mountainburg	74.2	1936-61

WATER RESOURCES DATA FOR ARKANSAS, 1998

DISCONTINUED GAGING STATIONS--CONTINUED

Station Number	Station name	Drainage area (mi ²)	Period of record
*07251500	Frog Bayou at Rudy	216	1950-70

ARKANSAS RIVER BASIN--CONTINUED

*07252000	Mulberry River near Mulberry	373	1938-94
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
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
*07257006	Big Piney Creek at Hwy 164 near Dover	297	1950-95
*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, 1998

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DISCONTINUED GAGING STATIONS--CONTINUED

Station Number	Station name	Drainage area (mi ²)	Period of record
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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
07049695	White River above Busch	Chem., Temp.	1969, 1972-82

WATER RESOURCES DATA FOR ARKANSAS, 1998

DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
07050000	White River at Beaver	Chem.	1945-46, 1948-53, 1974-83
WHITE RIVER BASIN--CONTINUED			
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
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
07074000	Strawberry River near Poughkeepsie	Chem.	1949-60, 1971,1972.

WATER RESOURCES DATA FOR ARKANSAS, 1998

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DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
			1979
07074490	Black River at Jacksonport	Chem.	1964,
			1974-83
07074491	White River at Jacksonport	Chem.	1983-86
WHITE RIVER BASIN--CONTINUED			
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
07077400	Cache River near Cash	Chem.	1974-83
07077600	Cache River at Brasfield	Chem.	1974-83
07077750	Bayou DeView near Brasfield	Chem.	1956-57,
			1974-83
07077790	Cache River at 100 Yards below Dredging	Chem.	1977-80
07077794	Cache River at Mouth near Clarendon	Chem.	1977-80
07077800	White River at Clarendon	Chem., Temp.	1948-67,
			1970-86
07077950	Big Creek at Poplar Grove	Chem.	1972,
			1976-79
07077952	Big Creek near Poplar Grove	Chem.	1970-73
07077960	Big Creek near Watkins Corner	Chem.	1974-83
07078120	Little LaGrue Bayou near Stuttgart	Chem.	1954-55
07078285	White River at Arkansas Post Canal near Nady	Chem.	1972-83
ARKANSAS RIVER BASIN			
07188910	Butler Creek near Sulphur Springs	Chem.	1969-93
07195686	North Flint Creek near Springtown	Chem.	1995-96
07195800	Flint Creek at Springtown	Chem.	1975-79
			1996
07195850	Flint Creek North of Siloam Springs	Chem.	1972-81

WATER RESOURCES DATA FOR ARKANSAS, 1998

DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
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

ARKANSAS RIVER BASIN--CONTINUED

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
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

WATER RESOURCES DATA FOR ARKANSAS, 1998

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DISCONTINUED WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
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
RED RIVER BASIN--CONTINUED			
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
07367666	Big Bayou near Jerome	Chem.	1974-81
07367695	LaFourche Bayou near Wilmot	Chem.	1973-74

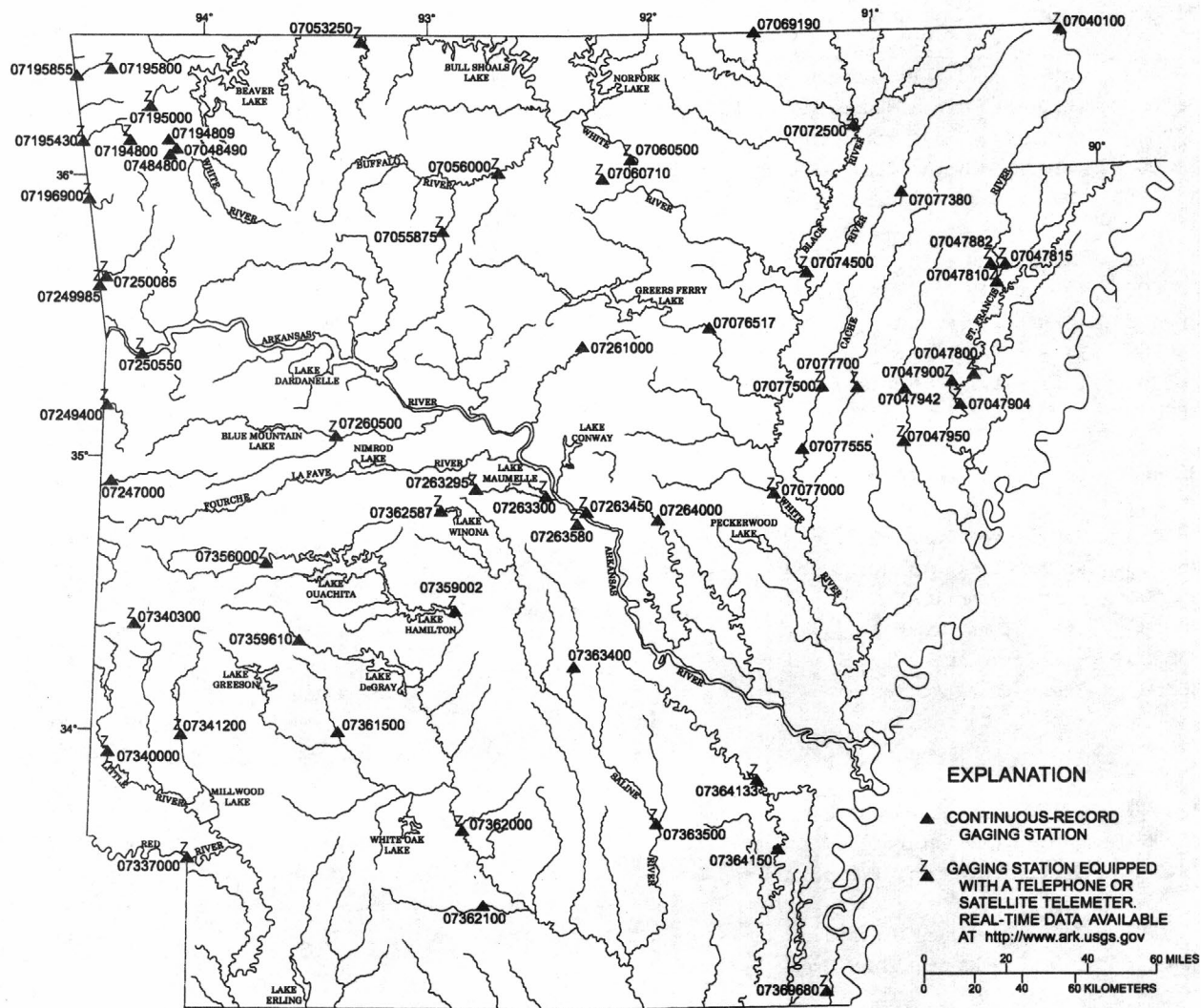


Figure 2.--Locations of continuous-record gaging stations in Arkansas.

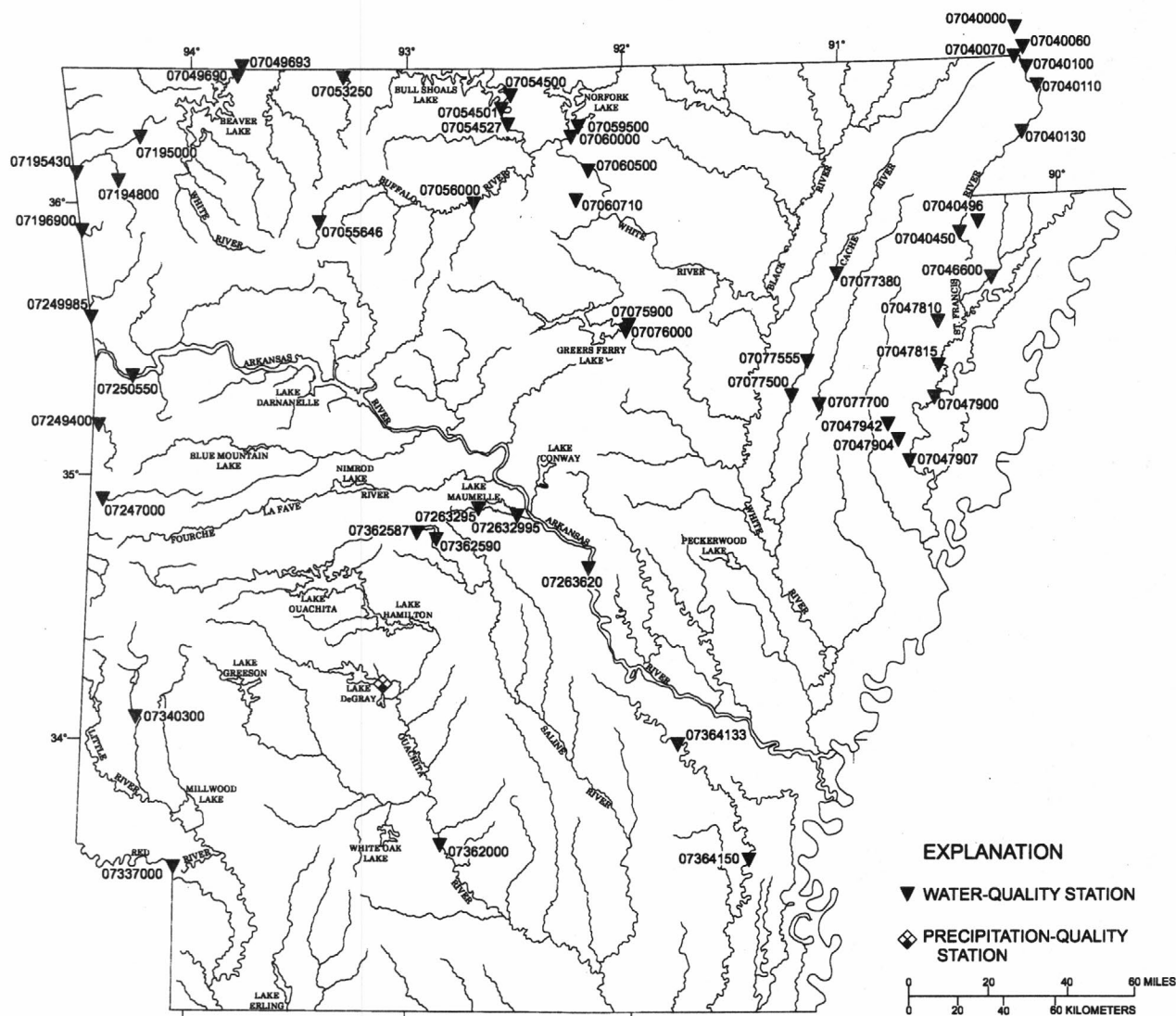


Figure 3.--Locations of water-quality stations in Arkansas.

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 fair. Some regulation by Wappapello Lake, 36.3 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft.

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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	183	248	2160	933	3250	6210	1530	2230	2820	1120	1120
2	199	255	490	2060	925	3250	6010	2490	2110	2420	1900	1030
3	196	316	622	1610	840	3050	5830	2890	1960	2060	2330	976
4	196	324	630	1490	729	2790	5640	2920	1730	1810	2400	887
5	194	308	628	1470	693	2500	5410	3060	1620	1550	2560	730
6	194	327	630	1850	687	2300	5070	2980	1510	1390	2440	554
7	194	495	631	2770	632	2230	4690	3080	1470	1210	2180	501
8	196	574	633	3930	583	2310	4250	2510	1320	960	1860	445
9	195	584	634	4580	574	2360	3730	2250	1200	757	1770	283
10	197	584	633	5170	573	2890	3140	2230	1160	699	1720	e230
11	197	501	632	5430	577	3460	2310	2580	1160	576	2060	e190
12	195	454	630	5380	585	3840	1700	3060	1180	505	2250	e170
13	202	456	628	5090	805	3870	1270	3170	1320	489	2500	e150
14	206	459	627	4690	753	3670	1100	3330	1380	480	2900	e130
15	200	457	635	4310	705	3520	1130	3360	1380	475	3010	e120
16	199	455	814	3850	896	3470	1360	3340	1360	471	3000	e110
17	198	456	891	3200	1150	3490	2380	3320	1280	469	2990	e105
18	198	459	723	2920	1890	4490	3370	3280	1170	464	2960	e100
19	198	459	440	2840	2870	4820	3610	3250	1080	460	2910	e100
20	198	458	353	2710	3840	5900	3620	3210	1250	455	2770	150
21	129	419	343	2250	4080	6140	3370	3170	1670	450	2600	287
22	e40	390	352	1840	4070	6920	3030	3140	2360	430	2450	299
23	e28	384	891	1580	3970	7570	2610	3110	2820	394	2270	299
24	e40	384	1780	1280	3700	7730	2150	3080	3320	388	2110	299
25	e61	308	2230	1160	3400	7680	1760	2780	3550	396	2010	299
26	90	249	2270	1130	3240	7420	1390	2100	3570	366	1920	282
27	267	237	2270	998	3060	7020	1250	1700	3530	1170	1750	255
28	328	236	2260	949	3150	6610	1520	1880	3420	1540	1610	242
29	261	236	2240	939	---	6390	1130	1970	3260	656	1470	241
30	198	240	2220	931	---	6400	963	2200	3060	717	1300	240
31	186	---	2190	923	---	6400	---	2290	---	853	1200	---
TOTAL	5577	11647	31198	81490	49910	143740	91003	85260	59430	27880	68320	10824
MEAN	180	388	1006	2629	1783	4637	3033	2750	1981	899	2204	361
MAX	328	584	2270	5430	4080	7730	6210	3360	3570	2820	3010	1120
MIN	28	183	248	923	573	2230	963	1530	1080	366	1120	100
AC-FT	11060	23100	61880	161600	99000	285100	180500	169100	117900	55300	135500	21470

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 - 1998, BY WATER YEAR (WY)

MEAN	359	628	1213	2557	1701	2328	2627	2017	1472	547	420	266
MAX	1115	1587	3751	7905	4399	5506	4728	7016	8572	1780	2204	669
(WY)	1937	1937	1928	1937	1938	1935	1933	1933	1928	1928	1998	1934
MIN	125	220	243	272	319	328	326	311	148	112	101	119
(WY)	1941	1941	1939	1931	1934	1941	1941	1930	1936	1941	1936	1941

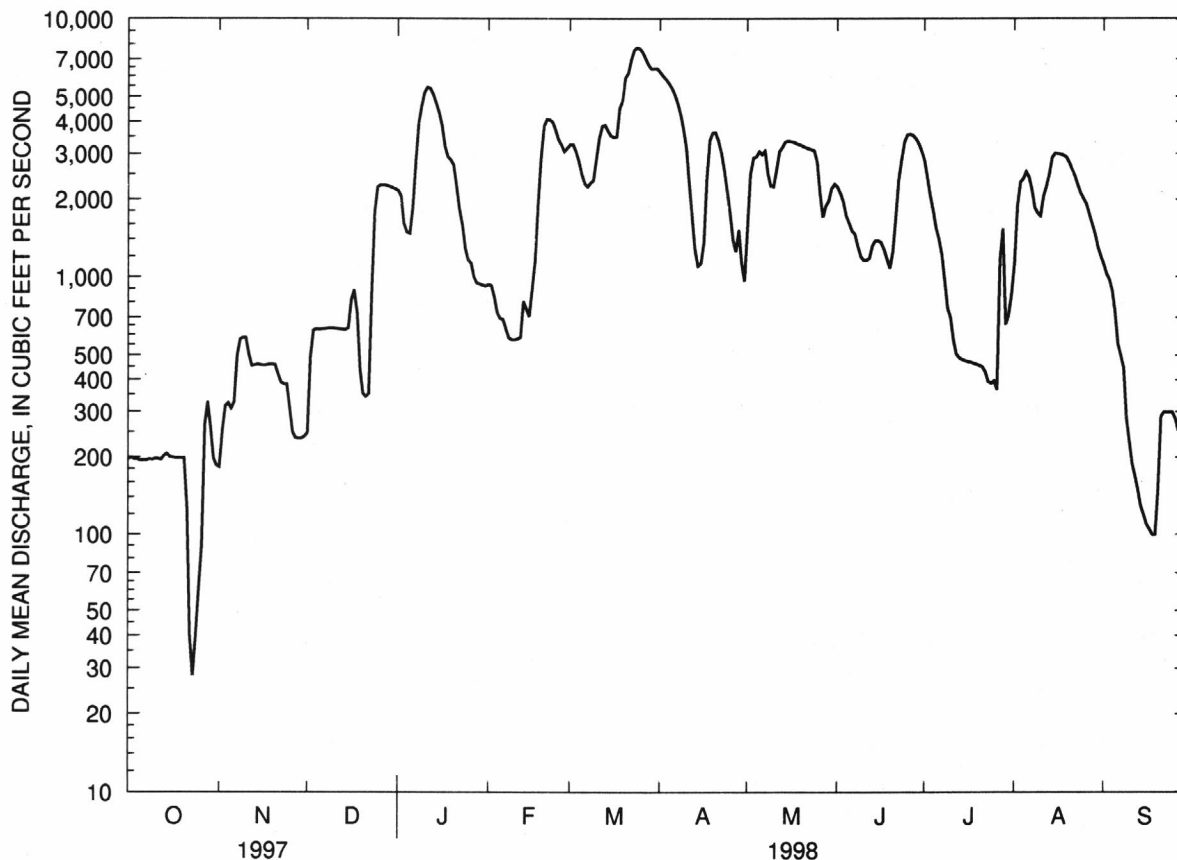
SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1928-41, 1998

ANNUAL TOTAL	666279		
ANNUAL MEAN	1825		1343
HIGHEST ANNUAL MEAN			2240
LOWEST ANNUAL MEAN			437
HIGHEST DAILY MEAN	7730	Mar 24	36000
LOWEST DAILY MEAN	28	Oct 23	8.0
ANNUAL SEVEN-DAY MINIMUM	84	Oct 20	16
INSTANTANEOUS PEAK FLOW	7750	Mar 24	49900
INSTANTANEOUS PEAK STAGE	17.23	Mar 24	26.71
INSTANTANEOUS LOW FLOW			5.0
ANNUAL RUNOFF (AC-FT)	1322000		973000
10 PERCENT EXCEEDS	3840		3170
50 PERCENT EXCEEDS	1360		534
90 PERCENT EXCEEDS	200		148

eEstimated



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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)
OCT									
07...	1140	80513	82913	195	-.50	215	7.2	757	22.0
NOV									
03...	1510	80513	82913	306	.25	216	7.3	752	10.5
DEC									
01...	1335	80513	82913	245	-.76	365	7.8	754	8.0
JAN									
06...	0715	80513	82913	1710	5.48	243	7.0	751	6.0
FEB									
09...	1350	80513	82913	574	1.35	210	6.8	754	4.5
MAR									
03...	1355	80513	82913	3080	8.76	162	6.9	751	7.0
APR									
06...	1505	80513	82913	5040	12.78	301	7.8	749	12.0
MAY									
04...	1520	80513	82913	2890	8.38	147	7.2	748	17.0
JUN									
01...	1515	80513	82913	2150	6.84	284	7.2	748	25.0
JUL									
06...	1300	80513	82913	1370	4.23	145	6.8	753	28.0
AUG									
10...	1300	80513	82913	1780	5.20	189	7.7	754	24.5
SEP									
07...	1205	80513	82913	491	.66	175	7.2	753	24.0

DATE	TRANS- PAR- ENCY (SECCHI DISK) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SEDI- MENT, DIS- 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)
OCT									
07...	.15	9.8	113	47	25	100	--	--	--
NOV									
03...	.18	10.0	91	48	40	92	92	100	--
DEC									
01...	.12	10.3	88	45	30	89	89	89	100
JAN									
06...	.09	10.2	83	57	263	88	88	92	100
FEB									
09...	.12	10.2	80	25	39	98	98	100	--
MAR									
03...	.12	12.2	102	64	532	86	89	97	100
APR									
06...	.09	11.2	106	81	1100	77	87	97	100
MAY									
04...	.09	10.8	114	102	796	74	87	95	100
JUN									
01...	.09	7.4	91	88	511	96	96	98	100
JUL									
06...	.15	9.2	119	88	326	99	99	100	--
AUG									
10...	.06	7.8	95	99	476	88	95	100	--
SEP									
07...	.15	6.8	82	71	94	93	93	100	--

ST. FRANCIS RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER
	THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN
	.062 MM (80158)	.125 MM (80159)	.250 MM (80160)	.500 MM (80161)	1.00 MM (80162)	2.00 MM (80169)	4.00 MM (80170)	8.00 MM (80171)
OCT								
07...	13	14	63	97	100	--	--	--
NOV								
03...	21	23	61	98	100	--	--	--
DEC								
01...	15	16	68	93	100	--	--	--
JAN								
06...	3	3	16	70	91	91	93	100
FEB								
09...	2	4	77	98	100	--	--	--
MAR								
03...	4	4	20	39	59	62	67	100
APR								
06...	2	35	98	100	--	--	--	--
MAY								
04...	2	3	17	85	100	--	--	--
JUN								
01...	2	3	21	82	98	98	100	--
JUL								
06...	36	66	97	98	100	--	--	--
AUG								
10...	4	39	97	98	100	--	--	--
SEP								
07...	56	75	98	100	--	--	--	--

ST. FRANCIS RIVER BASIN

07040060 St. FRANCIS RIVER NEAR GLENNONVILLE, MISSOURI

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)
NOV 04...	0815	80513	82913	344	1.32	10.0	.18	49	46	83	83
DEC 01...	1245	80513	82913	599	1.91	8.0	.12	68	110	88	88
JAN 05...	1340	80513	82913	1690	4.05	6.5	.06	78	356	84	88
FEB 09...	1240	80513	82913	814	2.44	5.0	.12	32	70	97	98
MAR 04...	1020	80513	82913	3400	6.20	7.0	.09	96	881	70	80
APR 07...	1005	80513	82913	5220	9.27	12.0	.09	216	3040	55	68
MAY 05...	0900	80513	82913	3430	6.67	17.5	.12	156	1440	71	79
JUN 01...	1400	80513	82913	2640	5.19	25.5	.09	108	770	95	95

DATE	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)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)
NOV 04...	100	--	1	1	35	96	100	--	--	--
DEC 01...	92	100	2	2	34	94	94	100	--	--
JAN 05...	96	100	1	1	12	66	94	--	99	100
FEB 09...	100	--	19	58	90	100	--	--	--	--
MAR 04...	95	100	23	43	95	100	--	--	--	--
APR 07...	98	100	1	18	62	100	--	--	--	--
MAY 05...	92	100	1	2	35	91	100	--	--	--
JUN 01...	97	100	27	60	98	99	100	--	--	--

ST. FRANCIS RIVER BASIN

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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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (T/DAY) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
NOV 03...	1235	80513	82913	276	21.93	10.0	.15	46	34	97
DEC 01...	1155	80513	82913	471	22.20	8.0	.18	74	94	82
JAN 05...	1300	80513	82913	1480	23.05	7.0	.09	115	460	62
FEB 09...	1205	80513	82913	726	21.70	5.0	.09	35	69	93
MAR 03...	1250	80513	82913	3360	26.12	7.0	.09	119	1080	74
APR 06...	1330	80513	82913	5690	30.04	12.5	.06	136	2090	78
MAY 04...	1400	80513	82913	3310	27.19	17.0	.06	154	1380	92
JUN 01...	1315	80513	82913	2390	24.41	25.5	.09	130	839	84

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 03...	97	100	--	1	1	33	93	100	--
DEC 01...	87	96	100	1	1	40	94	94	100
JAN 05...	69	92	100	3	3	33	94	98	100
FEB 09...	93	95	100	1	1	45	95	100	--
MAR 03...	88	95	100	1	1	56	96	100	--
APR 06...	95	98	100	1	2	70	99	100	--
MAY 04...	97	97	100	1	2	73	99	100	--
JUN 01...	85	96	100	1	3	87	98	100	--

ST. FRANCIS RIVER BASIN

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 except estimated daily discharges which are fair. Some regulation by Wappapello Lake (Missouri), 80 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	289	437	2250	1170	3600	7610	3400	2510	3310	7280	1200
2	297	282	504	2220	1170	3620	7430	2830	2420	3020	4720	1110
3	293	334	628	2000	1140	3550	7180	4280	2300	2600	3540	1020
4	287	388	805	1700	1060	3340	6910	4290	2170	2250	3200	973
5	e286	406	732	1630	957	3100	6580	3720	3840	1980	3020	873
6	e286	472	677	2320	933	3590	6180	3730	4250	1740	5700	732
7	e285	623	661	4870	917	3340	5790	6760	2520	1570	6730	608
8	e285	627	660	6640	854	3740	5300	7600	1950	1370	6230	569
9	e285	629	664	7480	809	4120	4750	5310	2000	1110	5830	515
10	e290	622	707	6690	798	3300	4150	3830	2540	984	3660	426
11	e300	604	737	6210	830	3490	3450	3230	1760	1010	2750	356
12	e295	536	688	6090	884	3940	2670	3390	1900	899	2720	335
13	e295	533	667	5970	864	4240	2150	3650	1640	789	2990	317
14	e310	815	657	5690	1020	4250	2470	3720	1880	722	3050	299
15	e305	710	649	5890	923	4070	1830	3810	2020	696	3260	303
16	e300	571	672	5810	1750	4070	2190	3820	1780	682	3290	304
17	e295	528	826	4820	4680	4730	2710	3770	1680	683	3240	296
18	e295	517	864	3880	6070	8980	3280	3720	1540	680	3180	292
19	e290	514	681	3510	4560	10100	3880	3660	1470	665	3140	282
20	e285	511	491	3350	4070	11100	4050	3610	3500	637	3060	278
21	e270	508	425	3060	4410	10900	4070	3550	6750	615	2850	332
22	245	473	438	2640	4520	9540	3820	3500	6260	630	2660	434
23	198	448	567	2460	4470	9030	3440	3500	4750	778	2490	450
24	185	440	1650	2140	4320	8950	3000	3450	3980	1710	2300	441
25	186	436	3280	1760	4030	8980	2570	3350	3890	2900	2130	428
26	218	388	2620	1620	3770	8890	2180	3000	3950	2150	2010	417
27	293	334	2350	1460	3930	8680	2100	2390	3920	4420	1900	391
28	357	321	2260	1260	3750	8390	5520	2130	3840	9910	1740	361
29	395	320	2220	1230	---	8030	6070	2280	3710	9700	1620	338
30	344	327	2220	1210	---	7730	4700	2320	3540	9530	1450	328
31	299	---	2280	1180	---	7580	---	2480	---	10100	1310	---
TOTAL	8854	14506	33717	109040	68659	190970	128030	114080	90260	79840	103050	15008
MEAN	286	484	1088	3517	2452	6160	4268	3680	3009	2575	3324	500
MAX	395	815	3280	7480	6070	11100	7610	7600	6750	10100	7280	1200
MIN	185	282	425	1180	798	3100	1830	2130	1470	615	1310	278
AC-FT	17560	28770	66880	216300	136200	378800	253900	226300	179000	158400	204400	29770

ST. FRANCIS RIVER BASIN

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

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

MEAN	553	1101	1854	3060	3121	3871	4290	3446	1976	1128	616	515
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

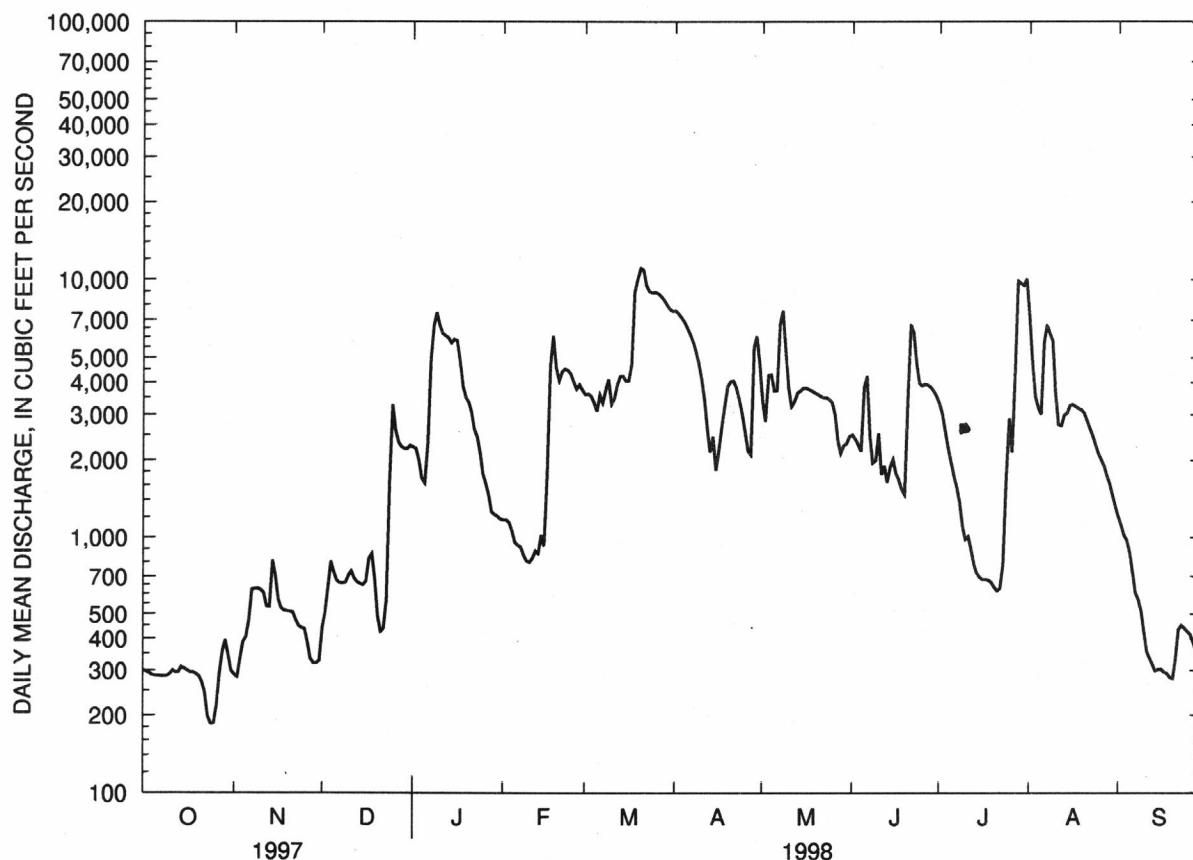
FOR 1998 WATER YEAR

WATER YEARS 1931-77, 1997-98

ANNUAL TOTAL	956014		
ANNUAL MEAN	2619		2107
HIGHEST ANNUAL MEAN			4886
LOWEST ANNUAL MEAN			548
HIGHEST DAILY MEAN	11100	Mar 20	37900
LOWEST DAILY MEAN	185	Oct 24	55
ANNUAL SEVEN-DAY MINIMUM	227	Oct 20	63
INSTANTANEOUS PEAK FLOW	11600	Mar 20	39200
INSTANTANEOUS PEAK STAGE	22.84	Mar 20	28.20
INSTANTANEOUS LOW FLOW	182	Oct 24,25	55
ANNUAL RUNOFF (AC-FT)	1896000		1527000
10 PERCENT EXCEEDS	6080		5660
50 PERCENT EXCEEDS	2140		902
90 PERCENT EXCEEDS	308		183

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

^eEstimated



ST. FRANCIS RIVER BASIN

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

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY	AGENCY	DIS-			PH	BARO-				OXYGEN,
		COL-	ANA-	CHARGE,		SPE-	WATER	METRIC		TRANS-		DIS-
		LECTING	LYZING	INST.		CIFIC	WHOLE	PRES-		PAR-		SOLVED
		SAMPLE	SAMPLE	CUBIC		CON-	FIELD	SURE	TEMPER-	ENCY	OXYGEN,	(PER-
		(CODE	(CODE	FEET	GAGE	DUCT-	(STAND-	(MM	ATURE	(SECCHI	DIS-	CENT
		NUMBER)	NUMBER)	PER	HEIGHT	ANCE	ARD	OF	WATER	DISK)	SOLVED	SATUR-
		(00027)	(00028)	SECOND	(FEET)	(US/CM)	UNITS)	HG)	(DEG C)	(M)	(MG/L)	ATION)
		(00027)	(00028)	(00061)	(00065)	(00095)	(00400)	(00025)	(00010)	(00078)	(00300)	(00301)
OCT												
07...	1345	80513	82913	285	5.04	233	7.2	757	22.0	.15	8.7	100
NOV												
03...	1330	80513	82913	342	5.49	240	7.1	752	10.0	.12	10.5	94
DEC												
02...	0800	80513	82913	524	6.53	335	7.8	757	6.0	.06	11.2	91
JAN												
06...	0840	80513	82913	1770	11.70	66	6.7	752	7.0	.06	10.4	87
FEB												
10...	0730	80513	82913	778	7.73	218	6.8	753	4.0	.09	11.8	91
MAR												
03...	1155	80513	82913	3640	15.72	169	6.8	754	7.0	.09	11.4	95
APR												
06...	1245	80513	82913	6380	19.91	293	7.9	752	12.0	.09	12.8	120
MAY												
04...	1320	80513	82913	4080	16.86	138	7.4	749	17.0	.09	8.1	85
JUN												
02...	0745	80513	82913	2450	13.14	301	7.4	746	25.0	.12	6.8	84
JUL												
06...	1135	80513	82913	1700	11.04	202	6.5	754	30.0	.12	11.8	158
AUG												
10...	1145	80513	82913	3170	15.72	213	7.8	754	26.0	.06	7.8	97
SEP												
07...	1055	80513	82913	614	7.16	209	7.3	753	25.0	.12	7.8	96

DATE	SEDI- MENT, SUS- PENDED (MG/L) (80154)	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)
OCT											
07...	46	35	97	97	100	--	21	43	95	100	--
NOV											
03...	52	48	86	86	100	--	25	45	96	99	100
DEC											
02...	344	487	98	98	98	100	38	65	93	100	--
JAN											
06...	106	507	91	95	98	100	20	46	97	98	100
FEB											
10...	44	92	94	94	95	100	24	60	99	100	--
MAR											
03...	106	1040	81	89	98	100	19	65	98	100	--
APR											
06...	184	3170	61	71	96	100	17	46	98	100	--
MAY											
04...	--	--	--	--	--	--	35	53	97	100	--
JUN											
02...	117	774	96	98	100	--	42	71	99	100	--
JUL											
06...	187	858	86	90	97	100	47	68	95	97	100
AUG											
10...	203	1740	96	97	100	--	6	49	97	99	100
SEP											
07...	75	124	96	96	100	--	28	52	95	99	100

ST. FRANCIS RIVER BASIN

43

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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	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)
NOV												
03...	1145	80513	82913	254	5.67	10.0	.15	--	55	38	86	86
DEC												
01...	1100	80513	82913	311	7.00	8.0	.18	--	51	43	94	94
JAN												
05...	1205	80513	82913	1600	10.98	7.0	.09	--	77	333	92	92
FEB												
09...	1115	80513	82913	787	8.24	5.0	.12	--	37	79	99	99
MAR												
03...	1050	80513	82913	3550	13.99	6.5	.06	--	121	1160	75	83
APR												
06...	1120	80513	82913	5700	18.38	12.0	.06	67	206	3170	88	91
06...	1150	80513	82913	691	--	12.0	.06	68	191	356	80	82
MAY												
04...	1215	80513	82913	3920	15.96	17.0	.09	67	267	2830	79	84
04...	1245	80513	82913	224	--	17.0	.06	68	295	178	89	93
JUN												
01...	1215	80513	82913	2500	12.81	25.5	.15	--	145	979	91	96

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 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)
NOV											
03...	86	100	--	5	6	37	79	100	--	--	--
DEC											
01...	100	--	--	1	1	41	87	100	--	--	--
JAN											
05...	95	100	--	0	0	12	70	97	100	--	--
FEB											
09...	100	--	--	1	1	29	86	97	100	--	--
MAR											
03...	97	100	--	1	1	54	88	97	--	99	100
APR											
06...	100	--	--	0	1	46	89	98	100	--	--
06...	91	94	100	90	92	95	100	--	--	--	--
MAY											
04...	99	100	--	1	2	71	98	100	--	--	--
04...	100	--	--	93	93	94	94	95	100	--	--
JUN											
01...	100	--	--	1	2	55	99	100	--	--	--

ST. FRANCIS RIVER BASIN

07040130 ST. FRANCIS RIVER AT HOLLY ISLAND

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

DRAINAGE AREA.--1,788 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)
NOV												
04...	1030	80513	82913	290	13.66	10.5	.12	--	102	80	66	85
DEC												
02...	0850	80513	82913	388	14.26	6.0	.12	--	52	54	86	96
JAN												
06...	1015	80513	82913	1470	16.13	7.0	.06	67	79	314	76	76
06...	1045	80513	82913	767	--	7.0	.09	68	29	60	94	94
FEB												
10...	0830	80513	82913	825	15.07	4.5	.12	--	76	169	66	78
MAR												
04...	1130	80513	82913	1680	17.02	7.0	.09	67	102	463	93	94
04...	1200	80513	82913	1780	--	7.5	.15	68	50	240	96	96
APR												
07...	1210	80513	82913	--	--	12.0	.09	67	56	--	96	96
07...	1245	80513	82913	--	--	12.0	.12	68	56	--	100	--
MAY												
05...	1055	80513	82913	--	--	17.0	.09	67	150	--	100	--
05...	1125	80513	82913	--	--	17.5	.12	68	165	--	100	--
JUN												
02...	0940	80513	82913	--	--	25.0	.09	--	146	--	94	94

DATE	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)	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)
NOV											
04...	93	100	17	42	94	94	100	--	--	--	--
DEC											
02...	96	100	37	63	92	100	--	--	--	--	--
JAN											
06...	84	100	6	17	92	98	100	--	--	--	--
06...	100	--	9	14	52	94	100	--	--	--	--
FEB											
10...	94	100	8	9	58	100	--	--	--	--	--
MAR											
04...	96	100	3	17	95	99	100	--	--	--	--
04...	100	--	11	17	55	89	96	100	--	--	--
APR											
07...	98	100	10	27	73	91	94	--	97	98	100
07...	--	--	2	7	40	67	81	--	88	91	100
MAY											
05...	--	--	35	94	99	100	--	--	--	--	--
05...	--	--	22	40	90	96	100	--	--	--	--
JUN											
02...	97	100	60	89	98	100	--	--	--	--	--

ST. FRANCIS RIVER BASIN

45

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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	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)
OCT										
08...	0715	80513	82913	289	1.68	268	7.2	757	22.0	.12
NOV										
04...	1215	80513	82913	358	2.17	307	7.4	760	10.5	.09
DEC										
02...	1015	80513	82913	430	2.44	387	7.8	760	8.5	.09
FEB										
10...	1150	80513	82913	1100	--	243	6.8	755	4.5	.09
10...	1255	80513	82913	290	--	220	6.8	755	4.5	.15
MAR										
05...	1045	80513	82913	1740	7.20	178	6.7	755	6.5	.09
05...	1120	80513	82913	2920	--	154	6.8	755	6.5	.12
APR										
07...	1530	80513	82913	2400	--	294	7.3	746	12.0	.09
07...	1620	80513	82913	6560	--	289	7.2	746	12.0	.12
MAY										
06...	0900	80513	82913	2000	--	127	7.2	750	17.0	.09
06...	0950	80513	82913	2560	--	135	7.3	750	17.0	.12
JUN										
02...	1210	80513	82913	1740	--	290	7.3	750	25.0	.12
JUL										
07...	0805	80513	82913	1630	13.98	223	6.9	754	26.0	.09
07...	0850	80513	82913	1050	--	188	6.9	754	26.5	.06
AUG										
11...	0815	80513	82913	2740	--	221	7.2	754	25.0	.06
11...	0950	80513	82913	8760	--	210	7.2	754	25.0	.12
SEP										
09...	1545	80513	82913	1020	--	275	7.3	760	22.5	.09

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)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
OCT										
08...	8.4	97	--	66	51	100	--	--	--	--
NOV										
04...	10.1	91	--	59	57	99	99	100	--	--
DEC										
02...	10.8	93	--	49	57	95	95	100	--	--
FEB										
10...	10.4	81	67	85	252	71	75	92	100	--
10...	11.2	87	68	67	52	77	77	100	--	--
MAR										
05...	10.4	85	67	47	221	94	94	97	100	--
05...	9.8	80	68	47	371	90	90	93	97	100
APR										
07...	11.2	106	67	53	343	95	96	98	100	--
07...	10.8	102	68	58	1030	92	92	95	100	--
MAY										
06...	10.5	110	67	87	470	95	95	97	100	--
06...	9.5	100	68	97	670	92	92	94	100	--
JUN										
02...	7.2	89	--	107	503	95	95	97	100	--
JUL										
07...	6.8	85	67	100	440	89	97	98	100	--
07...	7.4	93	68	81	230	87	89	92	100	--
AUG										
11...	7.8	96	67	349	2580	96	98	99	100	--
11...	7.0	86	68	58	1370	90	93	96	96	100
SEP										
09...	7.9	92	--	64	176	86	91	94	100	--

ST. FRANCIS RIVER BASIN

07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. FALL DIAM. % FINER THAN 8.00 MM (80171)
OCT									
08...	73	78	91	100	--	--	--	--	--
NOV									
04...	75	80	83	96	100	--	--	--	--
DEC									
02...	3	6	44	93	100	--	--	--	--
FEB									
10...	9	12	34	60	70	--	73	81	100
10...	4	8	55	95	100	--	--	--	--
MAR									
05...	6	9	53	91	96	100	--	--	--
05...	4	34	84	93	96	--	96	97	100
APR									
07...	9	23	64	95	100	--	--	--	--
07...	11	19	56	80	85	--	86	88	100
MAY									
06...	4	5	52	94	100	--	--	--	--
06...	4	10	56	96	99	--	99	100	--
JUN									
02...	18	28	65	90	97	--	97	100	--
JUL									
07...	27	34	63	85	90	--	92	93	100
07...	17	49	87	95	97	--	97	100	--
AUG									
11...	8	17	71	95	99	100	--	--	--
11...	10	21	78	96	100	--	--	--	--
SEP									
09...	16	29	66	92	98	100	--	--	--

ST. FRANCIS RIVER BASIN

47

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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)
OCT									
08...	0935	80513	82913	345	2.05	365	7.4	760	22.0
NOV									
04...	1400	80513	82913	409	2.23	457	7.1	760	10.5
DEC									
02...	1215	80513	82913	548	2.44	373	7.5	760	8.0
JAN									
06...	1210	80513	82913	1030	2.68	386	6.8	752	7.0
FEB									
10...	1045	80513	82913	1020	2.64	405	6.8	755	4.5
MAR									
04...	1405	80513	82913	2570	3.38	213	6.7	754	8.0
APR									
07...	1415	80513	82913	2070	3.05	291	7.4	750	12.5
MAY									
05...	1250	80513	82913	13600	10.61	117	7.3	754	17.5
JUN									
02...	1110	80513	82913	1990	3.08	307	7.2	750	26.0
JUL									
06...	1635	80513	82913	1410	2.75	407	7.2	754	30.0
AUG									
11...	1230	80513	82913	12000	10.21	228	7.5	754	25.5
SEP									
07...	1505	80513	82913	886	2.45	398	7.8	753	27.0

DATE	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	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)
OCT									
08...	.12	7.8	90	83	77	70	70	100	--
NOV									
04...	.15	9.5	85	57	63	95	100	--	--
DEC									
02...	.15	9.2	78	66	98	86	86	86	100
JAN									
06...	.24	10.1	84	94	261	99	99	100	--
FEB									
10...	.27	10.5	82	58	160	96	96	100	--
MAR									
04...	.12	11.2	96	176	1220	98	98	99	100
APR									
07...	.18	11.8	113	131	732	100	--	--	--
MAY									
05...	.09	11.1	117	234	8590	87	90	98	100
JUN									
02...	.27	7.4	93	110	591	99	99	100	--
JUL									
06...	.15	10.9	146	58	221	100	--	--	--
AUG									
11...	.09	7.8	96	43	1390	92	94	96	100
SEP									
07...	.12	7.6	97	50	120	95	95	100	--

ST. FRANCIS RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.	BED MAT. FALL DIAM.
	% FINER THAN .062 MM (80158)	% FINER THAN .125 MM (80159)	% FINER THAN .250 MM (80160)	% FINER THAN .500 MM (80161)	% FINER THAN 1.00 MM (80162)	% FINER THAN 2.00 MM (80163)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)
OCT								
08...	37	68	92	94	100	--	--	--
NOV								
04...	39	64	85	93	100	--	--	--
DEC								
02...	43	71	90	93	96	--	96	100
JAN								
06...	45	70	89	93	100	--	--	--
FEB								
10...	3	27	84	93	98	100	--	--
MAR								
04...	9	23	80	94	99	--	99	100
APR								
07...	17	59	98	100	--	--	--	--
MAY								
05...	4	7	56	96	100	--	--	--
JUN								
02...	16	51	99	100	--	--	--	--
JUL								
06...	14	48	98	98	100	--	--	--
AUG								
11...	5	21	76	97	100	--	--	--
SEP								
07...	13	36	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 Tyronza River, and at mile 102.0.

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

WATER-DISCHARGE RECORDS

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. Water-discharge records good. The greater part of St. Francis River floodflow is diverted through St. Francis River floodway at lock and dam about 4.0 mi northwest of Marked Tree, and is not included in records for this station. Diverted flow is included in records for St. Francis Bay at Riverfront and returns to the St. Francis River below Marianna (see station 07047900). Some regulation by Wappapello Lake (Missouri), 207 mi upstream since Apr. 1, 1941, capacity, 625,000 acre-ft. Stage-discharge relation affected by backwater during high stages of Mississippi River.

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	927	961	191	594	1490	3940	1910	5010	1730	1660	6340	1470
2	922	883	186	468	1470	2920	1870	5500	1640	1600	6620	1450
3	895	778	204	381	1480	2310	1840	5540	1620	1570	6690	1430
4	867	725	208	335	1500	2050	1850	4660	1570	1550	6670	1420
5	857	713	220	403	1480	2050	2030	3560	1540	1580	6510	1410
6	857	852	241	1200	1460	4280	2070	2820	1540	1590	6080	1390
7	855	1070	211	3500	1460	6790	1960	2640	1670	1570	5320	1370
8	827	1030	199	5790	1460	8100	1880	3770	1720	1530	4830	1360
9	734	919	195	6670	1460	8260	1830	4670	1690	1530	5700	1300
10	712	844	192	6290	1480	7480	1790	4870	1710	1590	6590	1090
11	734	807	188	4790	1850	5910	1740	5400	1710	1810	6630	972
12	743	797	183	2830	2440	4140	1720	5630	1690	2260	6590	934
13	757	984	178	1570	2550	2870	1710	5060	1660	2660	6390	956
14	777	2410	176	1070	2200	2270	1830	3980	1640	2540	5820	957
15	802	3240	174	1090	1900	2000	1970	3080	1620	2570	5090	939
16	858	2950	168	2560	3690	1890	1800	2640	1570	2600	4070	959
17	869	2190	167	3270	7050	1970	1940	2430	1530	2590	3170	953
18	930	1620	165	2720	8430	2120	1950	2270	1510	2320	2610	929
19	955	1390	164	2590	8450	2090	1900	2090	1510	1920	2410	904
20	941	1280	165	2260	7400	3010	1840	1910	1510	1660	2170	875
21	853	1210	174	1650	5420	3770	1840	1830	1520	1510	1900	849
22	551	1070	195	2000	3400	3650	1830	1770	2130	1430	1710	841
23	342	652	197	2870	2540	2970	1750	1740	2760	1410	1650	888
24	302	337	1110	2920	2300	2480	1650	1740	2950	1370	1610	893
25	301	247	2680	2490	2130	2320	1570	1700	2660	1050	1580	830
26	806	223	2530	2040	2140	2240	1550	1760	2220	1110	1580	821
27	1290	211	1910	1810	3610	2150	1560	2670	2010	1680	1560	982
28	1350	203	1420	1730	4490	2010	2370	3170	1930	2430	1540	1080
29	1090	197	1110	1690	---	1930	3800	2900	1840	4070	1530	1030
30	872	198	971	1630	---	1950	4400	2290	1750	5660	1500	1020
31	851	---	763	1550	---	1940	---	1910	---	6080	1480	---
TOTAL	25427	30991	16835	72761	86730	103860	59750	101010	54150	66500	123940	32302
MEAN	820	1033	543	2347	3098	3350	1992	3258	1805	2145	3998	1077
MAX	1350	3240	2680	6670	8450	8260	4400	5630	2950	6080	6690	1470
MIN	301	197	164	335	1460	1890	1550	1700	1510	1050	1480	821
AC-FT	50430	61470	33390	144300	172000	206000	118500	200400	107400	131900	245800	64070

ST. FRANCIS RIVER BASIN

07047800 ST. FRANCIS RIVER AT PARKIN--CONTINUED

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

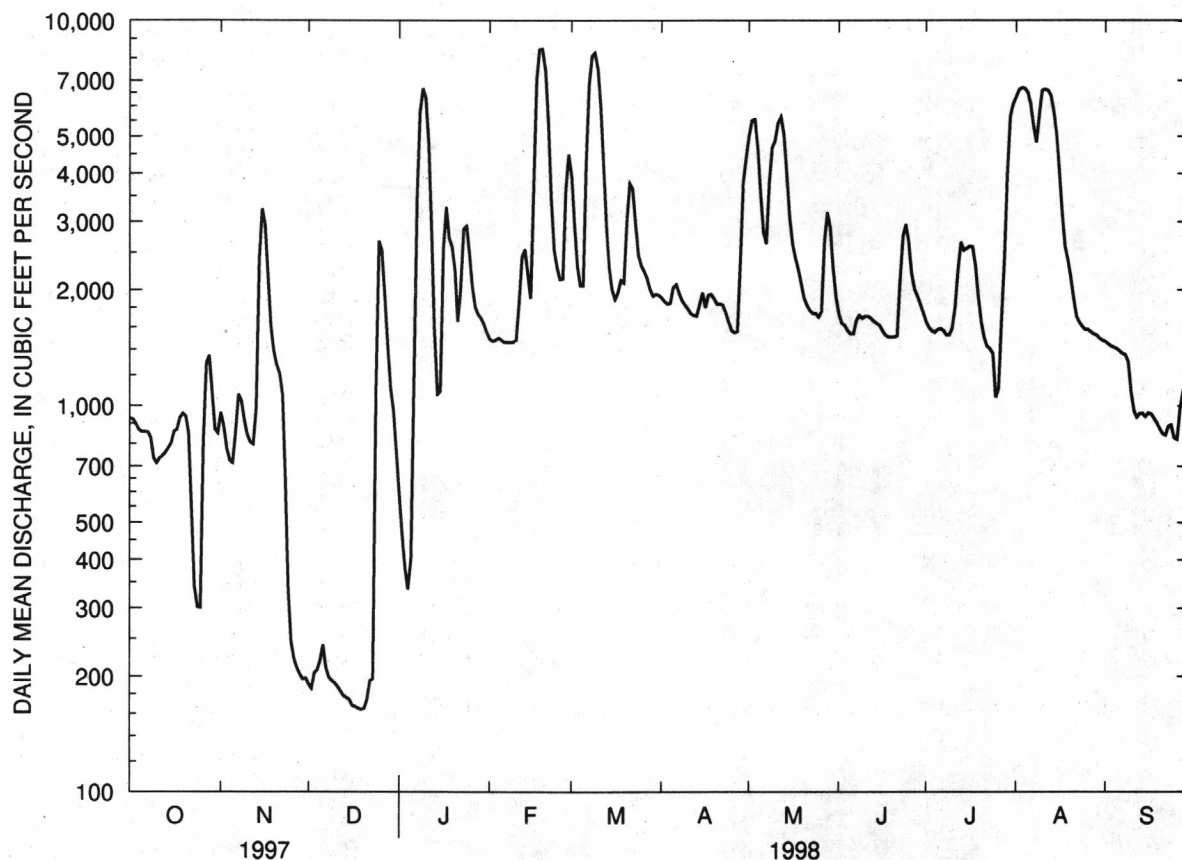
MEAN	1153	1698	2334	3368	4165	3995	4101	3543	2746	2097	1560	1291
MAX	3898	6532	6635	14140	18100	9627	14360	12900	8172	4038	3998	3920
(WY)	1946	1958	1932	1932	1932	1932	1933	1933	1933	1945	1998	1950
MIN	155	270	201	294	382	928	1080	1054	685	879	376	212
(WY)	1988	1955	1990	1964	1964	1954	1954	1977	1977	1941	1990	1994

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1931-94, 1998

ANNUAL TOTAL	774256		
ANNUAL MEAN	2121		2672
HIGHEST ANNUAL MEAN			6511 1933
LOWEST ANNUAL MEAN			1145 1977
HIGHEST DAILY MEAN	8450	Feb 19	21600 Jan 31 1932
LOWEST DAILY MEAN	164	Dec 19	42 Nov 8 1987
ANNUAL SEVEN-DAY MINIMUM	168	Dec 15	55 Nov 3 1987
INSTANTANEOUS PEAK FLOW	8610	Feb 18	25300 Jan 31 1930
INSTANTANEOUS PEAK STAGE	19.28	Feb 18	34.20 Feb 4 1937
INSTANTANEOUS LOW FLOW	163	Dec 18-20	163 Dec 18 1997
ANNUAL RUNOFF (AC-FT)	1536000		1936000
10 PERCENT EXCEEDS	4850		5570
50 PERCENT EXCEEDS	1680		1940
90 PERCENT EXCEEDS	442		510



ST. FRANCIS RIVER BASIN

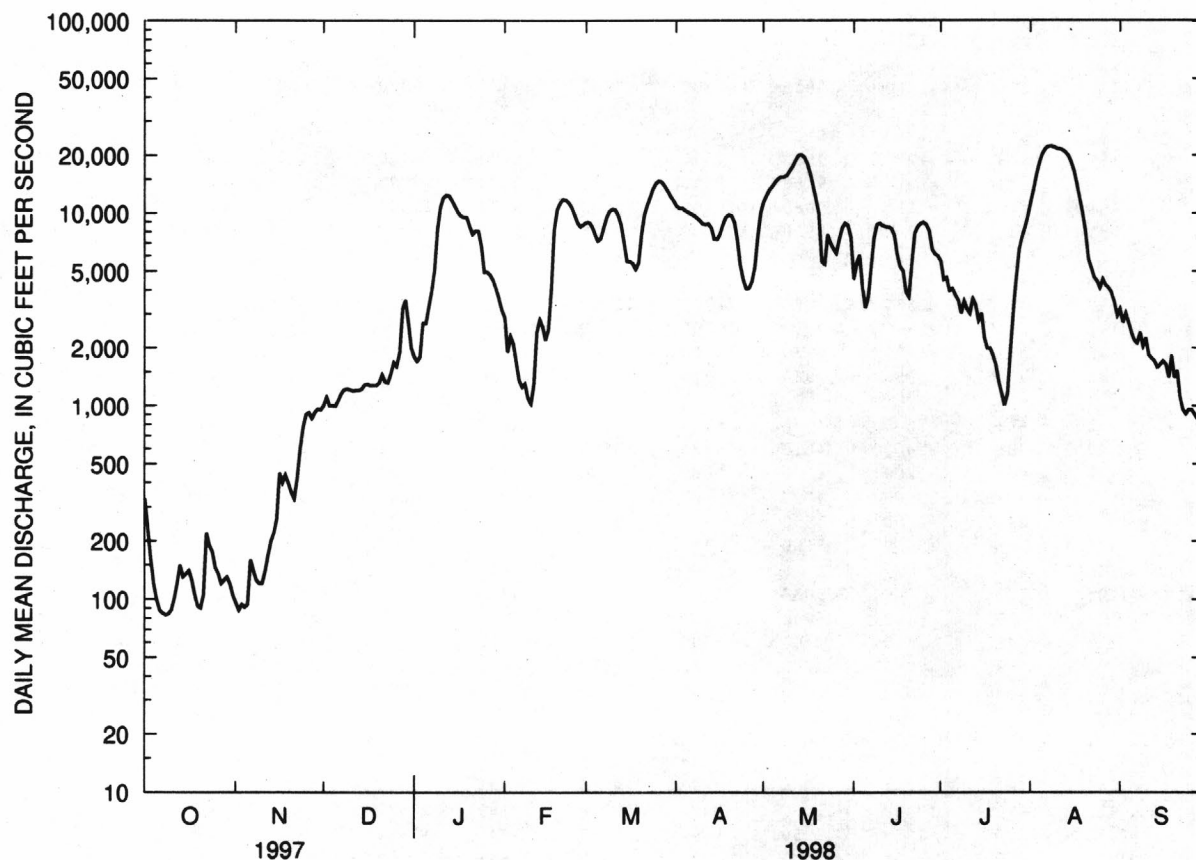
07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1935-70, 1991-98	
ANNUAL TOTAL	2271108		2109896			
ANNUAL MEAN	6222		5781		4476	
HIGHEST ANNUAL MEAN					10390	
LOWEST ANNUAL MEAN					258	
HIGHEST DAILY MEAN	38700	Mar 9	22300	Aug 8	48300	Jan 27 1937
LOWEST DAILY MEAN	83	Oct 8	83	Oct 8	^a .00	Oct 1 1934
ANNUAL SEVEN-DAY MINIMUM	90	Oct 5	90	Oct 5	.00	Oct 1 1934
INSTANTANEOUS PEAK FLOW			22600	Aug 8	^b 48300	Jan 26-28 1937
INSTANTANEOUS PEAK STAGE			24.49	Aug 8	^c 31.10	Jan 26-28 1937
ANNUAL RUNOFF (AC-FT)	4505000		4185000		3243000	
10 PERCENT EXCEEDS	16500		13200		12300	
50 PERCENT EXCEEDS	3340		4130		2030	
90 PERCENT EXCEEDS	160		160		.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



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, 894 mg/L, March 21; minimum daily mean, 27 mg/L, September 30.

SEDIMENT DISCHARGE: Maximum daily, 23,600 tons, March 21; minimum daily, 14 tons, November 2,4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	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										
04...	1535	80513	82913	89	4.76	371	7.4	760	10.5	.18
DEC										
02...	1330	80513	82913	1090	7.49	281	7.9	760	9.0	.09
02...	1405	80513	82913	36	--	--	--	--	9.0	.09
JAN										
06...	1430	80513	82913	2610	10.65	232	6.8	752	7.0	.06
06...	1455	80513	82913	516	--	--	--	--	7.0	.09
06...	1520	80513	82913	46	--	--	--	--	7.0	.06
FEB										
10...	1430	80513	82913	1020	7.32	401	6.3	755	4.5	.12
MAR										
05...	1335	80513	82913	5970	13.83	186	6.7	755	7.0	.09
05...	1405	80513	82913	1230	--	--	--	--	7.0	.09
05...	1425	80513	82913	4.6	--	--	--	--	7.0	.12
APR										
08...	0815	80513	82913	7400	16.08	235	7.2	748	12.0	.09
08...	0850	80513	82913	1920	--	--	--	--	12.0	.09
08...	0910	80513	82913	42	--	--	--	--	12.0	.06
MAY										
05...	1415	80513	82913	10400	20.57	220	7.2	750	17.5	.09
05...	1445	80513	82913	3310	--	--	--	--	17.5	.09
05...	1505	80513	82913	117	--	--	--	--	17.5	.09
05...	1520	80513	82913	450	--	--	--	--	17.5	.09
JUN										
02...	1335	80513	82913	4680	12.50	289	7.4	750	25.0	.09
02...	1405	80513	82913	959	--	--	--	--	25.0	.09

ST. FRANCIS RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	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)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
NOV										
04...	9.4	85	--	55	13	82	88	100	--	--
DEC										
02...	10.5	91	67	123	362	92	92	96	100	--
02...	--	--	68	46	4.5	87	87	100	--	--
JAN										
06...	10.2	85	67	67	472	84	84	86	100	--
06...	--	--	68	77	107	89	89	96	100	--
06...	--	--	68	68	8.4	95	95	95	100	--
FEB										
10...	9.9	77	--	86	237	93	93	93	100	--
MAR										
05...	10.9	91	67	108	1740	85	85	92	98	100
05...	--	--	68	117	389	75	85	95	100	--
05...	--	--	68	278	3.5	83	84	95	100	--
APR										
08...	11.2	106	67	101	2020	86	90	96	100	--
08...	--	--	68	81	420	87	92	99	100	--
08...	--	--	68	191	22	98	98	99	100	--
MAY										
05...	10.8	115	67	152	4270	88	91	98	100	--
05...	--	--	68	117	1050	98	99	100	--	--
05...	--	--	68	114	36	99	99	100	--	--
05...	--	--	68	197	239	98	98	100	--	--
JUN										
02...	8.6	106	67	171	2160	60	80	100	--	--
02...	--	--	68	87	225	95	95	95	100	--

ST. FRANCIS RIVER BASIN

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

DATE	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)
NOV									
04...	2	4	71	97	100	--	--	--	--
DEC									
02...	2	2	32	82	96	100	--	--	--
02...	1	1	38	92	100	--	--	--	--
JAN									
06...	5	22	60	70	73	--	73	75	100
06...	0	0	35	93	100	--	--	--	--
06...	7	8	23	57	74	--	78	81	100
FEB									
10...	1	7	77	98	100	--	--	--	--
MAR									
05...	18	65	98	99	100	--	--	--	--
05...	16	65	98	99	100	--	--	--	--
05...	28	34	80	98	100	--	--	--	--
DATE	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)
APR									
08...	4	31	87	97	100	--	--	--	--
08...	0	1	47	97	100	--	--	--	--
08...	56	64	87	98	100	--	--	--	--
MAY									
05...	6	8	54	94	100	--	--	--	--
05...	1	1	16	86	98	--	99	100	--
05...	35	40	60	83	97	100	--	--	--
05...	50	53	70	90	98	100	--	--	--
JUN									
02...	4	31	98	100	--	--	--	--	--
02...	19	62	98	99	100	--	--	--	--

ST. FRANCIS RIVER BASIN

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
	DISCHARGE	CONCEN-	SEDIMENT	DISCHARGE	CONCEN-	SEDIMENT	DISCHARGE	CONCEN-	SEDIMENT
	(CFS)	TRATION	DISCHARGE	(CFS)	TRATION	DISCHARGE	(CFS)	TRATION	DISCHARGE
		(MG/L)	(TONS/DAY)		(MG/L)	(TONS/DAY)		(MG/L)	(TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	e330	51	46	e96	58	15	e1000	132	357
2	e230	56	35	e88	59	14	1110	132	396
3	e160	58	25	e94	59	15	e1000	122	329
4	e120	61	20	91	56	14	e1000	121	326
5	e100	67	18	e94	63	16	e990	119	318
6	e88	71	17	e160	73	31	e1060	108	308
7	e85	79	18	e140	75	28	e1150	106	329
8	83	93	21	e125	76	26	e1210	104	339
9	e84	94	21	e120	78	25	e1220	93	305
10	e88	92	22	e120	88	28	e1210	91	297
11	e100	92	25	e140	91	34	e1190	91	292
12	e120	89	29	e170	92	42	e1200	89	288
13	e150	89	36	e200	93	50	e1200	78	252
14	e130	86	30	e220	96	57	e1220	76	250
15	e135	86	31	e260	114	80	e1280	76	261
16	e140	82	31	e450	160	195	e1290	74	257
17	e125	82	28	e400	162	174	e1270	76	259
18	e105	78	22	e440	161	191	e1270	76	261
19	e92	79	20	e400	152	164	e1270	76	261
20	e90	79	19	e360	141	137	e1310	76	269
21	e105	74	21	e330	135	120	e1450	76	298
22	e220	74	44	e420	157	178	e1330	76	273
23	e190	68	35	e600	168	272	e1310	76	269
24	e175	68	32	e770	147	306	e1460	76	300
25	e145	62	24	e900	125	304	e1680	76	345
26	e135	60	22	e920	125	310	e1600	76	328
27	e120	54	17	e860	126	293	e1900	76	390
28	e125	55	18	e920	128	318	3200	317	2740
29	e130	56	20	e960	129	335	3560	419	4020
30	e120	57	18	e950	131	336	2700	285	2070
31	e105	58	16	---	---	---	e2000	227	1220
TOTAL	4125	---	781	11798	---	4108	45640	---	18207

e Estimated

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 1997 TO SEPTEMBER 1998

DAY	MEAN			MEAN			MEAN		
	DISCHARGE	CONCEN- TRATION	SEDIMENT DISCHARGE	DISCHARGE	CONCEN- TRATION	SEDIMENT DISCHARGE	DISCHARGE	CONCEN- TRATION	SEDIMENT DISCHARGE
	(CFS)	(MG/L)	(TONS/DAY)	(CFS)	(MG/L)	(TONS/DAY)	(CFS)	(MG/L)	(TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	e1800	201	979	2900	83	646	8940	130	3150
2	e1700	165	758	e1900	78	402	8970	127	3060
3	e1800	132	644	e2300	76	475	8520	118	2710
4	2690	108	786	e2100	73	412	7780	114	2390
5	2680	83	600	1670	73	330	7160	110	2120
6	3270	72	637	e1350	75	274	7370	106	2110
7	3950	115	1220	e1250	77	261	8340	132	2970
8	5100	318	4380	e1300	80	281	9450	302	7700
9	8220	541	12000	e1100	82	244	10200	550	15100
10	10700	318	9180	e1020	85	235	10500	372	10600
11	12000	224	7240	e1300	85	297	10400	202	5660
12	12400	193	6450	2420	95	620	9730	198	5210
13	12300	175	5800	2820	150	1140	8670	125	2930
14	11600	151	4720	2590	114	799	7050	99	1880
15	10800	115	3360	e2200	107	632	5640	95	1450
16	10100	95	2590	e2500	98	663	5610	84	1270
17	9660	104	2720	4040	123	1340	5500	83	1230
18	9480	96	2460	8140	404	8890	5110	86	1190
19	9480	86	2200	10400	380	10700	5530	131	1950
20	8550	70	1610	11300	277	8440	7720	618	12900
21	7770	60	1260	11800	231	7360	9790	894	23600
22	8050	58	1260	11700	226	7140	11000	585	17400
23	8030	69	1490	11300	220	6700	12100	405	13200
24	6730	154	2810	10700	186	5370	13400	324	11700
25	4960	102	1370	9810	148	3920	14300	243	9390
26	4970	81	1090	8930	110	2660	14700	232	9210
27	4810	80	1040	8480	105	2400	14500	234	9180
28	4530	90	1100	8680	110	2580	13800	183	6820
29	4090	95	1050	---	---	---	13000	162	5700
30	3650	90	887	---	---	---	12200	127	4190
31	3160	85	728	---	---	---	11600	113	3550
TOTAL	209030	---	84419	146000	---	75211	298580	---	201520

e Estimated

ST. FRANCIS RIVER BASIN

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	APRIL			MAY			JUNE		
	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)
1	10900	107	3140	11400	346	10600	4540	164	2010
2	10600	126	3600	12300	234	7770	5510	151	2250
3	10600	103	2960	13200	187	6650	6030	170	2770
4	10300	96	2670	13800	160	5960	4160	171	1920
5	10100	112	3060	14500	153	5980	3230	172	1500
6	9880	136	3620	15100	159	6460	3680	191	1900
7	9690	118	3090	15400	170	7060	5220	540	7610
8	9420	117	2970	15400	198	8230	7370	632	12600
9	9120	122	3000	15700	259	11000	8690	353	8290
10	8780	123	2910	16600	269	12100	8810	273	6490
11	8710	133	3120	17500	292	13800	8580	251	5810
12	8760	140	3300	18900	211	10800	8460	248	5660
13	8360	159	3580	20000	217	11700	8440	246	5600
14	7310	141	2790	20100	219	11900	8270	252	5620
15	7300	152	3000	19500	204	10700	7660	244	5040
16	7860	193	4100	18100	191	9330	6080	234	3830
17	8700	383	9000	16100	176	7670	5270	236	3360
18	9490	535	13700	13900	194	7280	5010	256	3460
19	9800	427	11300	11800	180	5730	3910	191	2020
20	9660	332	8660	9920	152	4060	3680	163	1620
21	8940	517	12500	5620	142	2160	5440	717	10500
22	7250	628	12300	5420	147	2160	7840	692	14600
23	5360	675	9760	7710	179	3730	8460	540	12300
24	4530	684	8360	6960	179	3370	8790	360	8540
25	4060	476	5220	6520	183	3220	8930	241	5810
26	4100	321	3550	6150	178	2960	8690	192	4510
27	4460	235	2840	7260	224	4390	8040	184	4000
28	5270	180	2560	8320	382	8590	6450	170	2950
29	7540	206	4190	8840	343	8200	6110	167	2750
30	10000	462	12500	8630	240	5580	5970	133	2140
31	---	---	---	7470	205	4140	---	---	---
TOTAL	246850	---	167350	388120	---	223280	197320	---	157460

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 1997 TO SEPTEMBER 1998

DAY	MEAN			MEAN			MEAN		
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	5630	127	1930	11300	145	4410	3200	61	523
2	4540	122	1490	13300	120	4300	e2710	60	439
3	4650	114	1440	15900	132	5680	e3040	60	493
4	3980	110	1180	18300	106	5240	e2710	60	439
5	4080	106	1170	20300	91	5000	e2410	60	390
6	3760	99	1000	21600	102	5920	e2190	59	350
7	3540	95	911	22200	97	5790	e2120	59	337
8	3030	95	777	22300	90	5430	e2410	58	379
9	3510	95	900	22100	76	4560	e2040	59	324
10	3190	94	812	21700	89	5190	e2260	59	360
11	3030	91	741	21600	95	5560	e1840	58	290
12	3620	90	880	21300	94	5380	e1770	55	265
13	3360	89	810	20700	75	4170	e1710	55	254
14	e2780	86	642	19900	79	4240	e1580	55	235
15	3030	85	695	18400	72	3560	e1640	54	240
16	e2250	84	512	16600	93	4170	e1710	51	233
17	e1990	81	433	14200	94	3620	e1640	50	221
18	e1990	80	430	11900	99	3190	e1400	49	187
19	e1830	79	392	10000	78	2100	e1840	46	231
20	e1620	76	331	8070	82	1780	e1400	45	171
21	e1330	74	267	5770	81	1270	e1520	42	171
22	e1160	71	221	5200	80	1130	e1110	40	121
23	e1000	69	187	4670	77	965	e956	37	95
24	e1160	67	209	4470	75	909	e906	36	88
25	e1970	76	406	4110	72	794	e956	35	91
26	3190	100	863	4580	71	881	e956	32	84
27	4700	173	2200	4260	73	834	e906	32	78
28	6490	319	5590	4130	70	783	e857	31	72
29	7500	314	6350	3910	66	696	e857	28	64
30	8340	231	5210	3470	71	663	e809	27	59
31	9540	196	5040	e2950	65	519	---	---	---
TOTAL	111790	---	44019	399190	---	98734	51453	---	7284
YEAR	2109896		1082373						

e Estimated

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE

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

DRAINAGE AREA.--Not determined

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	121	1120	1990	3610	8260	10800	10900	6010	5830	10200	3170
2	92	122	1140	1990	2570	8420	10300	11900	4860	5000	11800	2720
3	76	136	1080	2100	3030	8150	10300	12900	6730	4720	13800	2570
4	56	119	1100	2860	3060	7470	10100	13700	5210	4420	15600	2180
5	55	126	1140	2820	2400	6870	9840	14400	4090	4260	16800	2240
6	52	240	1240	3520	2040	7450	9590	15000	3750	4050	17500	1800
7	46	199	1270	4650	1790	8190	9350	15500	5090	3940	18300	1730
8	48	177	1310	5920	2050	9320	9080	15900	6740	3290	19300	1940
9	50	171	1330	7430	1630	9960	8810	16000	8200	3380	20300	1570
10	53	160	1360	9400	1870	10100	8480	16600	8620	3540	20400	2040
11	58	189	1280	10700	2060	10100	8250	17400	8410	3400	20300	1530
12	102	227	1320	11200	2940	9580	8330	17900	8240	4030	20400	1570
13	135	312	1320	11300	3420	8600	8060	18300	8200	4060	20300	1550
14	104	336	1320	11000	3440	7260	7330	18800	8100	2050	19900	1300
15	122	405	1450	10600	3010	5600	6680	19100	7680	3000	19200	1300
16	133	706	1400	10100	3200	5470	7230	19100	6780	2130	18100	1210
17	123	590	1390	9710	5110	5330	7940	18300	5360	2310	16300	1620
18	92	664	1480	9320	7430	5070	8870	16600	5520	2260	13700	966
19	82	504	1370	9420	9650	5110	9310	14400	4620	1900	11100	1490
20	87	558	1450	9090	10400	6690	9340	12000	3840	1450	8810	956
21	113	475	1850	8060	11000	8960	8860	9000	4800	1070	6480	1360
22	499	667	1470	8110	11200	10100	7560	5640	7050	1150	5370	723
23	333	883	1490	8420	10900	11200	5900	7740	8030	741	4710	545
24	357	980	1780	7700	10400	12300	4880	7580	8400	1740	4580	525
25	323	1110	2000	5900	9590	13400	4520	7140	8610	e2500	3920	566
26	197	1120	1810	5650	8670	14000	4510	6530	8530	e3400	4670	461
27	154	1030	2450	5500	8030	14100	4890	7300	8010	4420	4130	387
28	131	1120	3250	5250	8000	13800	5580	8140	6950	5910	4010	346
29	136	1110	3750	4800	---	13100	6960	8870	6100	7290	4030	325
30	127	1150	3600	4430	---	12300	9230	8840	6080	7850	3580	320
31	123	---	2190	3840	---	11600	---	8200	---	8690	2870	---
TOTAL	4241	15707	51510	212780	152500	287860	240880	399680	198610	113781	380460	41010
MEAN	137	524	1662	6864	5446	9286	8029	12890	6620	3670	12270	1367
MAX	499	1150	3750	11300	11200	14100	10800	19100	8620	8690	20400	3170
MIN	46	119	1080	1990	1630	5070	4510	5640	3750	741	2870	320
MED	113	440	1390	7430	3430	8960	8410	13700	6760	3400	13700	1430
AC-FT	8410	31150	102200	422000	302500	571000	477800	792800	393900	225700	754600	81340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

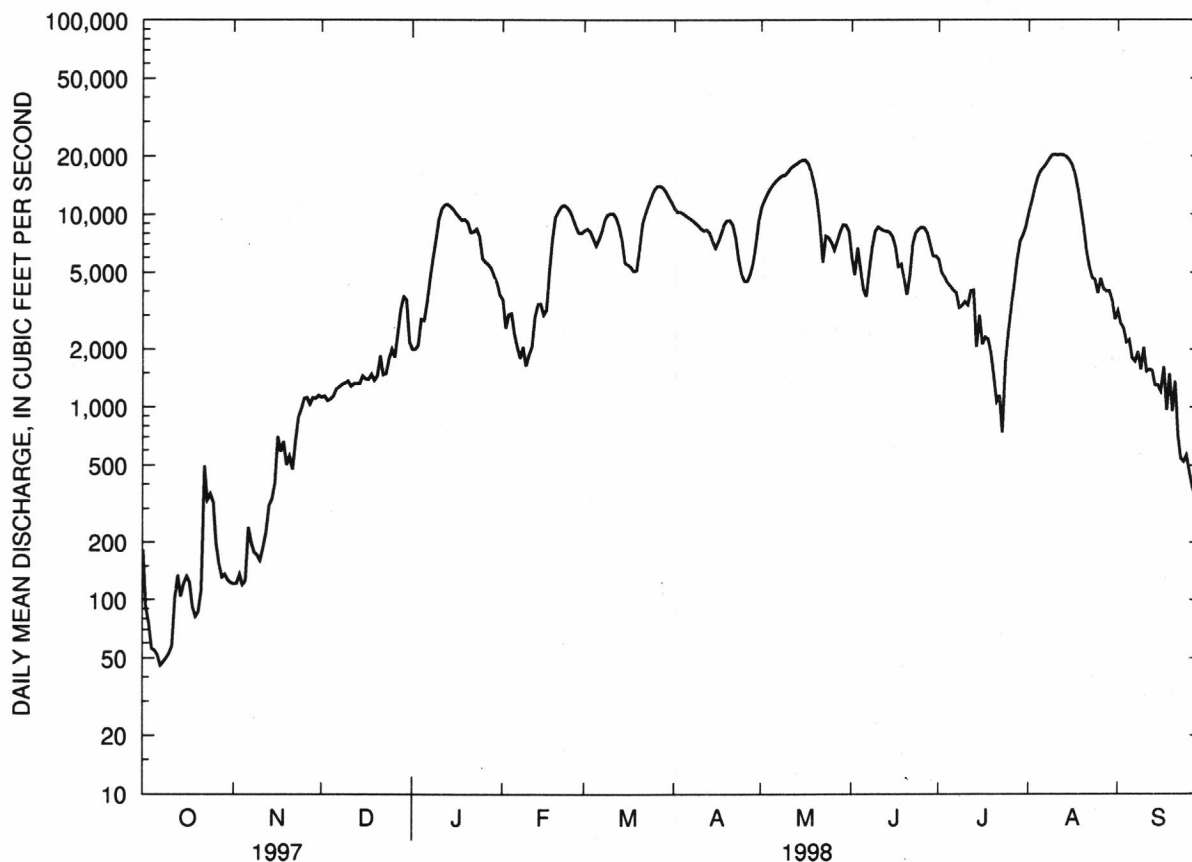
MEAN	533	2701	5201	6797	7448	12070	9333	8218	6832	2786	5090	919
MAX	872	6289	12320	8576	13380	24900	15970	12890	8273	3670	12270	1367
(WY)	1996	1997	1997	1997	1997	1997	1997	1998	1997	1998	1998	1998
MIN	137	524	1624	4950	3652	2028	4001	3581	5603	1017	1273	518
(WY)	1998	1998	1996	1996	1996	1996	1996	1997	1996	1996	1996	1996

ST. FRANCIS RIVER BASIN
07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

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SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1996 - 1998	
ANNUAL TOTAL	2515488		2099019			
ANNUAL MEAN	6892		5751		5656	
HIGHEST ANNUAL MEAN					8309	1997
LOWEST ANNUAL MEAN					2914	1996
HIGHEST DAILY MEAN	34400	Mar 11	20400	Aug 10	34400	Mar 11 1997
LOWEST DAILY MEAN	46	Oct 7	46	Oct 7	46	Oct 7 1997
ANNUAL SEVEN-DAY MINIMUM	51	Oct 4	51	Oct 4	51	Oct 4 1997
INSTANTANEOUS PEAK FLOW			20500	Aug 12	34600	Mar 11 1997
INSTANTANEOUS PEAK STAGE			36.76	Aug 12	41.13	Mar 11 1997
INSTANTANEOUS LOW FLOW			40	Oct 7,8	90	Sep 4 1996
ANNUAL RUNOFF (AC-FT)	4989000		4163000		4097000	
10 PERCENT EXCEEDS	20500		13200		13500	
50 PERCENT EXCEEDS	3610		4620		3700	
90 PERCENT EXCEEDS	198		198		379	

^eEstimated



ST. FRANCIS RIVER BASIN

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, 7.9 tons, November 5, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 612 mg/L, Apr. 30; minimum daily mean, 13 mg/L, September 30.

SEDIMENT DISCHARGE: Maximum daily, 12,500 tons, January 10; minimum daily, 7.9 tons, November 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SED. SUSP. FALL DIAM. % FINER (80155)	SED. SUSP. FALL DIAM. % FINER (70342)
NOV										
05...	0745	80513	82913	116	15.99	11.0	1.00	23	7.2	98
DEC										
03...	0810	80513	82913	1050	18.43	8.0	.06	73	207	89
JAN										
07...	1145	80513	82913	4530	23.60	7.0	.06	254	3110	--
FEB										
11...	0835	80513	82913	1900	19.58	4.5	.09	194	995	62
MAR										
05...	1530	80513	82913	6910	25.85	7.0	.09	110	2050	74
APR										
08...	1225	80513	82913	8340	27.96	12.0	.09	80	1800	81
MAY										
06...	1455	80513	82913	15500	32.75	17.0	.09	146	6110	91
JUN										
02...	1515	80513	82913	5280	23.52	25.5	.09	112	1600	96

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 (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)
NOV										
05...	98	99	100	0	0	13	90	100	--	--
DEC										
03...	89	89	100	58	70	86	95	100	--	--
JAN										
07...	--	--	--	10	37	86	98	100	--	--
FEB										
11...	65	94	100	0	2	85	98	100	--	--
MAR										
05...	76	97	100	23	41	98	100	--	--	--
APR										
08...	87	95	100	5	20	76	99	100	--	--
MAY										
06...	95	98	100	5	8	59	94	97	99	100
JUN										
02...	97	99	100	3	32	96	100	--	--	--

ST. FRANCIS RIVER BASIN

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07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	182	54	27	121	36	12	1120	83	252
2	92	57	14	122	39	13	1140	72	221
3	76	74	15	136	29	11	1080	76	221
4	56	61	9.3	119	25	8.0	1100	86	256
5	55	70	10	126	23	7.9	1140	86	264
6	52	71	9.9	240	24	15	1240	87	291
7	46	76	9.4	199	23	12	1270	86	296
8	48	67	8.6	177	25	12	1310	82	289
9	50	62	8.3	171	26	12	1330	76	272
10	53	58	8.3	160	30	13	1360	67	245
11	58	55	8.7	189	40	20	1280	65	224
12	102	54	15	227	31	19	1320	63	223
13	135	48	17	312	25	21	1320	60	212
14	104	52	15	336	31	28	1320	64	227
15	122	49	16	405	38	42	1450	85	333
16	133	45	16	706	41	79	1400	93	352
17	123	40	13	590	37	59	1390	92	347
18	92	37	9.1	664	37	67	1480	90	359
19	82	39	8.5	504	37	51	1370	94	349
20	87	39	9.1	558	42	63	1450	103	402
21	113	40	12	475	38	48	1850	81	406
22	499	32	43	667	42	75	1470	78	308
23	333	33	30	883	46	110	1490	80	323
24	357	30	29	980	55	145	1780	86	412
25	323	28	24	1110	59	176	2000	79	426
26	197	27	14	1120	61	184	1810	96	469
27	154	26	11	1030	64	179	2450	122	805
28	131	26	9.3	1120	61	183	3250	121	1060
29	136	29	11	1110	62	185	3750	118	1200
30	127	33	11	1150	73	227	3600	115	1120
31	123	27	9.1	---	---	---	2190	73	432
TOTAL	4241	---	450.6	15707	---	2076.9	51510	---	12596

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
JANUARY			FEBRUARY			MARCH			
1	1990	60	323	3610	85	831	8260	148	3300
2	1990	64	342	2570	87	602	8420	168	3820
3	2100	72	410	3030	94	768	8150	151	3320
4	2860	103	797	3060	90	740	7470	122	2460
5	2820	85	645	2400	87	561	6870	116	2150
6	3520	99	942	2040	80	439	7450	148	2980
7	4650	162	2030	1790	77	370	8190	221	4880
8	5920	288	4610	2050	72	396	9320	338	8510
9	7430	532	10700	1630	80	350	9960	430	11600
10	9400	494	12500	1870	95	480	10100	312	8510
11	10700	403	11700	2060	179	993	10100	192	5230
12	11200	310	9380	2940	173	1380	9580	135	3490
13	11300	264	8040	3420	171	1580	8600	116	2690
14	11000	223	6630	3440	136	1260	7260	96	1870
15	10600	194	5560	3010	113	920	5600	95	1440
16	10100	169	4610	3200	149	1290	5470	95	1400
17	9710	153	4020	5110	145	2000	5330	92	1320
18	9320	138	3470	7430	252	5050	5070	103	1410
19	9420	130	3310	9650	405	10600	5110	97	1340
20	9090	122	2990	10400	301	8460	6690	198	3580
21	8060	125	2720	11000	221	6560	8960	453	11000
22	8110	147	3230	11200	200	6040	10100	375	10200
23	8420	141	3200	10900	186	5460	11200	307	9270
24	7700	120	2490	10400	155	4340	12300	242	8020
25	5900	105	1660	9590	123	3190	13400	199	7190
26	5650	98	1500	8670	111	2610	14000	166	6260
27	5500	96	1420	8030	113	2460	14100	158	6000
28	5250	89	1260	8000	125	2690	13800	133	4970
29	4800	85	1100	---	---	---	13100	113	3980
30	4430	89	1070	---	---	---	12300	120	3970
31	3840	82	850	---	---	---	11600	95	2990
TOTAL	212780	---	113509	152500	---	72420	287860	---	149150

ST. FRANCIS RIVER BASIN

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07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	10800	79	2310	10900	452	13300	6010	123	2000
2	10300	83	2300	11900	275	8830	4860	116	1520
3	10300	97	2700	12900	197	6850	6730	110	2000
4	10100	90	2460	13700	159	5900	5210	106	1490
5	9840	85	2250	14400	137	5330	4090	108	1200
6	9590	85	2210	15000	143	5800	3750	122	1240
7	9350	89	2260	15500	137	5750	5090	141	1940
8	9080	87	2130	15900	131	5630	6740	194	3540
9	8810	119	2830	16000	126	5420	8200	147	3260
10	8480	105	2400	16600	136	6100	8620	106	2460
11	8250	98	2180	17400	149	6980	8410	104	2370
12	8330	89	1990	17900	133	6410	8240	153	3400
13	8060	76	1660	18300	138	6800	8200	138	3050
14	7330	67	1330	18800	137	6950	8100	113	2480
15	6680	68	1230	19100	117	6020	7680	115	2390
16	7230	98	1920	19100	99	5120	6780	111	2030
17	7940	265	5680	18300	94	4650	5360	124	1790
18	8870	354	8470	16600	92	4140	5520	115	1710
19	9310	386	9700	14400	112	4340	4620	88	1100
20	9340	308	7760	12000	117	3800	3840	101	1050
21	8860	199	4760	9000	118	2880	4800	196	2540
22	7560	135	2760	5640	124	1890	7050	214	4070
23	5900	95	1510	7740	121	2530	8030	188	4080
24	4880	80	1060	7580	111	2280	8400	140	3180
25	4520	71	870	7140	110	2120	8610	126	2940
26	4510	70	848	6530	111	1960	8530	124	2850
27	4890	61	806	7300	120	2370	8010	160	3470
28	5580	67	1010	8140	128	2820	6950	190	3560
29	6960	188	3530	8870	149	3560	6100	181	2990
30	9230	612	15300	8840	119	2840	6080	223	3650
31	---	---	---	8200	120	2660	---	---	---
TOTAL	240880	---	98224	399680	---	152030	198610	---	75350

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	5830	214	3360	10200	179	4940	3170	62	530
2	5000	109	1470	11800	169	5380	2720	56	414
3	4720	108	1380	13800	147	5480	2570	66	460
4	4420	87	1040	15600	143	6020	2180	71	419
5	4260	103	1190	16800	126	5730	2240	69	420
6	4050	111	1220	17500	106	5020	1800	65	316
7	3940	118	1260	18300	84	4140	1730	62	287
8	3290	130	1160	19300	59	3080	1940	58	305
9	3380	140	1280	20300	50	2760	1570	62	263
10	3540	127	1210	20400	49	2710	2040	65	357
11	3400	129	1180	20300	58	3180	1530	56	233
12	4030	128	1390	20400	82	4500	1570	49	206
13	4060	117	1290	20300	102	5580	1550	47	196
14	2050	130	718	19900	93	4980	1300	46	163
15	3000	112	910	19200	86	4460	1300	48	167
16	2130	115	661	18100	74	3620	1210	46	151
17	2310	115	716	16300	70	3080	1620	43	190
18	2260	104	637	13700	80	2960	966	49	129
19	1900	113	578	11100	74	2220	1490	59	237
20	1450	103	404	8810	66	1580	956	56	145
21	1070	122	352	6480	56	971	1360	73	268
22	1150	114	355	5370	68	992	723	132	259
23	741	113	226	4710	64	815	545	54	79
24	1740	129	605	4580	60	747	525	56	79
25	e2500	97	656	3920	60	638	566	43	65
26	e3400	60	551	4670	61	773	461	42	53
27	4420	85	1020	4130	60	668	387	43	45
28	5910	393	6270	4010	61	660	346	37	34
29	7290	483	9510	4030	52	568	325	28	24
30	7850	373	7900	3580	43	416	320	13	11
31	8690	266	6250	2870	42	328	---	---	---
TOTAL	113781	---	56749	380460	---	88996	41010	---	6505
YEAR	2099019		828056.5						

e Estimated

ST. FRANCIS RIVER BASIN

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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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	66	94	115	302	e580	e360	e140	e210	e330	e1100	139
2	53	58	78	97	181	e550	e340	e90	e170	e310	e1200	117
3	51	49	73	89	188	e480	e320	e70	e210	e290	e1400	102
4	51	48	74	116	197	e380	e310	e60	e190	e270	e1500	104
5	49	59	73	151	156	e350	e300	e40	e170	e260	e1700	109
6	48	486	67	690	146	e700	e290	e40	e160	e230	e1800	104
7	47	357	64	3950	140	e500	e280	e60	e200	e210	e1900	108
8	46	138	66	6620	137	e900	e270	e90	e280	e200	e2100	113
9	51	85	66	4620	132	e780	e260	e170	e370	e180	e2200	107
10	58	67	68	2630	136	e660	e250	e270	e360	e190	e2500	105
11	64	60	66	e1800	1240	e580	e240	e390	e340	e180	e2600	104
12	52	58	65	e1400	1430	e530	e240	e460	e300	e200	e2700	101
13	61	141	64	e1000	535	e500	e230	e510	e280	e200	e2800	105
14	157	1160	63	e750	344	e480	e230	e530	e270	e160	e2700	100
15	141	549	62	e570	241	e430	e220	e550	e260	e170	e2400	97
16	86	181	61	e450	e3000	e380	e300	e550	e250	e160	e2000	108
17	63	106	62	e370	e5000	e340	e290	e560	e240	e160	e1700	115
18	54	81	62	e300	e6000	e350	e280	e540	e220	e150	e1300	104
19	50	72	63	e270	e4000	e550	e270	e510	e210	e140	e1000	94
20	48	68	63	e250	e2600	e1700	e260	e450	e200	e120	e820	84
21	50	67	69	e250	e2000	e1200	e255	e370	e220	e110	e690	77
22	52	67	70	e330	e1600	e820	e240	e320	e270	e120	e570	76
23	50	64	77	e580	e1200	e700	e235	e290	e340	e100	e470	76
24	51	61	1190	e950	e900	e630	e230	e280	e400	e140	372	73
25	58	62	1900	1220	e750	e580	e225	e270	e470	e210	218	71
26	79	64	529	934	e680	e540	e220	e280	e450	e290	365	e68
27	131	65	311	879	e620	e500	e210	e310	e410	e380	274	66
28	85	63	319	797	e600	e470	e200	e340	e400	e490	282	62
29	62	62	409	645	---	e420	e190	e330	e390	e620	284	63
30	56	66	458	495	---	e400	e180	e320	e360	e800	206	65
31	59	---	174	349	---	e380	---	e310	---	e1000	135	---
TOTAL	2020	4530	6860	33667	34455	18360	7725	9500	8600	8370	41286	2817
MEAN	65.2	151	221	1086	1231	592	258	306	287	270	1332	93.9
MAX	157	1160	1900	6620	6000	1700	360	560	470	1000	2800	139
MIN	46	48	61	89	132	340	180	40	160	100	135	62
AC-FT	4010	8990	13610	66780	68340	36420	15320	18840	17060	16600	81890	5590

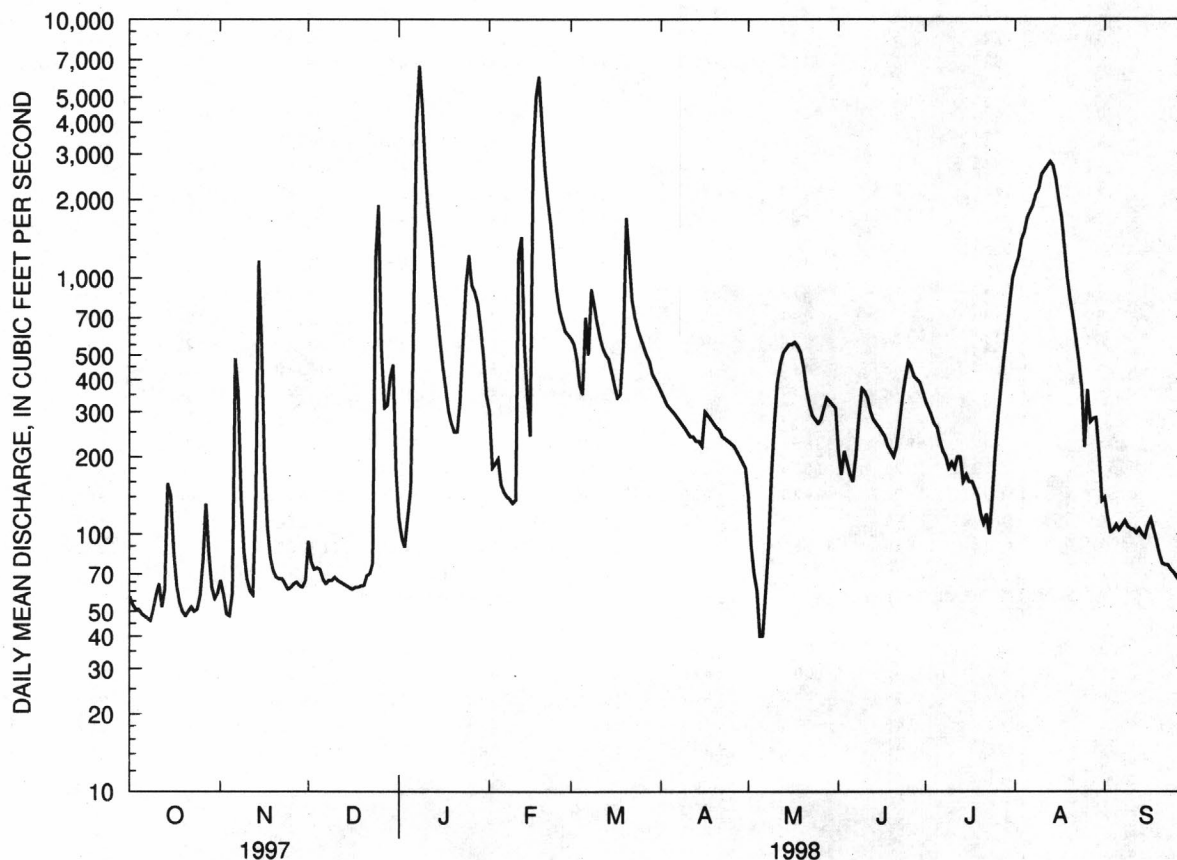
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	196	616	799	809	1190	975	472	342	273	196	639	131
MAX	461	1322	2030	1086	1423	2061	584	468	302	270	1332	159
(WY)	1997	1997	1997	1998	1997	1997	1997	1996	1997	1998	1998	1997
MIN	61.1	151	146	423	925	273	258	250	231	138	164	93.9
(WY)	1996	1998	1996	1996	1996	1996	1998	1997	1996	1996	1996	1998

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1996 - 1998	
ANNUAL TOTAL	203361		178190			
ANNUAL MEAN	557		488		551	
HIGHEST ANNUAL MEAN					841	
LOWEST ANNUAL MEAN					323	
HIGHEST DAILY MEAN	7200	Mar 6	6620	Jan 8	7200	Mar 6 1997
LOWEST DAILY MEAN	46	Oct 8	40	May 5	40	May 5 1998
ANNUAL SEVEN-DAY MINIMUM	49	Oct 3	49	Oct 3	46	Sep 9 1996
INSTANTANEOUS PEAK STAGE			^a 26.41	Aug 12	^a 33.14	Mar 12,13,14 1997
INSTANTANEOUS LOW FLOW					39	Sep 14 1996
ANNUAL RUNOFF (AC-FT)	403400		353400		398800	
10 PERCENT EXCEEDS	1390		1200		1300	
50 PERCENT EXCEEDS	230		240		236	
90 PERCENT EXCEEDS	62		62		64	

^aFrom backwater^eEstimated

ST. FRANCIS RIVER BASIN

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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, 2,650 mg/L July 29, 1998; minimum daily mean, 14 mg/L, September 30, 1997.

SEDIMENT DISCHARGE: Maximum daily, 14,500 tons, February 27, 1997; minimum daily, 2.1 tons, October 8, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,650 mg/L, July 29; minimum daily mean, 16 mg/L, October 11-12.

SEDIMENT DISCHARGE: Maximum daily, 6,700 tons, February 17; minimum daily, 2.1 tons, October 8.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	57	32	5.0	66	313	56	94	125	32
2	53	31	4.4	58	293	46	78	129	27
3	51	28	3.8	49	291	38	73	76	15
4	51	25	3.5	48	303	39	74	72	14
5	49	23	3.0	59	363	58	73	72	14
6	48	20	2.6	486	809	1060	67	72	13
7	47	18	2.3	357	1000	968	64	72	12
8	46	17	2.1	138	769	287	66	72	13
9	51	17	2.3	85	677	155	66	72	13
10	58	17	2.6	67	671	121	68	72	13
11	64	16	2.8	60	661	107	66	72	13
12	52	16	2.3	58	652	102	65	72	13
13	61	86	14	141	841	320	64	72	12
14	157	310	131	1160	1090	3430	63	72	12
15	141	225	86	549	737	1090	62	72	12
16	86	173	40	181	582	285	61	72	12
17	63	155	26	106	520	149	62	72	12
18	54	146	21	81	497	109	62	75	12
19	50	147	20	72	360	70	63	83	14
20	48	147	19	68	310	57	63	103	18
21	50	147	20	67	269	49	69	102	19
22	52	146	20	67	229	41	70	97	18
23	50	145	20	64	204	35	77	108	22
24	51	141	19	61	186	31	1190	238	766
25	58	141	22	62	172	29	1900	177	908
26	79	487	104	64	180	31	529	159	227
27	131	827	292	65	184	32	311	142	119
28	85	624	143	63	165	28	319	109	94
29	62	494	83	62	132	22	409	108	119
30	56	428	65	66	107	19	458	115	142
31	59	361	57	---	---	---	174	130	61
TOTAL	2020	---	1238.7	4530	---	8864	6860	---	2791

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
	JANUARY			FEBRUARY			MARCH		
1	115	201	62	302	161	131	e580	158	248
2	97	230	60	181	152	74	e550	116	173
3	89	219	53	188	143	72	e480	80	104
4	116	188	59	197	134	71	e380	76	78
5	151	255	104	156	126	53	e350	122	115
6	690	640	1190	146	121	48	e700	660	1250
7	3950	413	4410	140	117	44	e500	426	576
8	6620	366	6540	137	113	42	e900	413	1010
9	4620	341	4260	132	107	38	e780	280	590
10	2630	326	2320	136	134	49	e660	204	364
11	e1800	351	1710	1240	541	1810	e580	174	272
12	e1400	24	1230	1430	481	1860	e530	161	230
13	e1000	307	828	535	463	670	e500	146	197
14	e750	292	590	344	355	330	e480	111	144
15	e570	276	424	241	353	229	e430	219	254
16	e450	261	317	e3000	730	5910	e380	213	218
17	e370	242	242	e5000	496	6700	e340	209	192
18	e300	211	171	e6000	307	4970	e350	239	225
19	e270	184	134	e4000	168	1810	e550	362	538
20	e250	151	102	e2600	125	877	e1700	730	3350
21	e250	123	83	e2000	98	527	e1200	440	1430
22	e330	97	87	e1600	75	325	e820	250	554
23	e580	125	195	e1200	67	216	e700	197	372
24	e950	190	486	e900	68	166	e630	153	261
25	1220	313	1030	e750	62	126	e580	167	261
26	934	219	552	e680	85	157	e540	154	225
27	879	160	380	e620	154	258	e500	98	133
28	797	131	282	e600	171	277	e470	79	101
29	645	192	334	---	---	---	e420	74	84
30	495	181	242	---	---	---	e400	67	72
31	349	169	159	---	---	---	e380	69	71
TOTAL	33667	---	28636	34455	---	27840	18360	---	13692

e Estimated

ST. FRANCIS RIVER BASIN

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07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	APRIL			MAY			JUNE		
	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)
1	e360	102	100	e140	22	8.4	e210	174	99
2	e340	96	88	e90	23	5.5	e170	155	71
3	e320	115	99	e70	24	4.5	e210	108	61
4	e310	181	151	e60	28	4.6	e190	85	44
5	e300	187	152	e40	63	6.8	e170	81	37
6	e290	145	114	e40	69	7.5	e160	78	34
7	e280	130	99	e60	145	23	e200	88	47
8	e270	97	71	e90	220	53	e280	181	137
9	e260	65	46	e170	242	111	e370	226	226
10	e250	91	62	e270	301	220	e360	173	168
11	e240	124	80	e390	474	499	e340	167	154
12	e240	90	58	e460	437	543	e300	179	145
13	e230	69	43	e510	412	568	e280	190	143
14	e230	83	52	e530	382	546	e270	216	157
15	e220	190	113	e550	371	551	e260	222	156
16	e300	171	138	e550	305	453	e250	273	184
17	e290	171	134	e560	198	299	e240	474	307
18	e280	162	123	e540	113	165	e220	519	308
19	e270	153	112	e510	61	84	e210	748	424
20	e260	112	79	e450	46	56	e200	984	532
21	e255	93	64	e370	73	73	e220	638	379
22	e240	96	62	e320	93	81	e270	334	244
23	e235	102	65	e290	106	83	e340	240	221
24	e230	90	56	e280	89	67	e400	233	252
25	e225	72	44	e270	116	85	e470	252	319
26	e220	66	39	e280	181	137	e450	271	329
27	e210	64	36	e310	504	422	e410	347	385
28	e200	61	33	e340	499	459	e400	356	384
29	e190	51	26	e330	414	369	e390	455	479
30	e180	38	18	e320	321	277	e360	359	349
31	---	---	---	e310	250	209	---	---	---
TOTAL	7725	---	2357	9500	---	6470.3	8600	---	6775

e Estimated

ST. FRANCIS RIVER BASIN

07047882 STRAIGHT SLOUGH NEAR BIRDEYE--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	e330	321	286	e1100	312	926	139	195	73
2	e310	280	234	e1200	152	492	117	227	72
3	e290	314	246	e1400	157	595	102	228	63
4	e270	404	295	e1500	105	424	104	213	60
5	e260	330	232	e1700	111	511	109	201	59
6	e230	226	141	e1800	94	458	104	172	48
7	e210	162	92	e1900	135	694	108	160	47
8	e200	133	72	e2100	432	2450	113	155	47
9	e180	121	59	e2200	418	2480	107	152	44
10	e190	111	57	e2500	162	1100	105	152	43
11	e180	104	51	e2600	126	883	104	149	42
12	e200	205	111	e2700	260	1900	101	149	40
13	e200	196	106	e2800	456	3450	105	146	41
14	e160	128	55	e2700	211	1540	100	144	39
15	e170	109	50	e2400	155	1010	97	141	37
16	e160	101	44	e2000	123	664	108	140	41
17	e160	94	41	e1700	134	615	115	137	43
18	e150	87	35	e1300	134	471	104	136	38
19	e140	84	32	e1000	138	372	94	133	34
20	e120	80	26	e820	134	296	84	131	30
21	e110	77	23	e690	126	234	77	128	27
22	e120	73	24	e570	117	180	76	127	26
23	e100	70	19	e470	107	135	76	124	26
24	e140	65	25	372	96	96	73	124	24
25	e210	59	34	218	86	51	71	121	23
26	e290	80	62	365	77	76	e68	121	22
27	e380	415	426	274	69	51	66	121	21
28	e490	1100	1460	282	68	52	62	118	20
29	e620	2650	4440	284	91	70	63	118	20
30	e800	1120	2420	206	121	68	65	118	21
31	e1000	554	1500	135	147	54	---	---	---
TOTAL	8370	---	12698	41286	---	22398	2817	---	1171
YEAR	178190		134931.0						

e Estimated

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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	231	1150	1810	3300	8390	10100	8980	6400	4850	10800	e2300
2	216	196	1140	1890	2410	8580	9810	10200	4210	4260	12200	e2100
3	202	209	1120	1940	2590	8350	9680	11000	6360	3860	14100	e1900
4	182	183	1100	2600	2750	7610	10100	11900	5220	3780	16200	e1800
5	180	185	1130	2730	2190	7080	9690	12500	4060	3550	17900	e1700
6	179	757	1200	3740	1860	10400	9480	13000	3610	3460	19000	e1600
7	166	752	1240	7180	1550	11200	9430	14100	4690	3290	20200	e1500
8	159	449	1280	9490	1780	11900	9310	14700	6180	2730	22100	e1400
9	181	333	1300	10000	1480	11900	9000	14200	7870	2520	23900	1390
10	212	264	1340	9960	1630	11400	8570	16200	8730	3000	23500	1840
11	234	269	1270	10800	2360	11000	8230	16900	8640	3300	23300	1520
12	256	321	1280	11400	3320	10500	8280	16600	8410	4760	24000	1430
13	407	501	1280	11600	3210	9490	8040	17100	8340	5150	23400	1410
14	415	1400	1280	11400	3140	7890	7470	17700	8250	2530	22400	1230
15	461	1100	1380	10800	2760	5890	6460	18200	7870	3270	21500	1050
16	385	977	1360	10500	4580	5520	7140	18400	7030	2340	20100	1200
17	328	775	1350	9230	8650	5340	8640	17700	5080	2430	17800	1440
18	250	761	1420	8570	10200	4980	8640	15700	5090	2370	14800	900
19	172	645	1340	8730	10900	5210	8830	13300	4020	2070	12000	1300
20	146	621	1380	8510	10900	9030	8730	11000	3000	1550	9360	874
21	146	581	1750	7500	11400	10900	8150	8180	3610	1230	6780	1060
22	535	684	1480	7640	11600	10700	6980	4610	5800	1190	5150	757
23	501	895	1460	8400	11200	11800	5350	6360	7060	928	4510	457
24	460	1010	2420	7770	10700	12600	4130	7190	7450	1550	4310	377
25	465	1100	3200	5970	9900	11100	3730	7030	7730	2210	3670	474
26	380	1130	2170	5430	8900	9020	3630	6500	7680	2850	e3500	420
27	375	1040	2460	5220	8420	7640	3890	7860	7160	4320	e3200	341
28	300	1120	3130	4960	8270	6980	4690	8140	6110	6120	e3000	294
29	234	1120	3650	4530	---	7250	5900	8750	4980	8360	e2800	267
30	228	1130	3760	4110	---	8130	7150	8840	4990	8870	e2600	249
31	220	---	2200	3540	---	9160	---	8350	---	9120	e2400	---
TOTAL	8954	20739	53020	217950	161950	276940	229230	371190	185630	111818	410480	34580
MEAN	289	691	1710	7031	5784	8934	7641	11970	6188	3607	13240	1153
MAX	535	1400	3760	11600	11600	12600	10100	18400	8730	9120	24000	2300
MIN	146	183	1100	1810	1480	4980	3630	4610	3000	928	2400	249
AC-FT	17760	41140	105200	432300	321200	549300	454700	736300	368200	221800	814200	68590

ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1998, BY WATER YEAR (WY)

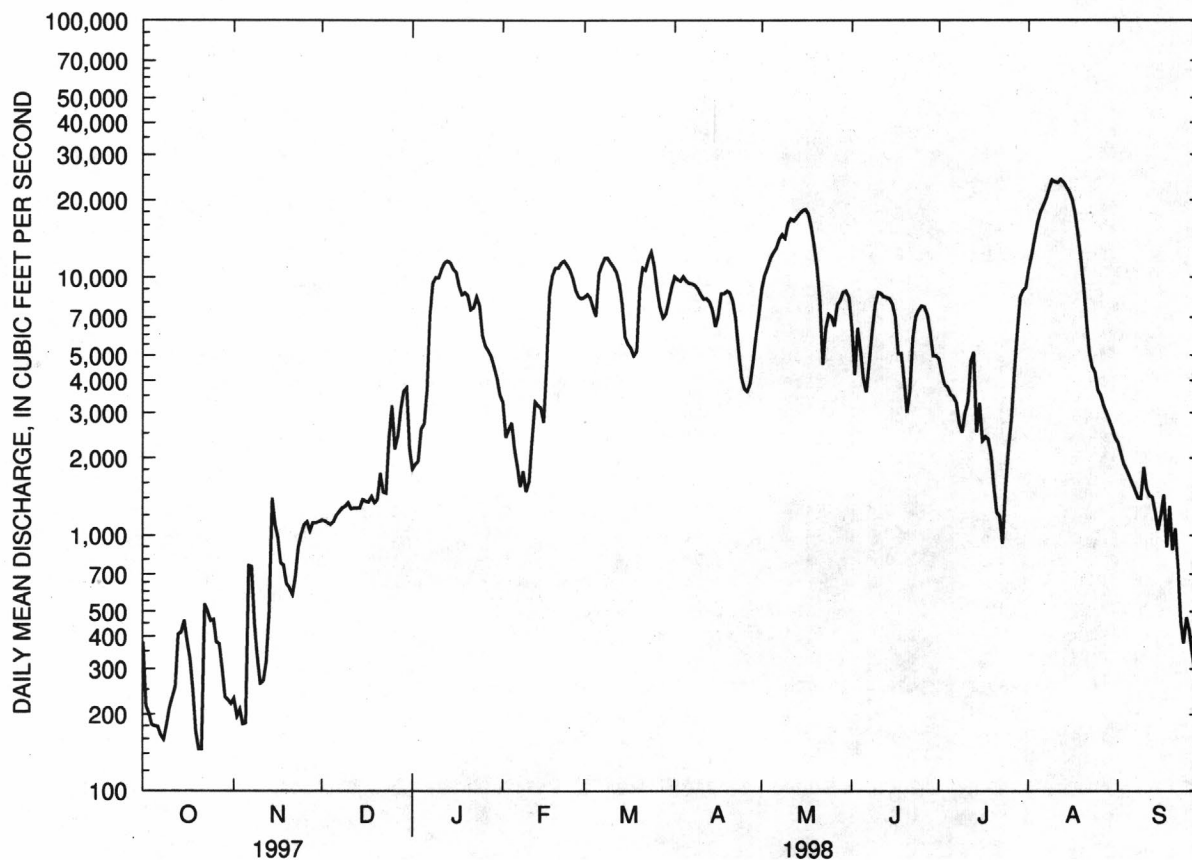
MEAN	1131	2297	5272	7806	9394	10250	10560	8543	5093	2648	1574	1090
MAX	6413	16410	23870	30270	37430	27400	36220	33660	27120	14280	13240	3943
(WY)	1950	1958	1958	1950	1937	1979	1979	1973	1957	1957	1998	1965
MIN	36.8	24.7	89.0	103	336	465	625	292	78.3	70.0	61.0	48.0
(WY)	1940	1942	1941	1944	1936	1941	1941	1941	1941	1941	1936	1941

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1936-94, 1998

ANNUAL TOTAL	2082481		
ANNUAL MEAN	5705		5507
HIGHEST ANNUAL MEAN			13580
LOWEST ANNUAL MEAN			344
HIGHEST DAILY MEAN	24000	Aug 12	53000
LOWEST DAILY MEAN	146	Oct 20	.00
ANNUAL SEVEN-DAY MINIMUM	178	Oct 3	.00
INSTANTANEOUS PEAK FLOW	24100	Aug 12	54700
INSTANTANEOUS PEAK STAGE	26.26	Aug 12	^a 39.03
INSTANTANEOUS LOW FLOW	127	Oct 21	.00
ANNUAL RUNOFF (AC-FT)	4131000		3989000
10 PERCENT EXCEEDS	11900		14800
50 PERCENT EXCEEDS	4130		2680
90 PERCENT EXCEEDS	380		240

^aBackwater from Mississippi River^eEstimated

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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)
OCT									
08...	1605	80513	82913	158	5.59	397	7.4	760	22.0
NOV									
05...	1030	80513	82913	191	5.66	383	7.5	760	10.5
DEC									
03...	1115	80513	82913	1040	7.57	401	7.8	752	9.0
JAN									
08...	1105	80513	82913	9590	16.05	138	6.5	745	7.0
FEB									
12...	0810	80513	82913	3530	10.74	172	6.4	760	5.0
MAR									
11...	1345	80513	82913	10400	17.19	154	6.6	777	22.0
APR									
09...	0845	80513	82913	8650	16.14	348	7.4	751	12.5
MAY									
06...	1330	80513	82913	13500	22.89	212	7.4	750	17.0
JUN									
03...	0810	80513	82913	6620	13.53	287	7.3	750	25.0
JUL									
10...	1015	80513	82913	3090	11.38	271	7.5	760	30.2
AUG									
13...	1100	80513	82913	21600	26.00	231	7.8	754	25.0
SEP									
09...	1100	80513	82913	1290	8.14	290	7.3	755	25.0

DATE	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	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)
OCT									
08...	.18	8.1	93	58	25	98	98	100	--
NOV									
05...	.45	9.5	85	47	24	84	84	84	100
DEC									
03...	.12	11.2	98	60	168	97	97	100	--
JAN									
08...	.06	10.2	86	402	10400	75	78	96	100
FEB									
12...	.06	11.2	88	274	2610	91	92	98	100
MAR									
11...	.09	11.2	126	231	6490	62	69	97	100
APR									
09...	.09	11.4	109	111	2590	69	72	93	100
MAY									
06...	.09	10.1	106	151	5500	93	96	99	100
JUN									
03...	.12	6.5	80	311	5560	35	40	71	100
JUL									
10...	.09	6.0	80	361	3010	25	26	90	100
AUG									
13...	.06	8.1	99	62	3620	89	90	95	100
SEP									
09...	.09	7.7	94	--	--	--	--	--	--

ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	BED MAT. FALL DIAM. % FINER THAN (80169)	BED MAT. FALL DIAM. % FINER THAN (80170)	BED MAT. FALL DIAM. % FINER THAN (80171)
OCT									
08...	0	0	50	97	100	--	--	--	--
NOV									
05...	5	10	61	99	100	--	--	--	--
DEC									
03...	82	82	93	93	100	--	--	--	--
JAN									
08...	1	1	62	97	100	--	--	--	--
FEB									
12...	0	0	30	92	100	--	--	--	--
MAR									
11...	2	16	93	99	100	--	--	--	--
APR									
09...	29	71	89	93	97	--	98	100	--
MAY									
06...	4	8	50	88	93	--	94	96	100
JUN									
03...	32	69	95	99	100	--	--	--	--
JUL									
10...	15	49	89	95	100	--	--	--	--
AUG									
13...	6	12	62	92	98	100	--	--	--
SEP									
09...	11	64	96	96	96	100	--	--	--

ST. FRANCIS RIVER BASIN

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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.

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 1997 TO SEPTEMBER 1998 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	e250	1160	2370	3960	8840	11000	8650	8330	5650	13500	e2800
2	376	e245	1150	2310	2760	8920	10600	10100	5040	5020	15800	e2600
3	321	e240	1150	2250	2790	8500	10400	11100	7940	4700	18800	e2400
4	286	e235	1140	2610	3120	7540	10900	12200	6710	4690	22800	e2200
5	266	230	1150	2930	2470	6820	10300	13200	4930	4470	26000	e2000
6	256	399	1180	3510	2020	11200	9990	13800	4100	4380	27100	e1900
7	248	687	1210	7620	1640	11800	9790	15500	5340	4170	28200	e1800
8	242	573	1240	12200	1790	12700	9470	16300	7460	3470	31800	e1700
9	240	473	1260	14300	1600	12900	9060	15400	10200	3250	33000	1650
10	244	397	1290	14500	1640	12300	8560	18900	12200	3840	29300	2060
11	252	358	1270	15600	2430	12100	8170	19700	12300	4280	28900	1860
12	243	345	1270	17000	3910	11500	8230	19100	11800	6130	29700	1660
13	e370	379	1280	16600	3830	10200	7960	19900	11700	6620	27000	1660
14	e420	988	1280	15300	3740	8340	7320	21000	11500	3330	26300	1520
15	e460	1220	1340	14200	3220	6110	6230	22000	10700	3870	25900	1280
16	e410	1130	1330	13600	5620	5750	6980	22400	9170	2810	24800	1480
17	e340	990	1340	11500	11800	5660	8630	21200	6520	2730	21800	1620
18	e270	946	1370	10600	13900	5340	8600	17900	6550	2640	18000	1230
19	e230	861	1340	10900	14100	5510	8770	14200	5190	2320	17400	1500
20	e210	815	1370	10600	13700	10200	8650	11400	3900	1760	14100	1200
21	e215	772	1560	9340	14200	12200	8030	7970	4600	1380	10700	1260
22	e530	790	1610	9750	14200	11500	6710	4320	7290	1210	7710	1130
23	e500	875	1570	10900	13400	12900	4930	7380	8680	1050	6620	758
24	e470	950	2090	10000	12500	13700	3640	9090	9010	1350	6020	658
25	e460	1040	3370	7650	11300	11800	3210	9190	9290	2220	5380	726
26	e410	1120	2660	6950	9870	8860	3130	8630	9090	2690	e4900	692
27	e380	1100	2840	6710	9150	7030	3320	10600	8340	4230	e4400	609
28	e330	1140	3180	6360	8840	6310	4010	11600	6960	6340	e4000	558
29	e280	1140	3670	5720	---	6670	5210	12500	5640	9580	e3700	527
30	e265	1150	4090	5120	---	7930	6500	12600	5720	11600	e3400	509
31	e260	---	2830	4330	---	9540	---	11600	---	11600	e3100	---
TOTAL	10237	21838	54590	283330	193500	290670	228300	429430	236200	133380	540130	43547
MEAN	330	728	1761	9140	6911	9376	7610	13850	7873	4303	17420	1452
MAX	530	1220	4090	17000	14200	13700	11000	22400	12300	11600	33000	2800
MIN	210	230	1140	2250	1600	5340	3130	4320	3900	1050	3100	509
AC-FT	20310	43320	108300	562000	383800	576500	452800	851800	468500	264600	1071000	86380

ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUT-OFF NEAR COLT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	890	3901	4901	7990	7697	11260	10130	9201	6920	3020	7096	1068
MAX	1337	9381	11000	9733	12770	22320	18450	13850	7873	4303	17420	1452
(WY)	1997	1997	1997	1997	1997	1997	1997	1998	1998	1998	1998	1998
MIN	330	728	1761	5099	3563	2078	4339	5489	6372	1133	1916	854
(WY)	1998	1998	1998	1996	1996	1996	1996	1997	1997	1996	1996	1996

SUMMARY STATISTICS

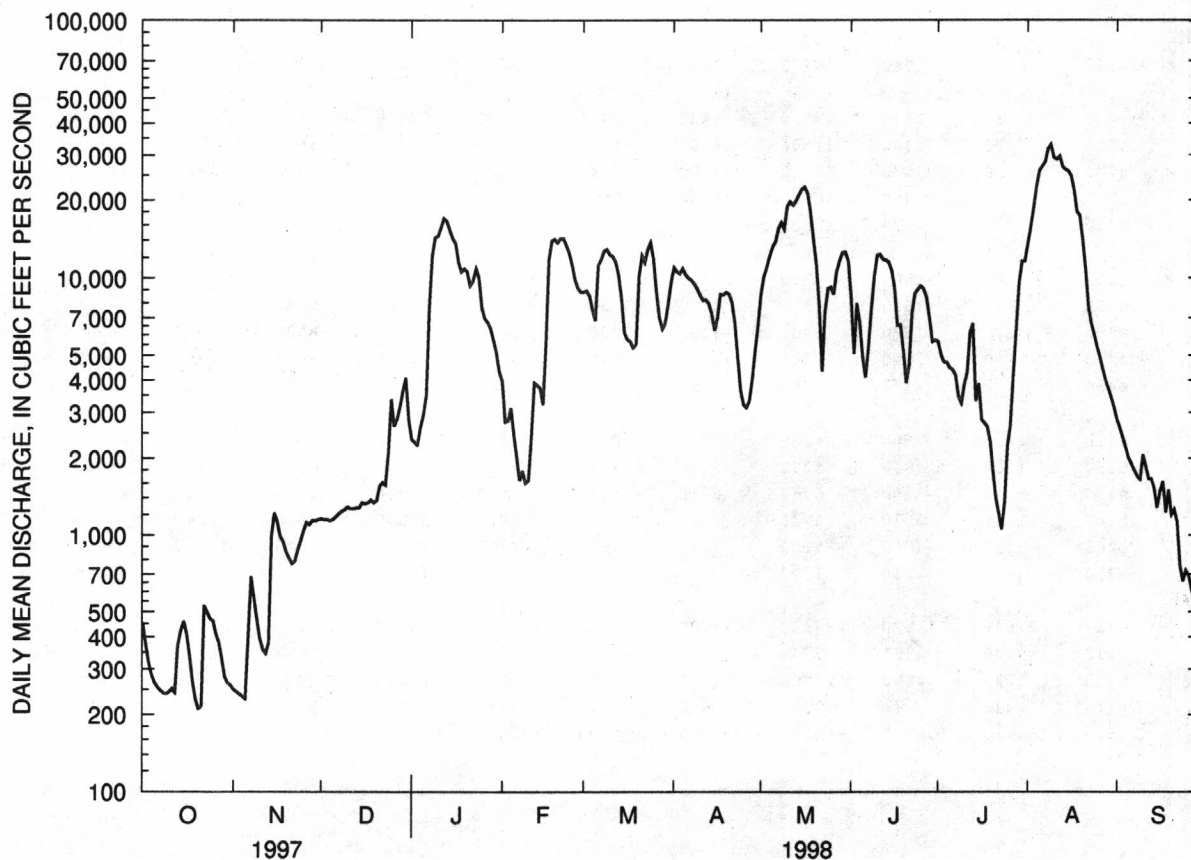
FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1996 - 1998

ANNUAL TOTAL	2552459		2465152			
ANNUAL MEAN	6993		6754		6169	
HIGHEST ANNUAL MEAN					8574	1997
LOWEST ANNUAL MEAN					3188	1996
HIGHEST DAILY MEAN	37700	Apr 13	33000	Aug 9	37700	Apr 13 1997
LOWEST DAILY MEAN	210	Oct 20	210	Oct 20	210	Oct 20 1997
ANNUAL SEVEN-DAY MINIMUM	246	Oct 6	246	Oct 6	246	Oct 6 1997
INSTANTANEOUS PEAK FLOW			34800	Aug 9	40800	Apr 12 1997
INSTANTANEOUS PEAK STAGE			39.90	May 16	47.57	Mar 14 1997
ANNUAL RUNOFF (AC-FT)	5063000		4890000		4470000	
10 PERCENT EXCEEDS	18100		14200		13800	
50 PERCENT EXCEEDS	3470		4930		3900	
90 PERCENT EXCEEDS	457		457		608	

eEstimated



ST. FRANCIS RIVER BASIN

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07047904 CLARK CORNER CUT-OFF 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 DISCHARGE: 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, 1,130 mg/L, July 18; minimum daily mean, 26 mg/L, October 19-20.

SEDIMENT DISCHARGE: Maximum daily, 41,500 tons, January 9; minimum daily, 15 tons, October 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (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)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	
DATE	TIME											
NOV												
05...	1245	80513	82913	235	16.53	11.0	.09	70	44	81	81	
DEC												
03...	1315	80513	82913	1140	18.49	8.0	.09	123	379	99	100	
JAN												
07...	0850	80513	82913	7070	24.06	7.0	--	385	7350	--	--	
FEB												
11...	1155	80513	82913	2110	19.84	4.5	.06	170	968	96	96	
MAR												
06...	0915	80513	82913	10700	28.50	7.0	.09	192	5550	97	97	
APR												
08...	1505	80513	82913	9490	28.93	12.0	.09	90	2310	97	97	
MAY												
07...	0845	80513	82913	14400	37.58	19.0	.09	130	5050	99	100	
JUN												
03...	0930	80513	82913	7390	--	26.0	.09	--	--	35	49	
DATE		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)	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)
NOV												
05...	92	100	5	5	37	94	100	--	--	--	--	--
DEC												
03...	--	--	10	17	59	85	100	--	--	--	--	--
JAN												
07...	--	--	11	33	78	93	96	--	97	98	100	100
FEB												
11...	96	100	1	3	84	99	100	--	--	--	--	--
MAR												
06...	98	100	6	35	88	95	98	100	--	--	--	--
APR												
08...	98	100	5	14	62	98	100	--	--	--	--	--
MAY												
07...	--	--	6	19	96	100	--	--	--	--	--	--
JUN												
03...	93	100	32	62	89	100	--	--	--	--	--	--

ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUT-OFF NEAR COLT--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	453	34	41	e250	43	29	1160	121	377
2	376	35	35	e245	46	30	1150	113	350
3	321	35	30	e240	41	27	1150	107	332
4	286	35	27	e235	42	27	1140	102	314
5	266	36	26	230	68	42	1150	99	307
6	256	36	25	399	76	82	1180	97	309
7	248	34	23	687	107	198	1210	96	312
8	242	32	21	573	96	148	1240	95	319
9	240	31	20	473	87	112	1260	102	347
10	244	30	20	397	83	89	1290	88	305
11	252	29	20	358	80	77	1270	85	291
12	243	29	19	345	73	68	1270	83	284
13	e370	28	28	379	68	69	1280	80	276
14	e420	36	40	988	94	251	1280	78	270
15	e460	39	49	1220	122	402	1340	78	281
16	e410	33	37	1130	95	290	1330	75	270
17	e340	30	27	990	68	182	1340	75	272
18	e270	27	20	946	61	156	1370	81	301
19	e230	26	16	861	59	137	1340	113	407
20	e210	26	15	815	57	126	1370	119	439
21	e215	30	18	772	58	120	1560	106	447
22	e530	66	94	790	57	122	1610	105	456
23	e500	69	93	875	58	137	1570	114	484
24	e470	63	80	950	58	149	2090	138	780
25	e460	58	72	1040	62	175	3370	190	1730
26	e410	51	56	1120	93	281	2660	127	915
27	e380	38	39	1100	131	390	2840	98	750
28	e330	37	33	1140	138	425	3180	93	800
29	e280	40	30	1140	134	414	3670	160	1590
30	e265	39	28	1150	128	398	4090	151	1660
31	e260	41	29	---	---	---	2830	123	941
TOTAL	10237	---	1111	21838	---	5153	54590	---	16916

e Estimated

ST. FRANCIS RIVER BASIN

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07047904 CLARK CORNER CUT-OFF NEAR COLT--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
	JANUARY			FEBRUARY			MARCH		
1	2370	118	758	3960	102	1090	8840	168	4000
2	2310	117	730	2760	96	717	8920	209	5030
3	2250	109	661	2790	87	653	8500	180	4140
4	2610	106	749	3120	109	920	7540	126	2570
5	2930	111	878	2470	190	1270	6820	120	2200
6	3510	174	1650	2020	235	1280	11200	248	7500
7	7620	350	7200	1640	196	868	11800	396	12600
8	12200	1120	36800	1790	170	823	12700	312	10700
9	14300	1080	41500	1600	176	760	12900	263	9170
10	14500	409	16000	1640	205	907	12300	233	7720
11	15600	273	11500	2430	231	1520	12100	198	6470
12	17000	211	9700	3910	267	2820	11500	172	5340
13	16600	174	7770	3830	185	1910	10200	111	3050
14	15300	144	5960	3740	172	1740	8340	87	1950
15	14200	121	4620	3220	180	1560	6110	85	1400
16	13600	116	4260	5620	600	9110	5750	90	1400
17	11500	138	4270	11800	727	23200	5660	83	1270
18	10600	104	2980	13900	552	20700	5340	92	1330
19	10900	118	3470	14100	437	16600	5510	104	1550
20	10600	148	4230	13700	376	13900	10200	208	5730
21	9340	78	1970	14200	296	11400	12200	369	12200
22	9750	73	1920	14200	250	9600	11500	256	7940
23	10900	86	2540	13400	217	7860	12900	224	7810
24	10000	85	2280	12500	193	6500	13700	174	6420
25	7650	78	1600	11300	168	5140	11800	145	4630
26	6950	69	1290	9870	159	4240	8860	148	3530
27	6710	92	1660	9150	149	3690	7030	148	2810
28	6360	96	1660	8840	141	3370	6310	151	2570
29	5720	83	1280	---	---	---	6670	108	1940
30	5120	80	1100	---	---	---	7930	89	1900
31	4330	85	996	---	---	---	9540	84	2160
TOTAL	283330	---	183982	193500	---	154148	290670	---	149030

ST. FRANCIS RIVER BASIN

07047904 CLARK CORNER CUT-OFF NEAR COLT--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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	11000	73	2160	8650	149	3470	8330	82	1840
2	10600	66	1880	10100	173	4700	5040	80	1090
3	10400	67	1880	11100	136	4080	7940	84	1790
4	10900	58	1720	12200	111	3660	6710	85	1550
5	10300	51	1420	13200	107	3800	4930	87	1150
6	9990	51	1380	13800	90	3360	4100	80	891
7	9790	49	1310	15500	88	3660	5340	221	3180
8	9470	50	1270	16300	116	5120	7460	233	4680
9	9060	51	1240	15400	128	5310	10200	197	5420
10	8560	65	1500	18900	209	10700	12200	146	4810
11	8170	72	1600	19700	359	19100	12300	173	5760
12	8230	82	1820	19100	343	17700	11800	152	4850
13	7960	96	2060	19900	304	16400	11700	181	5720
14	7320	85	1670	21000	271	15400	11500	210	6520
15	6230	94	1590	22000	178	10600	10700	166	4800
16	6980	133	2500	22400	173	10500	9170	130	3220
17	8630	283	6600	21200	191	10900	6520	130	2290
18	8600	314	7280	17900	195	9430	6550	150	2640
19	8770	306	7240	14200	196	7520	5190	114	1600
20	8650	305	7130	11400	188	5780	3900	73	765
21	8030	239	5190	7970	179	3840	4600	87	1080
22	6710	185	3360	4320	169	1970	7290	217	4270
23	4930	140	1860	7380	159	3160	8680	281	6580
24	3640	126	1240	9090	148	3630	9010	254	6170
25	3210	110	956	9190	138	3410	9290	204	5120
26	3130	92	776	8630	128	2980	9090	150	3690
27	3320	76	685	10600	134	3830	8340	143	3220
28	4010	70	756	11600	165	5170	6960	127	2380
29	5210	74	1040	12500	116	3920	5640	130	1970
30	6500	106	1860	12600	92	3140	5720	132	2030
31	---	---	---	11600	83	2600	---	---	---
TOTAL	228300	---	72973	429430	---	208840	236200	---	101076

ST. FRANCIS RIVER BASIN

07047907 ST. FRANCIS RIVER AT MADISON

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT										
09...	1005	80513	82913	303	- .64	401	7.0	762	22.0	.15
NOV										
05...	1430	80513	82913	276	-1.35	368	7.3	757	11.0	.09
DEC										
03...	1415	80513	82913	1310	1.32	349	7.7	752	9.0	.09
JAN										
09...	1415	80513	82913	6600	12.52	183	6.5	757	7.5	.06
FEB										
11...	1345	80513	82913	2100	3.90	246	6.5	750	4.5	.09
MAR										
06...	1045	80513	82913	8950	14.12	176	6.4	758	7.0	.09
APR										
09...	1245	80513	82913	10100	14.85	289	7.4	753	12.5	.06
MAY										
07...	1040	80513	82913	15700	24.87	128	7.2	755	18.5	.09
JUN										
03...	1125	80513	82913	5750	8.74	305	7.2	750	25.5	.09
JUL										
08...	1250	80513	82913	3720	13.33	240	6.8	755	29.5	.09
AUG										
12...	1325	80513	82913	25200	22.86	238	7.3	754	25.5	.06
SEP										
09...	0820	80513	82913	2090	2.75	262	7.3	755	25.0	.09

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	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)
OCT									
09...	7.9	90	57	47	95	95	97	100	--
NOV									
05...	9.4	86	46	34	96	96	96	100	--
DEC									
03...	10.1	89	118	417	91	95	98	100	--
JAN									
09...	10.4	87	311	5540	96	99	100	--	--
FEB									
11...	11.8	93	102	578	95	100	--	--	--
MAR									
06...	11.9	99	196	4740	98	99	100	--	--
APR									
09...	11.8	112	79	2150	98	98	100	--	--
MAY									
07...	8.2	88	132	5600	100	--	--	--	--
JUN									
03...	7.0	87	179	2780	91	94	96	98	100
JUL									
08...	8.2	109	69	693	100	--	--	--	--
AUG									
12...	7.2	89	205	13900	86	96	98	100	--
SEP									
09...	7.8	95	111	626	94	94	97	100	--

ST. FRANCIS RIVER BASIN

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07047907 ST. FRANCIS RIVER AT MADISON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	BED MAT. FALL DIAM. % FINER THAN (80169)	BED MAT. FALL DIAM. % FINER THAN (80170)	BED MAT. FALL DIAM. % FINER THAN (80171)
OCT									
09...	33	57	87	87	100	--	--	--	--
NOV									
05...	23	47	93	100	--	--	--	--	--
DEC									
03...	3	3	42	96	100	--	--	--	--
JAN									
09...	83	91	93	96	100	--	--	--	--
FEB									
11...	23	46	96	98	100	--	--	--	--
MAR									
06...	3	24	79	92	93	100	--	--	--
APR									
09...	44	48	57	70	87	--	88	98	100
MAY									
07...	8	27	97	100	--	--	--	--	--
JUN									
03...	57	88	97	100	--	--	--	--	--
JUL									
08...	18	55	93	96	100	--	--	--	--
AUG									
12...	3	15	65	91	96	--	96	100	--
SEP									
09...	13	57	97	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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	56	46	615	623	1060	648	148	256	26	679	258
2	476	47	40	573	584	961	600	143	241	27	704	224
3	421	70	41	523	540	882	556	134	212	28	705	193
4	362	70	53	472	495	828	506	124	174	32	696	165
5	301	54	43	440	449	860	451	110	149	38	684	144
6	240	315	38	571	402	1720	390	97	135	34	684	125
7	180	356	39	974	352	2140	327	90	99	32	687	104
8	128	429	41	1720	295	3650	267	78	78	32	754	87
9	91	517	48	2460	246	3490	240	65	73	29	1250	72
10	66	520	48	2620	278	3190	207	65	75	34	1340	58
11	52	484	47	2390	663	2810	176	81	54	31	1310	52
12	50	428	47	1980	609	2390	155	97	32	128	1330	43
13	68	409	45	1630	569	2040	135	120	27	241	1330	35
14	108	480	41	1390	590	1780	118	142	24	280	1290	31
15	120	450	36	1350	579	1620	109	158	17	408	1170	30
16	153	510	32	1580	1040	1490	126	174	12	549	1040	37
17	178	544	28	1490	1900	1380	151	193	10	615	938	50
18	181	532	25	1410	2570	1210	156	203	14	646	863	48
19	160	497	22	1310	2860	1160	160	208	21	653	823	43
20	118	444	20	1150	2810	1790	158	202	24	649	781	37
21	75	389	20	1010	2450	1770	153	187	25	635	738	29
22	49	335	22	1060	2080	1890	143	161	30	612	692	21
23	37	279	19	1160	1810	1790	130	133	30	586	645	17
24	34	222	433	1050	1580	1470	118	111	28	550	605	13
25	32	172	575	997	1400	1190	110	97	31	508	563	8.8
26	69	126	604	929	1300	984	99	108	31	494	519	5.5
27	73	92	709	862	1310	874	96	179	31	491	477	6.2
28	89	69	737	809	1190	819	99	187	33	543	433	6.0
29	102	56	729	759	---	776	113	212	34	601	397	5.2
30	86	50	700	711	---	727	139	243	29	636	352	4.4
31	63	---	656	663	---	685	---	257	---	653	307	---
TOTAL	4688	9002	5984	36658	31574	49426	6836	4507	2029	10821	24786	1952.1
MEAN	151	300	193	1183	1128	1594	228	145	67.6	349	800	65.1
MAX	526	544	737	2620	2860	3650	648	257	256	653	1340	258
MIN	32	47	19	440	246	685	96	65	10	26	307	4.4
AC-FT	9300	17860	11870	72710	62630	98040	13560	8940	4020	21460	49160	3870
CFSM	.28	.56	.36	2.21	2.11	2.98	.43	.27	.13	.65	1.49	.12
IN.	.33	.63	.42	2.55	2.20	3.44	.48	.31	.14	.75	1.72	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1998, BY WATER YEAR (WY)

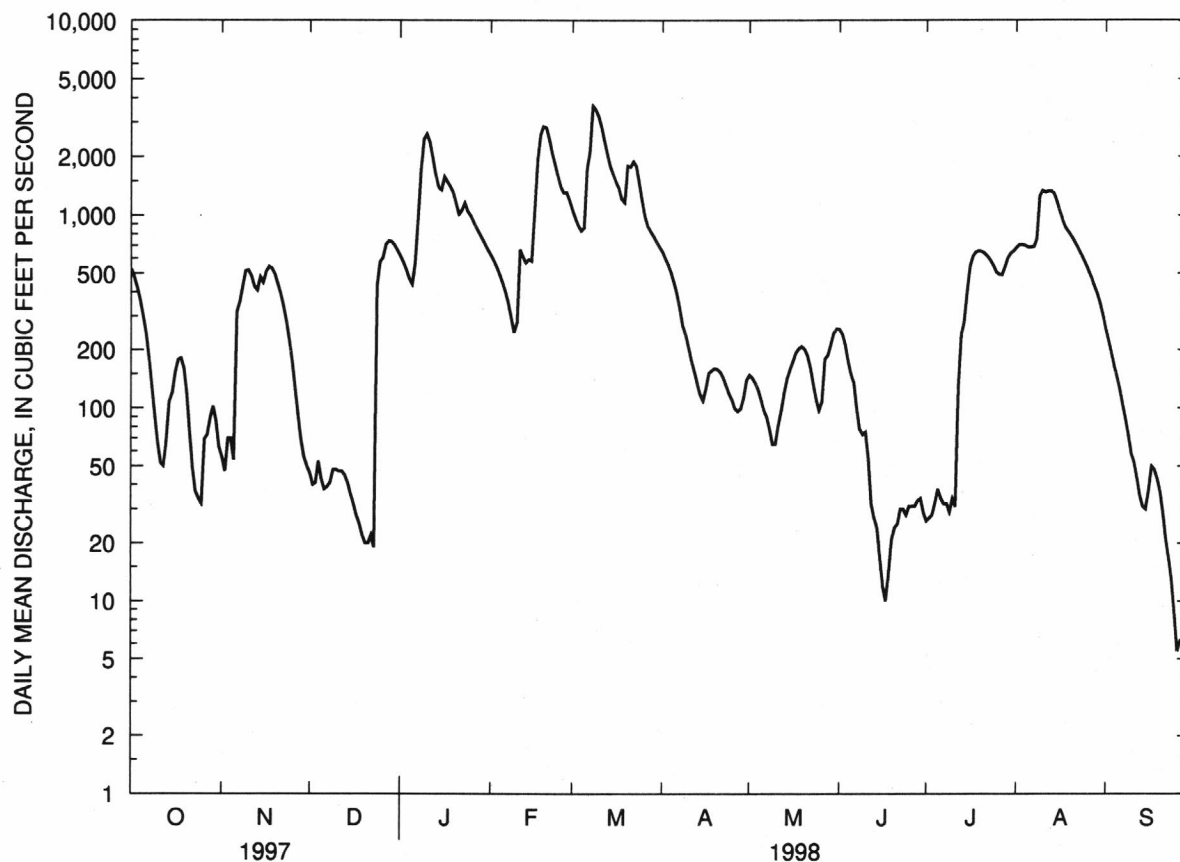
MEAN	308	703	1205	1008	1111	1145	1146	767	512	260	270	458
MAX	1509	2807	3145	2857	4091	2977	3428	3033	2617	1507	800	2784
(WY)	1991	1989	1979	1991	1989	1975	1991	1983	1974	1994	1998	1978
MIN	5.10	23.3	11.9	43.2	151	222	228	39.6	25.3	23.8	63.8	65.1
(WY)	1995	1972	1990	1986	1972	1982	1998	1992	1988	1993	1980	1998

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

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SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1971 - 1998	
ANNUAL TOTAL	299817		188263.1			
ANNUAL MEAN	821		516		739	
HIGHEST ANNUAL MEAN					1321	1989
LOWEST ANNUAL MEAN					271	1972
HIGHEST DAILY MEAN	7700	Mar 6	3650	Mar 8	15000	Dec 29 1987
LOWEST DAILY MEAN	19	May 24	4.4	Sep 30	1.0	Oct 27 1971
ANNUAL SEVEN-DAY MINIMUM	22	Dec 17	7.0	Sep 24	1.0	Oct 9 1992
INSTANTANEOUS PEAK FLOW			4100	Mar 8	16600	Apr 29 1991
INSTANTANEOUS PEAK STAGE			13.64	Mar 8	^a 17.34	Dec 30 1987
INSTANTANEOUS LOW FLOW			3.8	Sep 30	.99	Jul 20 1980
ANNUAL RUNOFF (AC-FT)	594700		373400		535100	
ANNUAL RUNOFF (CFSM)	1.54		.96		1.38	
ANNUAL RUNOFF (INCHES)	20.85		13.09		18.76	
10 PERCENT EXCEEDS	2290		1360		1910	
50 PERCENT EXCEEDS	435		241		365	
90 PERCENT EXCEEDS	47		31		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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	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)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
09...	1530	80513	82913	89	4.35	332	7.3	760	22.0	.06	7.8
NOV											
06...	0800	80513	82913	345	7.83	330	7.4	760	10.0	.06	8.1
25...	1430	80513	81213	127	--	257	7.2	760	6.5	--	9.8
DEC											
03...	1500	80513	82913	44	3.41	390	7.9	752	9.0	.06	10.3
JAN											
09...	1515	80513	82913	1970	13.20	175	6.0	757	8.0	.06	9.8
09...	1540	80513	82913	660	--	131	6.1	757	7.5	.09	9.1
28...	1455	80513	81213	806	--	209	7.5	766	6.6	--	9.1
FEB											
11...	1530	80513	82913	731	11.05	94	6.2	750	7.0	.06	10.2
MAR											
03...	1515	80513	81213	839	--	166	7.0	758	10.4	--	7.7
06...	1215	80513	82913	1570	12.65	86	5.3	758	7.0	.09	12.1
06...	1245	80513	82913	160	--	93	5.4	758	7.0	.06	9.2
APR											
09...	0705	80513	82913	254	6.60	309	7.5	750	12.5	.06	11.6
27...	1330	80513	81213	94	--	175	7.7	756	20.0	--	5.4
MAY											
07...	0710	80513	82913	92	4.29	197	7.2	748	20.0	.06	8.0
27...	1245	80513	81213	183	--	364	7.1	757	22.5	--	6.4
JUN											
03...	0625	80513	82913	223	6.29	298	7.5	751	27.0	.06	6.4
JUL											
08...	1400	80513	82913	31	2.95	223	6.9	753	30.0	.12	1.8
AUG											
12...	1505	80513	82913	1600	12.34	251	7.4	756	24.0	.12	6.8
19...	1355	80513	81213	815	--	271	7.2	757	26.0	--	5.0
SEP											
08...	1340	80513	82913	87	4.37	528	7.4	753	25.0	.06	5.6

ST. FRANCIS RIVER BASIN

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07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	SAMPLE SOURCE (72005)	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)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 09...	90	--	--	--	--	--	--	--	--	--
NOV 06...	72	--	--	--	--	--	--	--	--	--
25...	80	--	K19	K33	92	23	8.3	11	19	.5 8.8
DEC 03...	90	--	--	--	--	--	--	--	--	--
JAN 09...	83	67	--	--	--	--	--	--	--	--
09...	76	68	--	--	--	--	--	--	--	--
28...	74	--	<3	180	78	20	6.8	7.9	17	.4 6.5
FEB 11...	85	--	--	--	--	--	--	--	--	--
MAR 03...	70	--	--	K30	63	16	5.5	6.6	17	.4 5.0
06...	100	67	--	--	--	--	--	--	--	--
06...	76	68	--	--	--	--	--	--	--	--
APR 09...	111	--	--	--	--	--	--	--	--	--
27...	60	--	K490	220	62	16	5.4	7.6	19	.4 4.9
MAY 07...	90	--	--	--	--	--	--	--	--	--
27...	75	--	180	1800	39	10	3.4	5.7	22	.4 3.4
JUN 03...	82	--	--	--	--	--	--	--	--	--
JUL 08...	24	--	--	--	--	--	--	--	--	--
AUG 12...	82	--	--	--	--	--	--	--	--	--
19...	62	--	47	410	110	29	10	9.2	15	.4 3.5
SEP 08...	69	--	--	--	--	--	--	--	--	--

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) (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)
NOV 25...	112	15	16	.20	14	154	164	.21	52.8	--	--
DEC 03...	--	--	--	--	--	--	--	--	--	--	--
JAN 28...	45	6.9	9.8	.15	12	132	98	.18	287	--	--
MAR 03...	59	6.4	7.3	.15	7.8	106	91	.14	240	--	--
APR 27...	56	12	7.4	.18	6.4	110	96	.15	27.9	.345	1.5
MAY 27...	112	6.6	3.9	.11	8.6	90	111	.12	44.5	.437	1.9
AUG 19...	100	6.8	11	.18	16	172	147	.23	378	--	--

ST. FRANCIS RIVER BASIN

07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	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)
NOV 25...	<.010	--	.080	.048	.06	.55	.60	.68	.020	.06	20
JAN 28...	<.010	--	.100	.015	.02	.41	.42	.52	.040	.12	20
MAR 03...	<.010	--	.120	.063	.08	1.1	1.2	1.3	.030	.09	17
APR 27...	.015	.05	.360	.073	.09	.46	.53	.89	.030	.09	26
MAY 27...	.023	.08	.460	.150	.19	.41	.56	1.0	.060	.18	27
AUG 19...	<.010	--	.100	.040	.05	.42	.46	.56	.060	.18	29

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
NOV 25...	60	<.50	<.50	<1.0	<1.0	<1.0	30	<1.0	<4	160	<2.0
JAN 28...	50	<.50	<.50	<1.0	<1.0	<1.0	60	<1.0	<4	36	<2.0
MAR 03...	48	<.50	<.50	<1.0	<1.0	1.0	40	<1.0	<4	56	<2.0
APR 27...	55	<.50	<.50	<1.0	<1.0	1.1	20	<1.0	<4	140	<2.0
MAY 27...	49	<.50	<.50	<1.0	<1.0	1.7	30	<1.0	<4	2.1	<2.0
AUG 19...	65	<.50	<.50	<1.0	<1.0	<1.0	35	<1.0	<4	350	<2.0

DATE	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)	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)
OCT 09...	--	--	--	--	--	93	22	--	99	99	100
NOV 06...	--	--	--	--	--	773	720	--	89	89	89
NOV 25...	<1.0	<1.0	69	<1	2.4	219	75	92	--	--	--
DEC 03...	--	--	--	--	--	101	12	--	100	--	--
JAN 09...	--	--	--	--	--	396	2110	--	100	--	--
JAN 09...	--	--	--	--	--	44	78	--	99	99	100
JAN 28...	1.3	<1.0	60	<1	2.3	74	161	87	--	--	--
FEB 11...	--	--	--	--	--	217	428	--	96	96	100
MAR 03...	1.0	<1.0	52	<1	<1.0	68	154	97	--	--	--
MAR 06...	--	--	--	--	--	189	801	--	99	99	99
MAR 06...	--	--	--	--	--	130	56	--	98	98	100
APR 09...	--	--	--	--	--	174	119	--	100	--	--
APR 27...	1.4	<1.0	56	1	1.3	180	46	99	--	--	--
MAY 07...	--	--	--	--	--	171	42	--	97	97	99
MAY 27...	<1.0	<1.0	56	2	6.2	178	88	98	--	--	--
JUN 03...	--	--	--	--	--	147	89	--	98	98	100
JUL 08...	--	--	--	--	--	140	12	--	97	98	100
AUG 12...	--	--	--	--	--	48	207	--	87	87	91
AUG 19...	<1.0	<1.0	100	<1	1.1	49	108	97	--	--	--
SEP 08...	--	--	--	--	--	87	20	--	97	98	98

ST. FRANCIS RIVER BASIN

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07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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 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)
OCT											
09...	--	--	94	94	94	95	98	100	--	--	--
NOV											
06...	89	100	98	98	98	99	100	--	--	--	--
DEC											
03...	--	--	94	94	96	98	100	--	--	--	--
JAN											
09...	--	--	83	83	85	90	90	100	--	--	--
09...	--	--	30	44	61	80	86	--	97	100	--
FEB											
11...	--	--	93	94	95	96	97	--	98	100	--
MAR											
06...	100	--	57	61	75	87	100	--	--	--	--
06...	--	--	71	73	77	90	100	--	--	--	--
APR											
09...	--	--	95	96	96	97	99	--	99	100	--
MAY											
07...	100	--	94	94	97	98	98	100	--	--	--
JUN											
03...	--	--	88	94	96	98	100	--	--	--	--
JUL											
08...	--	--	85	89	92	92	100	--	--	--	--
AUG											
12...	100	--	22	23	28	38	46	--	54	61	100
SEP											
08...	100	--	96	96	98	98	99	--	99	100	--

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
16...	0843	80513	80513	60.0	.50	1.00	117
16...	0844	80513	80513	60.0	.30	.50	111
16...	0845	80513	80513	60.0	.30	.50	105
16...	0847	80513	80513	60.0	1.00	2.00	99.0
16...	0848	80513	80513	60.0	1.00	2.00	93.0
16...	0850	80513	80513	60.0	1.50	3.00	87.0
16...	0851	80513	80513	60.0	1.50	3.00	81.0
16...	0853	80513	80513	60.0	1.50	3.00	75.0
16...	0854	80513	80513	60.0	1.00	2.00	69.0
16...	0855	80513	80513	60.0	.30	.50	63.0

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
16...	34	546	6.9	23.9	4.8	58	759
16...	--	538	7.1	23.9	4.8	57	759
16...	--	509	7.1	24.0	4.8	57	759
16...	--	535	7.1	24.0	4.8	57	759
16...	--	536	7.1	24.0	4.8	57	759
16...	--	537	7.2	24.0	4.8	57	759
16...	--	537	7.1	24.0	4.8	57	759
16...	--	537	7.2	24.0	4.8	57	759
16...	--	537	7.2	24.0	4.8	57	759
16...	--	436	7.2	24.0	4.9	58	759

ST. FRANCIS RIVER BASIN

07047950 L'ANGUILLE RIVER AT PALESTINE

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

DRAINAGE AREA.--786 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 and estimated daily discharges which are poor. The stage-discharge relation affected by backwater during high stages of Mississippi River.

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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	854	150	70	1110	1220	1660	1090	e165	357	83	762	631
2	775	108	63	1030	1160	1590	1040	e175	323	54	777	562
3	689	95	67	937	1090	1490	996	e160	288	23	788	467
4	617	93	73	854	999	1400	930	e155	249	7.3	794	366
5	507	95	80	803	906	1370	857	e140	230	3.0	799	287
6	406	187	86	894	828	1480	755	100	228	4.3	800	246
7	292	548	82	1190	744	1910	610	77	195	6.2	807	209
8	213	738	77	1510	599	3510	452	81	167	5.9	877	169
9	156	848	78	1740	442	4390	326	94	135	9.8	1000	136
10	116	926	79	1960	417	4420	270	103	120	10	1120	113
11	86	928	86	2260	839	3900	229	116	114	13	1230	91
12	65	843	89	2590	1110	3330	186	126	93	86	1350	74
13	64	736	87	2600	1250	2840	154	133	68	343	1430	61
14	90	727	83	2350	1300	2410	133	160	63	519	1480	50
15	158	765	76	2140	1260	2080	120	188	51	684	1500	43
16	216	797	65	2040	1430	1890	115	211	37	804	1500	39
17	220	832	57	1950	1780	1760	169	231	27	856	1480	42
18	217	860	49	1890	2400	1670	222	248	19	858	1450	55
19	213	837	43	1830	2870	1640	198	256	14	805	1410	65
20	190	756	36	1750	3120	1700	185	254	11	751	1350	60
21	147	664	36	1670	3280	1780	180	262	11	724	1300	50
22	102	569	43	1660	3180	1900	166	247	25	708	1240	41
23	70	465	42	1650	2870	1950	e151	210	50	692	1190	31
24	59	370	481	1650	2510	1910	e145	143	72	677	1130	23
25	75	283	922	1670	2170	1810	e125	100	85	664	1070	18
26	220	218	1070	1670	1970	1670	e115	127	95	652	995	13
27	212	168	1170	1640	1850	1550	e110	184	101	657	903	8.8
28	179	129	1240	1570	1750	1430	e115	300	111	669	818	5.9
29	162	100	1260	1480	---	1320	e135	386	106	692	811	3.9
30	148	82	1240	1380	---	1210	e155	423	98	726	737	2.9
31	152	---	1180	1290	---	1140	---	391	---	750	669	---
TOTAL	7670	14917	10110	50758	45344	64110	10434	5946	3543	13536.5	33567	3963.5
MEAN	247	497	326	1637	1619	2068	348	192	118	437	1083	132
MAX	854	928	1260	2600	3280	4420	1090	423	357	858	1500	631
MIN	59	82	36	803	417	1140	110	77	11	3.0	669	2.9
AC-FT	15210	29590	20050	100700	89940	127200	20700	11790	7030	26850	66580	7860
CFSM	.31	.63	.41	2.08	2.06	2.63	.44	.24	.15	.56	1.38	.17
IN.	.36	.71	.48	2.40	2.15	3.03	.49	.28	.17	.64	1.59	.19

ST. FRANCIS RIVER BASIN

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07047950 L'ANGUILLE RIVER AT PALESTINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1998, BY WATER YEAR (WY)

MEAN	324	703	1194	1637	2406	2168	1762	1561	581	426	439	634
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

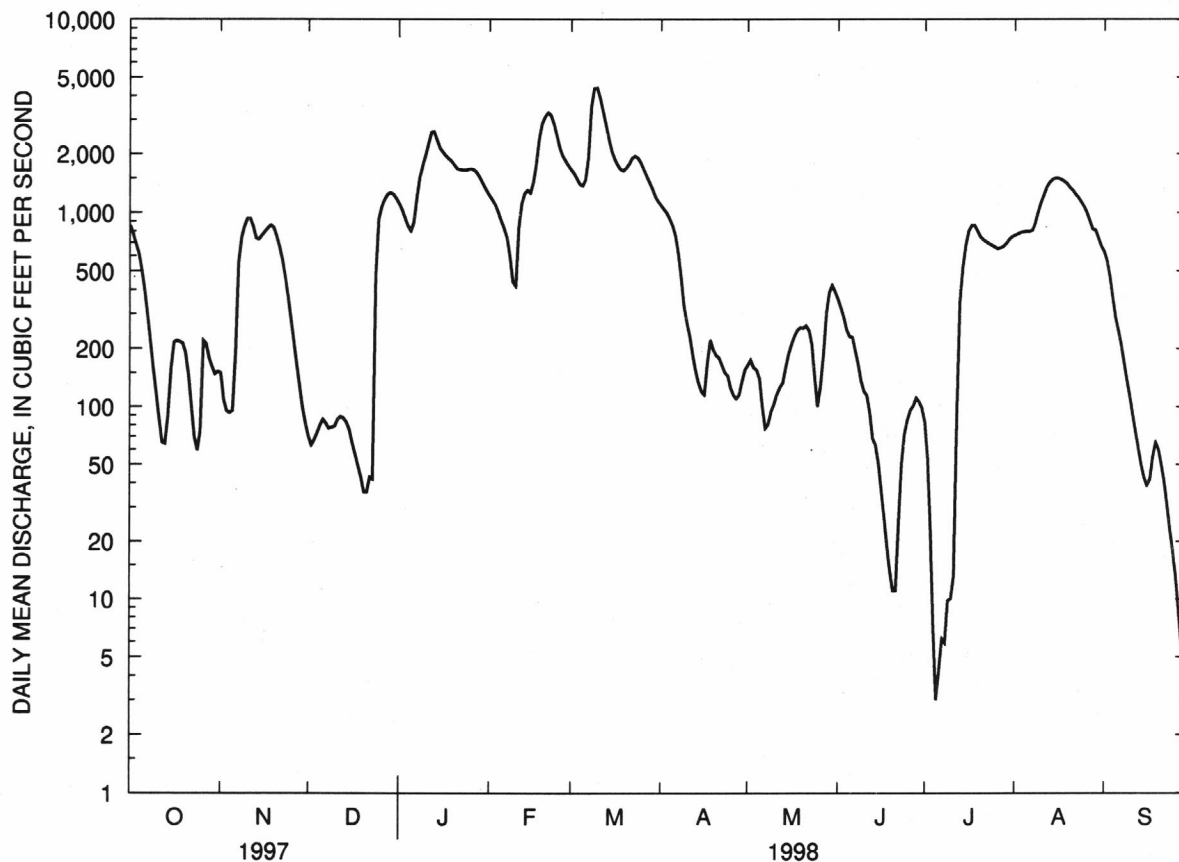
FOR 1998 WATER YEAR

WATER YEARS 1950-77, 1998

ANNUAL TOTAL	263899.0		
ANNUAL MEAN	723		1146
HIGHEST ANNUAL MEAN			2592
LOWEST ANNUAL MEAN			455
HIGHEST DAILY MEAN	4420	Mar 10	15500
LOWEST DAILY MEAN	2.9	Sep 30	.00
ANNUAL SEVEN-DAY MINIMUM	6.6	Jul 4	.00
INSTANTANEOUS PEAK FLOW	4580	Mar 9	15600
INSTANTANEOUS PEAK STAGE	23.99	Mar 9	^a 30.92
INSTANTANEOUS LOW FLOW	2.4	Jul 5	.00
ANNUAL RUNOFF (AC-FT)	523400		830200
ANNUAL RUNOFF (CFSM)	.92		1.46
ANNUAL RUNOFF (INCHES)	12.49		19.81
10 PERCENT EXCEEDS	1770		2970
50 PERCENT EXCEEDS	391		479
90 PERCENT EXCEEDS	50		36

^aBackwater from Mississippi River

^eEstimated



WHITE RIVER BASIN

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. Water-discharge records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.16	.25	.14	.31	.31	1.1	.22	.32	2.0	.16	.24
2	.44	.17	2.6	.13	.16	.25	1.4	.66	.57	.65	.16	.27
3	.30	.16	1.5	.15	.17	.20	.84	.19	.55	.57	.09	.24
4	.25	.16	.52	76	.16	.16	.71	.16	1.1	.65	2.3	.14
5	.28	1.0	.40	19	.12	10	.65	2.4	.57	.62	.40	.17
6	.30	.10	.40	9.4	.10	1.0	1.1	1.6	.40	.65	.10	.21
7	.33	.10	3.5	14	.10	18	3.4	1.1	.35	.68	.09	.10
8	14	.06	6.3	15	.10	4.5	.68	.37	3.8	1.2	.09	.20
9	2.5	.08	.92	1.8	.11	1.1	.46	2.8	.65	.70	.56	.10
10	.77	2.1	.75	.93	8.7	.75	.40	.55	.48	.75	.10	.11
11	.67	.26	.58	.76	8.5	.66	.36	.40	.95	2.4	.06	.23
12	20	1.1	.25	.66	.80	.42	.30	.25	.47	7.7	.10	.11
13	2.4	6.2	.18	.40	.54	.46	.27	.29	.61	.16	.25	4.9
14	.74	1.5	.16	.40	.30	.60	.25	.40	.66	.05	.93	8.7
15	.58	.70	.16	.26	.41	5.4	.32	.31	.70	.07	.14	.13
16	.40	.49	.16	.18	2.3	10	.46	.36	.68	.08	.10	2.4
17	.40	.40	.16	.16	.99	11	.25	.37	.77	.11	.12	.11
18	.31	.40	.16	.16	.52	1.3	.25	.39	.81	.09	.14	.08
19	.16	.32	.14	.14	.41	21	.25	.39	.67	.10	.90	.11
20	.17	.29	.71	.10	.26	2.1	.25	.41	.68	.12	.08	.07
21	.51	.34	4.3	.13	.25	1.0	.32	.53	2.5	.17	.05	.08
22	.16	.25	.77	.15	.25	.78	.17	.65	.65	.18	.13	3.6
23	1.6	.25	3.2	.11	.21	.70	.19	.65	.68	.21	.09	.07
24	2.0	.25	4.0	.10	.17	.65	.24	.66	.67	.23	.10	.05
25	1.8	.25	.34	3.2	5.4	.55	.22	9.1	2.3	.17	.15	.05
26	.32	.25	.25	4.7	8.8	.41	1.6	4.7	.41	.21	.20	.05
27	.18	.25	.18	.70	.95	4.9	6.4	.35	.66	.15	.18	.07
28	.13	.52	.23	.31	.50	.80	.30	.24	.65	.21	.17	.10
29	.11	.91	.23	.25	---	.68	.25	1.8	.67	.26	.28	.11
30	.10	.32	.16	.17	---	18	.33	.34	.73	.22	.20	.77
31	.12	---	.16	.49	---	6.1	---	.23	---	.20	.29	---
TOTAL	52.42	19.34	33.62	150.08	41.59	123.78	23.72	32.87	25.71	21.56	8.71	23.57
MEAN	1.69	.64	1.08	4.84	1.49	3.99	.79	1.06	.86	.70	.28	.79
MAX	20	6.2	6.3	76	8.8	21	6.4	9.1	3.8	7.7	2.3	8.7
MIN	.10	.06	.14	.10	.10	.16	.17	.16	.32	.05	.05	.05
AC-FT	104	38	67	298	82	246	47	65	51	43	17	47
CFSM	1.97	.75	1.26	5.63	1.73	4.64	.92	1.23	1.00	.81	.33	.91
IN.	2.27	.84	1.45	6.49	1.80	5.35	1.03	1.42	1.11	.93	.38	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	1.61	3.27	1.21	2.51	2.36	2.76	.89	.98	1.40	.72	.83	.93
MAX	1.69	5.90	1.33	4.84	3.24	3.99	1.00	1.06	1.95	.75	1.37	1.08
(WY)	1998	1997	1997	1998	1997	1998	1997	1998	1997	1997	1997	1997
MIN	1.53	.64	1.08	.18	1.49	1.53	.79	.90	.86	.70	.28	.79
(WY)	1997	1998	1998	1997	1998	1997	1998	1997	1998	1998	1998	1998

WHITE RIVER BASIN

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

SUMMARY STATISTICS

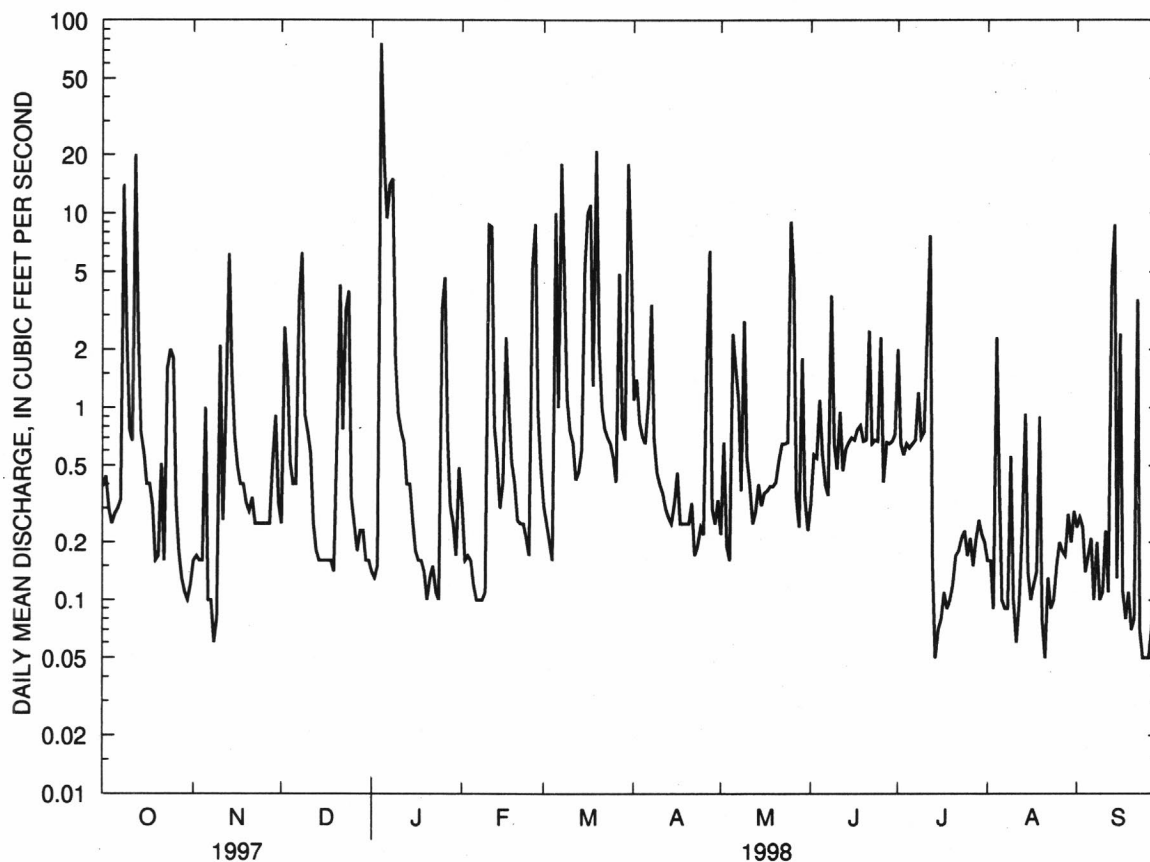
FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1996 - 1998

ANNUAL TOTAL	463.40	556.97	
ANNUAL MEAN	1.27	1.53	1.62
HIGHEST ANNUAL MEAN			1.71 1997
LOWEST ANNUAL MEAN			1.53 1998
HIGHEST DAILY MEAN	41 Feb 20	76 Jan 4	77 Sep 26 1996
LOWEST DAILY MEAN	.00 Jan 10	.05 Jul 14	.00 Jan 10 1997
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 10	.07 Sep 23	.00 Jan 10 1997
INSTANTANEOUS PEAK FLOW		^a 526 Jan 4	^a 860 Sep 26 1996
INSTANTANEOUS PEAK STAGE		5.75 Jan 4	7.40 Sep 26 1996
INSTANTANEOUS LOW FLOW		.05 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	919	1100	1170
ANNUAL RUNOFF (CFSM)	1.48	1.77	1.88
ANNUAL RUNOFF (INCHES)	20.04	24.09	25.55
10 PERCENT EXCEEDS	2.5	3.3	3.3
50 PERCENT EXCEEDS	.40	.35	.40
90 PERCENT EXCEEDS	.10	.10	.10

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



WHITE RIVER BASIN

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.---No estimated daily discharges. Water-discharge records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	1.0	.71	.73	3.2	3.3	2.6	.83	.60	2.1	.27	.22
2	.96	1.1	1.6	.70	3.2	3.2	1.9	1.5	.54	.48	.28	.22
3	.96	1.2	1.2	.64	3.2	3.2	1.6	.78	.53	.42	.30	.21
4	.96	1.3	.57	.79	3.2	3.1	1.3	.74	.73	.42	2.8	.21
5	.96	3.3	.54	20	3.2	11	1.2	3.2	.58	.39	1.1	.22
6	.96	1.2	.51	10	3.2	3.3	1.2	2.4	.55	.43	.28	.22
7	.96	1.2	1.7	10	3.2	12	4.8	1.7	.54	.40	.27	.22
8	22	1.2	2.9	15	3.1	5.5	1.2	.87	4.2	1.1	.25	.22
9	3.6	1.1	1.3	5.6	3.1	3.5	1.1	3.8	.63	.43	.82	.21
10	.79	5.2	1.1	5.5	5.5	3.1	1.0	.90	.57	.40	.30	.22
11	.48	1.4	.88	5.0	6.9	2.7	.96	.80	1.2	2.0	.27	.22
12	21	2.5	.71	4.9	3.0	2.4	.95	.78	.58	7.7	.27	.21
13	4.7	12	.69	4.9	3.0	2.2	.93	.79	.54	.36	.42	4.6
14	1.0	5.1	.67	4.6	3.0	2.0	.90	.77	.50	.30	.95	8.7
15	.61	3.7	.64	4.6	3.0	8.0	.88	.76	.51	.35	.38	.44
16	.47	3.3	.64	4.5	3.1	12	1.1	.75	.54	.31	.26	3.9
17	.45	3.1	.64	4.2	3.0	15	.85	.76	.48	.28	.24	.42
18	.44	2.9	.64	4.1	3.0	4.6	.86	.76	.53	.26	.26	.33
19	.42	1.8	.64	4.1	3.0	22	.83	.79	.47	.26	2.7	.30
20	.40	1.5	.75	3.9	3.0	7.1	.81	.82	.43	.25	.31	.28
21	.85	1.3	4.2	3.9	2.9	4.1	1.4	.95	2.9	.25	.26	.28
22	.46	1.2	1.7	3.7	2.7	3.4	.79	.98	.69	.24	.23	5.2
23	2.1	1.1	4.2	3.6	2.7	3.0	.74	1.1	.63	.28	.23	.38
24	3.2	1.1	6.7	3.6	2.7	2.7	.71	1.2	.45	.29	.23	.32
25	3.2	.96	1.6	4.8	8.4	2.5	.71	13	.42	.27	.22	.32
26	.67	.93	1.1	6.8	14	2.4	2.6	5.8	.42	.25	.23	.31
27	.54	.87	.82	3.5	3.7	6.4	9.0	.91	.41	.24	.24	.33
28	.55	.82	.90	3.5	3.3	2.6	.92	.80	.40	.27	.25	.40
29	.91	1.1	.80	3.4	---	2.3	.83	3.2	.40	.26	.23	.40
30	.97	.73	.79	3.4	---	18	.90	.79	.54	.24	.22	1.2
31	.96	---	.77	3.4	---	8.4	---	.67	---	.28	.22	---
TOTAL	77.52	65.21	42.61	235.57	108.5	185.0	45.57	53.90	22.51	21.51	15.29	30.71
MEAN	2.50	2.17	1.37	7.60	3.88	5.97	1.52	1.74	.75	.69	.49	1.02
MAX	22	12	6.7	79	14	22	9.0	13	4.2	7.7	2.8	8.7
MIN	.40	.73	.51	.64	2.7	2.0	.71	.67	.40	.24	.22	.21
AC-FT	154	129	85	467	215	367	90	107	45	43	30	61
CFSM	1.84	1.60	1.01	5.59	2.85	4.39	1.12	1.28	.55	.51	.36	.75
IN.	2.12	1.78	1.17	6.44	2.97	5.06	1.25	1.47	.62	.59	.42	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

MEAN	2.14	4.93	1.40	4.17	4.30	4.07	1.72	1.39	1.93	1.02	1.42	1.76
MAX	2.50	7.69	1.42	7.60	4.73	5.97	1.92	1.74	3.10	1.35	2.34	2.50
(WY)	1998	1997	1997	1998	1997	1998	1997	1998	1997	1997	1997	1997
MIN	1.78	2.17	1.37	.75	3.88	2.17	1.52	1.05	.75	.69	.49	1.02
(WY)	1997	1998	1998	1997	1998	1997	1998	1997	1998	1998	1998	1998

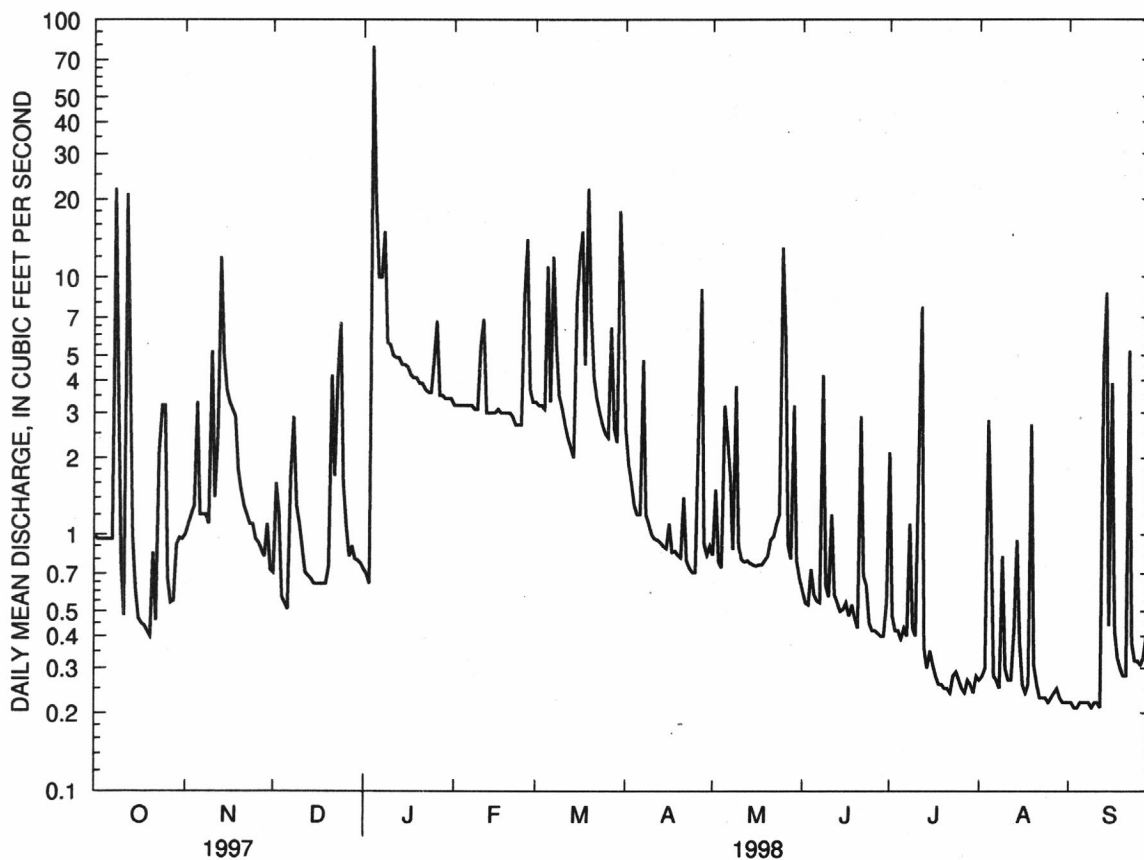
WHITE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1997 - 1998
ANNUAL TOTAL	780.97	903.90	
ANNUAL MEAN	2.14	2.48	2.51
HIGHEST ANNUAL MEAN			2.54 1997
LOWEST ANNUAL MEAN			2.48 1998
HIGHEST DAILY MEAN	49 Feb 20	79 Jan 4	79 Jan 4 1998
LOWEST DAILY MEAN	.18 Jun 24	.21 Sep 3	.08 Oct 18 1996
ANNUAL SEVEN-DAY MINIMUM	.28 Jun 19	.22 Sep 3	.15 Oct 14 1996
INSTANTANEOUS PEAK FLOW		^a 496 Jan 4	^a 646 Jun 17 1997
INSTANTANEOUS PEAK STAGE		4.43 Jan 4	5.32 Jun 17 1997
INSTANTANEOUS LOW FLOW		.18 Aug 25, Sep 3-12	.08 Oct 18 1996
ANNUAL RUNOFF (AC-FT)	1550	1790	1820
ANNUAL RUNOFF (CFSM)	1.57	1.82	1.84
ANNUAL RUNOFF (INCHES)	21.36	24.72	25.04
10 PERCENT EXCEEDS	3.8	4.9	4.8
50 PERCENT EXCEEDS	.90	.96	.91
90 PERCENT EXCEEDS	.49	.27	.30

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



WHITE RIVER BASIN

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 1997 TO SEPTEMBER 1998

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 CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
08...	1151	80513	.00	175	136	8.6	738	23.3	9.5	115	4.30
08...	1152	80513	10.0	175	136	8.6	738	23.4	9.5	115	--
08...	1153	80513	20.0	175	136	8.6	738	23.4	9.4	114	--
08...	1154	80513	30.0	175	136	8.4	738	22.7	8.6	103	--
08...	1155	80513	38.0	175	138	8.0	738	21.7	7.3	86	--
08...	1156	80513	39.0	175	140	7.7	738	21.1	6.9	80	--
08...	1157	80513	40.0	175	141	7.4	738	19.8	6.2	71	--
08...	1158	80513	41.0	175	143	7.2	738	18.9	5.8	64	--
08...	1159	80513	43.0	175	143	7.1	738	18.0	4.8	53	--
08...	1200	80513	44.0	175	143	7.1	738	17.3	4.1	44	--
08...	1201	80513	47.0	175	143	7.0	738	16.1	2.3	24	--
08...	1202	80513	50.0	175	141	6.9	738	14.7	1.7	17	--
08...	1203	80513	60.0	175	135	6.9	738	13.4	1.6	16	--
08...	1204	80513	69.0	175	134	6.9	738	12.4	2.2	22	--
08...	1205	80513	80.0	175	131	6.9	738	11.7	2.8	27	--
08...	1206	80513	90.0	175	129	6.9	738	11.0	3.5	33	--
08...	1207	80513	100	175	126	6.9	738	10.4	3.9	36	--
08...	1208	80513	110	175	124	6.9	738	9.9	4.0	36	--
08...	1209	80513	120	175	122	6.8	738	9.3	3.6	32	--
08...	1210	80513	130	175	123	6.8	738	8.8	3.1	27	--
08...	1211	80513	140	175	123	6.8	738	8.4	2.2	19	--
08...	1212	80513	150	175	125	6.8	738	8.1	1.2	10	--
08...	1213	80513	160	175	127	6.7	738	8.0	.4	4	--
08...	1214	80513	170	175	130	6.8	738	7.9	.1	1	--
08...	1215	80513	175	175	133	6.8	738	7.8	.1	1	--
NOV											
04...	1133	80513	.00	175	139	7.4	738	15.9	8.3	87	4.30
04...	1134	80513	10.0	175	139	7.5	738	15.9	8.3	86	--
04...	1135	80513	20.0	175	138	7.5	738	15.9	8.2	86	--
04...	1136	80513	30.0	175	139	7.5	738	15.9	8.2	85	--
04...	1137	80513	40.0	175	139	7.6	738	16.0	8.1	85	--
04...	1138	80513	50.0	175	139	7.5	738	16.0	8.0	84	--
04...	1140	80513	57.0	175	139	7.2	738	15.7	5.2	54	--
04...	1141	80513	58.0	175	140	6.8	738	14.8	1.5	15	--
04...	1142	80513	60.0	175	139	6.7	738	13.4	.6	6	--
04...	1143	80513	70.0	175	136	6.7	738	12.4	1.0	10	--
04...	1144	80513	80.0	175	133	6.7	738	11.6	1.8	17	--
04...	1145	80513	90.0	175	131	6.7	738	11.0	2.2	21	--
04...	1146	80513	100	175	128	6.7	738	10.4	2.8	25	--
04...	1147	80513	110	175	126	6.6	738	9.8	2.5	23	--
04...	1148	80513	120	175	125	6.6	738	9.4	1.8	17	--
04...	1149	80513	130	175	126	6.6	738	8.9	1.1	10	--
04...	1150	80513	140	175	127	6.6	738	8.6	.5	4	--
04...	1151	80513	150	175	127	6.5	738	8.4	.2	1	--
04...	1152	80513	160	175	132	6.6	738	8.2	.1	1	--
04...	1153	80513	170	175	135	6.6	738	8.1	.1	1	--
04...	1154	80513	175	175	136	6.7	738	8.0	.1	1	--
MAR											
04...	1247	80513	.00	189	134	7.7	728	8.2	11.3	100	3.50
04...	1248	80513	10.0	189	134	7.7	728	8.1	11.1	98	--
04...	1249	80513	20.0	189	134	7.6	728	8.1	11.0	97	--
04...	1250	80513	30.0	189	134	7.6	728	8.0	10.9	96	--
04...	1251	80513	40.0	189	134	7.6	728	8.0	10.8	96	--
04...	1252	80513	50.0	189	134	7.6	728	8.0	10.8	95	--
04...	1253	80513	60.0	189	134	7.6	728	7.9	10.7	94	--
04...	1254	80513	70.0	189	134	7.5	728	7.7	10.3	91	--
04...	1255	80513	80.0	189	134	7.4	728	7.6	10.1	88	--
04...	1256	80513	90.0	189	133	7.4	728	7.5	9.9	86	--
04...	1257	80513	100	189	133	7.4	728	7.4	9.9	86	--
04...	1258	80513	110	189	133	7.4	728	7.4	9.8	86	--
04...	1259	80513	120	189	134	7.3	728	7.4	9.8	85	--
04...	1300	80513	130	189	134	7.3	728	7.4	9.7	84	--
04...	1301	80513	140	189	134	7.3	728	7.3	9.6	83	--
04...	1302	80513	150	189	135	7.3	728	7.3	9.3	81	--
04...	1303	80513	160	189	137	7.2	728	7.3	8.8	76	--
04...	1304	80513	170	189	138	7.2	728	7.3	8.4	73	--
04...	1305	80513	180	189	138	7.1	728	7.3	8.2	72	--
04...	1306	80513	189	189	138	7.1	728	7.3	8.1	70	--

WHITE RIVER BASIN

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07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE OF WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
AUG										
11...	1224	80513	.00	185	146	8.3	738	28.8	7.4	99
11...	1225	80513	10.0	185	147	8.4	738	28.5	6.7	89
11...	1226	80513	20.0	185	147	8.4	738	28.4	6.5	87
11...	1228	80513	28.0	185	146	8.4	738	27.5	7.6	100
11...	1229	80513	30.0	185	145	8.5	738	26.6	8.3	106
11...	1230	80513	31.0	185	144	8.5	738	25.2	9.1	115
11...	1231	80513	32.0	185	144	8.5	738	23.5	9.8	119
11...	1232	80513	33.0	185	143	8.4	738	22.3	9.6	114
11...	1233	80513	34.0	185	143	8.4	738	21.5	9.6	112
11...	1234	80513	35.0	185	143	8.3	738	20.6	9.4	108
11...	1235	80513	37.0	185	143	8.0	738	19.1	8.9	99
11...	1236	80513	39.0	185	144	7.7	738	17.8	8.1	88
11...	1237	80513	40.0	185	143	7.6	738	17.2	8.0	86
11...	1238	80513	42.0	185	141	7.4	738	15.9	6.9	72
11...	1239	80513	46.0	185	142	7.2	738	14.7	6.5	66
11...	1240	80513	50.0	185	141	7.1	738	14.1	5.9	60
11...	1241	80513	55.0	185	141	7.0	738	13.3	5.3	52
11...	1242	80513	60.0	185	141	6.9	738	12.8	4.9	47
11...	1243	80513	70.0	185	140	6.9	738	11.9	4.8	46
11...	1244	80513	80.0	185	139	6.9	738	10.9	5.2	48
11...	1245	80513	90.0	185	139	6.9	738	10.3	5.4	50
11...	1246	80513	100	185	138	6.8	738	9.8	5.5	50
11...	1247	80513	110	185	137	6.8	738	9.4	5.4	48
11...	1248	80513	120	185	136	6.8	738	9.1	5.3	47
11...	1249	80513	130	185	136	6.8	738	8.8	5.0	44
11...	1250	80513	140	185	137	6.8	738	8.6	4.8	43
11...	1251	80513	150	185	137	6.7	738	8.3	4.6	40
11...	1252	80513	160	185	138	6.7	738	8.1	4.2	36
11...	1253	80513	170	185	139	6.7	738	8.1	3.4	30
11...	1254	80513	180	185	140	6.7	738	8.0	2.9	26
11...	1255	80513	185	185	141	6.6	738	8.0	2.5	22
SEP										
07...	0915	80513	.00	177	143	--	740	28.9	8.2	109
07...	0916	80513	10.0	177	144	--	740	28.9	8.2	110
07...	0917	80513	20.0	177	144	--	740	28.9	8.2	110
07...	0919	80513	28.0	177	143	--	740	28.1	8.7	115
07...	0920	80513	30.0	177	142	--	740	27.3	9.7	127
07...	0921	80513	31.0	177	141	--	740	26.7	10.7	137
07...	0922	80513	32.0	177	139	--	740	24.9	11.5	143
07...	0923	80513	33.0	177	139	--	740	23.9	11.5	140
07...	0924	80513	34.0	177	139	--	740	22.8	11.1	133
07...	0925	80513	35.0	177	139	--	740	21.7	10.8	126
07...	0926	80513	36.0	177	138	--	740	20.4	10.2	117
07...	0927	80513	37.0	177	138	--	740	19.6	9.8	110
07...	0929	80513	39.0	177	138	--	740	18.3	8.6	94
07...	0930	80513	40.0	177	138	--	740	17.5	7.9	85
07...	0931	80513	41.0	177	137	--	740	16.6	7.3	77
07...	0932	80513	45.0	177	137	--	740	15.3	5.9	61
07...	0933	80513	50.0	177	136	--	740	14.4	4.9	49
07...	0934	80513	55.0	177	136	--	740	13.5	4.0	39
07...	0935	80513	60.0	177	136	--	740	13.1	3.8	38
07...	0936	80513	70.0	177	135	--	740	12.1	3.8	37
07...	0937	80513	80.0	177	134	--	740	11.3	4.3	41
07...	0938	80513	90.0	177	134	--	740	10.7	4.4	41
07...	0939	80513	100	177	132	--	740	10.2	4.8	44
07...	0940	80513	110	177	130	--	740	9.7	4.6	42
07...	0941	80513	120	177	130	--	740	9.3	4.2	38
07...	0942	80513	130	177	130	--	740	9.0	3.8	34
07...	0943	80513	140	177	131	--	740	8.8	3.5	31
07...	0944	80513	150	177	132	--	740	8.6	3.0	26
07...	0945	80513	160	177	133	--	740	8.4	2.4	21
07...	0946	80513	170	177	135	--	740	8.4	1.1	10
07...	0947	80513	177	177	136	--	740	8.3	.9	8

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM, NEAR EUREKA SPRINGS

LOCATION.--Lat 36°25'15", long 93°50'50", in NW1/4NW1/4 sec.10, T.20 N., R.27 W., Carroll County, Hydrologic Unit 11010001, at Beaver Dam, 6.0 mi west of Eureka Springs, and at mile 609.0.

DRAINAGE AREA.--1,192 mi².

PERIOD OF RECORD.--Water years 1946, 1950-53, October 1967 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 OF WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT								
08...	1235	80513	125	7.1	742	10.6	9.7	89
NOV								
04...	1214	80513	134	7.1	743	11.5	9.6	91
MAR								
04...	1229	80513	155	7.6	734	8.4	12.1	108
AUG								
11...	1317	80513	142	6.9	743	12.8	6.7	65
SEP								
07...	1012	80513	133	--	742	11.3	7.0	65

WHITE RIVER BASIN

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07049693 WHITE RIVER AT CAMPGROUND E NEAR BUSCH

LOCATION.--Lat 36°25'15", long 90°29'05", in NW1/4SE1/4 sec.2, T.20 N., R.27 W., Carroll County, Hydrologic Unit 11010001, at Campground E, 2.2 mi downstream from Beaver Dam, and 2.5 mi south of Busch.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.3	4.7	6.3	12.0	7.1	9.4	8.5	4.5	6.2	---	---	---
2	7.5	4.7	6.1	11.7	7.9	10.1	7.3	4.8	5.8	---	---	---
3	9.9	4.5	7.3	11.7	9.2	10.7	7.4	5.5	6.2	---	---	---
4	12.6	5.4	9.7	11.0	8.4	9.9	10.5	6.7	7.9	---	---	---
5	12.4	4.3	8.0	10.4	7.5	9.5	11.3	6.0	8.1	---	---	---
6	12.1	5.1	8.0	9.6	8.0	9.0	8.0	6.1	7.0	---	---	---
7	12.4	4.8	6.9	9.2	5.4	7.0	7.9	6.3	7.1	---	---	---
8	10.5	5.1	6.6	10.9	6.4	8.6	9.3	6.1	7.2	---	---	---
9	10.4	5.3	7.0	9.6	6.8	8.7	8.8	6.0	7.2	---	---	---
10	11.5	4.9	6.9	8.9	7.4	8.3	9.9	8.2	9.1	---	---	---
11	13.0	4.8	7.4	9.6	7.5	8.8	9.7	7.6	8.8	---	---	---
12	7.6	4.4	5.9	9.4	7.8	8.8	9.6	7.3	8.5	---	---	---
13	9.1	5.6	7.3	10.5	8.6	9.5	10.7	8.1	9.5	---	---	---
14	12.6	5.4	9.0	9.9	7.1	8.7	10.5	8.4	9.6	---	---	---
15	10.1	4.1	6.8	9.6	4.3	6.7	10.3	7.9	9.4	---	---	---
16	6.0	4.1	4.9	8.5	6.6	7.4	9.7	6.2	7.9	---	---	---
17	6.4	4.0	4.9	11.1	8.2	9.6	10.2	7.2	8.8	---	---	---
18	10.8	5.3	7.9	10.9	8.8	10.0	10.6	8.2	9.7	---	---	---
19	10.8	4.0	8.4	10.9	8.2	9.8	10.0	7.7	9.2	---	---	---
20	7.8	3.7	6.0	10.2	5.5	8.0	10.6	7.8	9.4	---	---	---
21	7.6	3.8	5.8	8.1	4.7	6.4	10.8	9.2	10.1	---	---	---
22	6.6	3.6	4.8	8.9	5.6	6.9	11.4	7.6	9.3	---	---	---
23	6.2	3.5	4.9	8.9	5.9	7.3	12.2	11.1	11.7	---	---	---
24	7.8	3.6	5.5	9.8	5.8	7.0	11.9	10.2	10.9	---	---	---
25	8.9	6.3	7.7	10.2	6.6	8.1	13.4	10.7	12.2	---	---	---
26	11.2	4.3	8.3	10.0	6.5	8.5	14.0	9.6	12.7	---	---	---
27	9.9	3.6	6.1	9.6	7.4	8.7	13.0	8.9	11.0	---	---	---
28	9.3	3.3	5.2	8.9	6.7	7.7	12.9	8.5	10.7	---	---	---
29	11.4	4.0	8.1	9.1	5.4	7.4	12.3	10.1	10.9	---	---	---
30	9.9	3.9	7.2	8.8	5.4	6.9	12.8	9.9	11.3	---	---	---
31	10.5	4.1	7.6	---	---	---	12.1	9.9	11.1	---	---	---
MONTH	13.0	3.3	6.9	12.0	4.3	8.4	14.0	4.5	9.2	---	---	---

WHITE RIVER BASIN

07049693 WHITE RIVER AT CAMPGROUND E NEAR BUSCH--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	12.7	7.9	8.8	12.0	6.2	7.7	9.4	4.4	6.1
2	10.9	9.3	9.9	11.1	7.8	8.9	10.3	6.1	7.6	9.7	5.2	6.4
3	10.9	9.1	9.8	12.3	7.7	9.1	8.8	6.0	7.2	9.0	5.1	6.5
4	10.7	9.1	9.6	13.5	7.8	9.5	11.2	6.3	7.8	9.0	5.0	5.9
5	10.3	9.1	9.5	11.6	7.9	8.8	11.1	6.0	7.7	8.3	4.4	5.8
6	10.3	9.0	9.5	11.0	7.5	8.4	11.2	5.5	7.0	9.1	4.8	6.4
7	9.9	9.2	9.6	10.9	7.2	8.2	9.9	5.4	6.9	7.6	4.9	5.9
8	10.0	8.8	9.4	11.6	7.1	8.3	11.1	5.7	7.0	10.7	5.1	6.6
9	9.9	9.0	9.5	11.6	7.0	8.3	9.0	5.1	6.8	11.2	5.0	6.7
10	10.2	8.8	9.4	11.4	7.1	8.2	10.8	6.3	7.7	11.3	5.1	7.1
11	9.9	8.8	9.3	11.6	7.2	8.4	9.1	6.6	7.7	7.3	5.1	6.1
12	10.0	9.0	9.5	13.1	6.9	8.9	8.3	6.2	7.3	---	---	---
13	11.8	8.7	9.4	11.2	7.2	8.2	10.7	6.0	7.3	---	---	---
14	12.9	8.7	9.6	11.3	6.8	8.1	11.0	5.3	7.3	---	---	---
15	9.8	8.6	9.1	11.3	7.1	8.0	10.7	5.5	7.4	---	---	---
16	9.5	8.5	9.0	12.1	7.3	8.3	9.3	5.5	7.4	9.1	5.1	6.3
17	9.9	8.3	8.9	10.6	7.4	8.2	10.4	5.6	7.4	9.3	4.7	6.1
18	9.9	8.7	9.1	10.6	7.0	8.0	8.7	5.1	6.4	9.2	4.7	6.1
19	13.3	8.6	9.6	---	---	---	8.9	4.3	6.0	9.1	4.7	6.3
20	12.7	8.8	9.9	9.0	6.6	7.3	8.8	4.9	6.4	9.7	4.5	6.3
21	11.5	8.7	9.3	8.1	6.5	6.8	9.6	5.1	6.4	9.3	4.8	6.2
22	14.2	8.6	9.6	8.8	6.3	6.9	9.1	4.4	6.1	8.0	4.7	5.9
23	10.8	8.4	9.3	9.2	6.1	6.9	9.7	5.3	6.7	8.3	4.9	5.9
24	9.8	8.3	9.0	10.1	6.2	7.3	9.7	5.2	6.6	9.3	5.2	6.7
25	9.9	8.3	8.9	10.7	6.3	7.7	10.0	5.4	6.5	8.9	4.2	5.7
26	9.9	8.2	8.9	12.5	6.6	8.3	8.6	4.4	5.9	9.4	3.8	5.9
27	14.7	8.3	11.5	10.3	6.2	7.2	9.3	5.5	6.7	9.9	4.8	6.8
28	14.3	9.9	12.1	8.8	6.3	7.2	9.2	5.2	6.4	8.2	3.9	5.2
29	12.6	8.0	9.8	10.0	6.1	7.4	10.3	4.3	6.7	8.9	3.8	5.4
30	9.9	7.6	8.3	10.2	6.0	7.1	9.7	5.3	6.7	10.0	4.2	5.7
31	---	---	---	10.8	6.5	7.4	9.0	5.1	6.3	---	---	---
MONTH	---	---	---	---	---	---	12.0	4.3	6.9	---	---	---

WHITE RIVER BASIN

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07049693 WHITE RIVER AT CAMPGROUND E NEAR BUSCH--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.3	9.5	9.8	13.0	10.1	11.4	11.0	9.4	10.1	---	---	---
2	10.3	9.5	9.8	10.5	8.9	9.7	10.2	8.5	9.7	---	---	---
3	13.6	9.7	11.3	9.0	8.0	8.5	10.1	9.2	9.7	---	---	---
4	14.6	9.7	12.6	10.2	7.1	8.7	11.1	8.5	9.8	---	---	---
5	14.5	9.6	11.6	10.5	9.2	9.8	10.0	7.4	8.9	---	---	---
6	14.8	9.7	11.1	9.5	8.2	8.6	10.1	9.4	9.7	---	---	---
7	12.6	9.8	10.6	10.0	8.2	9.3	9.8	8.2	9.4	---	---	---
8	11.5	9.9	10.5	11.2	8.3	9.8	9.7	9.0	9.4	---	---	---
9	12.7	10.0	10.9	9.8	8.6	9.4	9.3	8.4	8.7	---	---	---
10	12.5	10.0	10.8	9.6	7.9	8.7	8.5	7.2	7.5	---	---	---
11	15.0	10.2	11.4	8.4	7.5	8.0	7.5	6.9	7.3	---	---	---
12	12.2	9.9	10.8	8.2	7.2	7.7	7.4	6.9	7.1	---	---	---
13	12.0	9.7	11.1	7.8	7.1	7.4	8.9	6.4	7.4	---	---	---
14	11.5	9.2	10.2	8.2	7.3	7.8	9.0	6.0	7.4	---	---	---
15	10.1	8.5	9.5	10.0	6.6	8.8	9.4	6.3	7.8	---	---	---
16	10.1	9.1	9.7	10.9	6.8	8.7	9.4	6.5	8.2	---	---	---
17	11.2	9.1	9.8	8.7	5.9	7.5	9.7	7.5	8.5	---	---	---
18	12.1	8.5	10.1	10.0	6.9	8.4	9.4	6.5	8.0	---	---	---
19	12.0	8.6	10.3	10.4	7.1	8.7	10.0	6.8	8.4	---	---	---
20	12.6	9.0	10.9	11.3	7.6	9.8	9.0	7.7	8.1	---	---	---
21	12.0	9.2	10.2	10.3	9.0	9.8	7.7	7.1	7.4	---	---	---
22	10.4	9.7	10.0	11.1	8.6	9.7	8.0	7.7	7.9	---	---	---
23	10.2	9.8	10.0	10.7	8.2	9.3	7.9	7.4	7.8	---	---	---
24	11.2	10.0	10.5	11.0	8.0	9.4	7.9	7.2	7.6	---	---	---
25	11.1	10.3	10.5	10.5	8.5	9.5	7.8	7.4	7.6	---	---	---
26	10.3	8.5	9.3	11.8	9.3	10.7	8.6	7.3	7.6	---	---	---
27	10.3	8.5	9.4	10.6	8.2	9.3	8.6	7.1	7.9	---	---	---
28	12.0	9.7	10.3	10.7	10.2	10.5	8.5	6.5	7.4	---	---	---
29	11.9	8.8	10.3	11.0	10.0	10.4	9.2	8.3	8.6	---	---	---
30	10.9	9.2	10.0	10.0	9.6	9.8	8.7	7.3	8.1	---	---	---
31	12.9	9.9	11.3	---	---	---	8.6	8.2	8.4	---	---	---
MONTH	15.0	8.5	10.5	13.0	5.9	9.2	11.1	6.0	8.3	---	---	---

WHITE RIVER BASIN

07049693 WHITE RIVER AT CAMPGROUND E NEAR BUSCH--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	11.0	9.0	9.5	17.2	9.5	11.5	15.0	9.6	10.5
2	8.8	8.3	8.4	14.4	9.1	10.1	14.0	9.6	10.8	15.8	9.6	10.5
3	8.7	8.3	8.5	15.4	9.1	10.4	12.4	9.4	10.7	14.5	9.6	10.3
4	8.7	8.3	8.5	17.0	8.9	10.9	15.3	9.7	11.2	13.8	9.7	10.3
5	8.8	8.3	8.5	13.5	8.9	9.7	16.0	9.5	11.3	12.6	9.6	10.2
6	8.8	8.0	8.5	13.6	9.0	9.7	15.9	9.4	11.0	14.7	9.7	10.5
7	8.8	8.0	8.5	13.3	9.0	9.8	15.4	9.3	10.7	10.5	9.8	10.0
8	8.9	8.5	8.6	11.8	9.0	9.7	15.6	9.4	10.8	15.7	9.7	11.1
9	9.2	8.5	8.7	14.0	9.1	9.9	12.1	9.3	10.2	15.5	9.7	11.0
10	9.0	8.6	8.8	15.0	9.1	10.1	15.8	9.5	11.0	15.3	9.3	11.2
11	9.7	8.7	8.9	12.4	9.2	10.1	13.7	9.6	10.8	12.5	9.6	10.9
12	9.1	8.7	8.9	16.2	9.3	11.3	12.2	9.3	10.5	---	---	---
13	11.4	8.7	9.0	14.7	9.0	10.4	14.2	9.5	10.4	---	---	---
14	12.8	8.7	9.7	15.6	9.2	10.4	15.1	9.6	11.0	---	---	---
15	9.1	8.6	8.9	14.5	9.1	10.2	14.8	9.5	10.8	---	---	---
16	9.2	8.8	8.9	14.3	9.2	10.0	13.4	9.6	10.9	12.1	9.8	11.0
17	9.2	8.7	8.9	15.0	9.2	10.0	15.5	9.4	11.5	14.1	10.0	11.4
18	9.5	8.9	9.1	15.0	9.1	10.2	12.8	9.5	10.1	14.7	10.1	11.7
19	11.6	8.9	9.3	15.3	9.3	10.4	12.3	9.5	10.0	15.2	10.1	11.3
20	12.2	8.9	9.5	13.1	9.2	9.9	12.6	9.7	10.3	15.3	10.1	11.3
21	11.4	8.8	9.6	10.8	9.3	9.6	13.8	9.5	10.5	14.7	9.8	11.3
22	12.7	8.8	9.5	12.9	9.3	9.9	14.0	9.5	10.5	13.2	9.8	10.9
23	10.2	8.9	9.2	12.1	9.3	10.0	14.9	9.6	10.7	12.8	9.9	10.6
24	9.6	8.9	9.2	13.5	9.4	10.5	15.6	9.4	10.6	14.0	.0	11.0
25	9.5	8.9	9.2	16.4	9.3	11.2	15.2	9.5	10.4	14.6	9.7	10.9
26	10.2	8.9	9.2	16.8	9.7	11.5	13.8	9.6	10.3	15.6	9.8	11.3
27	17.9	8.9	13.0	14.9	9.2	10.6	14.1	9.5	10.4	15.6	9.9	11.8
28	18.9	13.6	16.4	12.5	9.2	10.0	13.1	9.6	10.3	14.1	9.8	10.5
29	17.7	9.1	12.1	15.2	9.4	10.7	16.9	9.8	11.4	14.7	9.7	10.8
30	12.6	9.0	9.8	15.2	9.4	10.6	15.1	9.6	10.6	14.5	9.9	11.0
31	---	---	---	17.2	9.5	11.5	13.5	9.5	10.1	---	---	---
MONTH	---	---	---	17.2	8.9	10.3	17.2	9.3	10.7	---	---	---

WHITE RIVER BASIN

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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 fair.

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	12	12	9.8	26	5.0	151	152	27	17	11	10	e8.5
2	33	14	8.2	24	4.4	129	123	26	15	140	11	8.0
3	10	14	12	22	4.0	110	109	25	14	90	19	14
4	10	11	15	725	3.5	96	95	23	14	47	61	e10
5	12	14	16	1940	3.3	100	85	22	16	34	69	e9.6
6	11	12	14	613	3.0	143	76	31	14	27	38	e9.2
7	9.1	11	14	369	2.9	236	70	65	14	23	28	e9.0
8	12	11	27	588	2.8	401	64	41	15	22	22	e8.6
9	19	12	49	419	2.5	241	58	104	13	19	20	e8.2
10	18	12	43	285	3.0	178	52	127	12	17	18	7.8
11	16	9.6	35	218	912	148	49	94	12	17	16	7.9
12	17	11	28	176	325	123	46	72	12	18	13	8.0
13	30	15	24	143	227	109	44	58	12	20	13	11
14	36	28	22	122	177	97	40	48	13	18	13	12
15	30	32	18	107	150	88	e38	39	13	16	12	11
16	24	29	15	97	148	166	36	35	12	15	12	11
17	20	24	14	89	186	244	34	31	11	15	11	10
18	18	17	14	83	201	217	33	28	11	14	10	9.4
19	18	13	12	75	169	414	33	25	11	13	10	9.2
20	16	12	12	68	147	404	31	23	11	13	9.7	16
21	14	10	13	63	127	282	30	22	12	11	9.5	18
22	13	10	12	59	112	215	28	21	12	11	9.0	15
23	13	9.7	11	39	98	175	27	20	11	11	10	13
24	13	8.8	25	16	87	149	27	21	10	11	9.8	11
25	14	7.3	54	15	80	128	27	21	9.6	11	8.5	9.9
26	17	7.0	47	18	161	111	27	22	9.5	12	8.7	9.2
27	15	6.9	41	11	243	102	38	50	9.7	12	9.7	10
28	13	8.5	37	7.8	177	102	36	24	11	13	9.7	9.9
29	13	9.5	33	6.1	---	88	31	21	10	12	10	8.6
30	12	11	29	5.5	---	80	30	19	12	11	e9.5	8.4
31	12	---	27	5.1	---	204	---	18	---	11	e9.1	---
TOTAL	520.1	402.3	731.0	6434.5	3761.4	5431	1569	1203	368.8	715	519.2	311.4
MEAN	16.8	13.4	23.6	208	134	175	52.3	38.8	12.3	23.1	16.7	10.4
MAX	36	32	54	1940	912	414	152	127	17	140	69	18
MIN	9.1	6.9	8.2	5.1	2.5	80	27	18	9.5	11	8.5	7.8
AC-FT	1030	798	1450	12760	7460	10770	3110	2390	732	1420	1030	618
CFSM	.32	.25	.45	3.93	2.54	3.32	.99	.73	.23	.44	.32	.20
IN.	.37	.28	.52	4.53	2.65	3.83	1.11	.85	.26	.50	.37	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998
MEAN	14.9	85.3	46.4	88.9	73.5	112
MAX	21.3	233	68.3	208	134	175
(WY)	1994	1997	1997	1998	1998	1998
MIN	7.71	13.4	23.6	21.9	27.3	52.5
(WY)	1995	1998	1998	1997	1996	1995

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

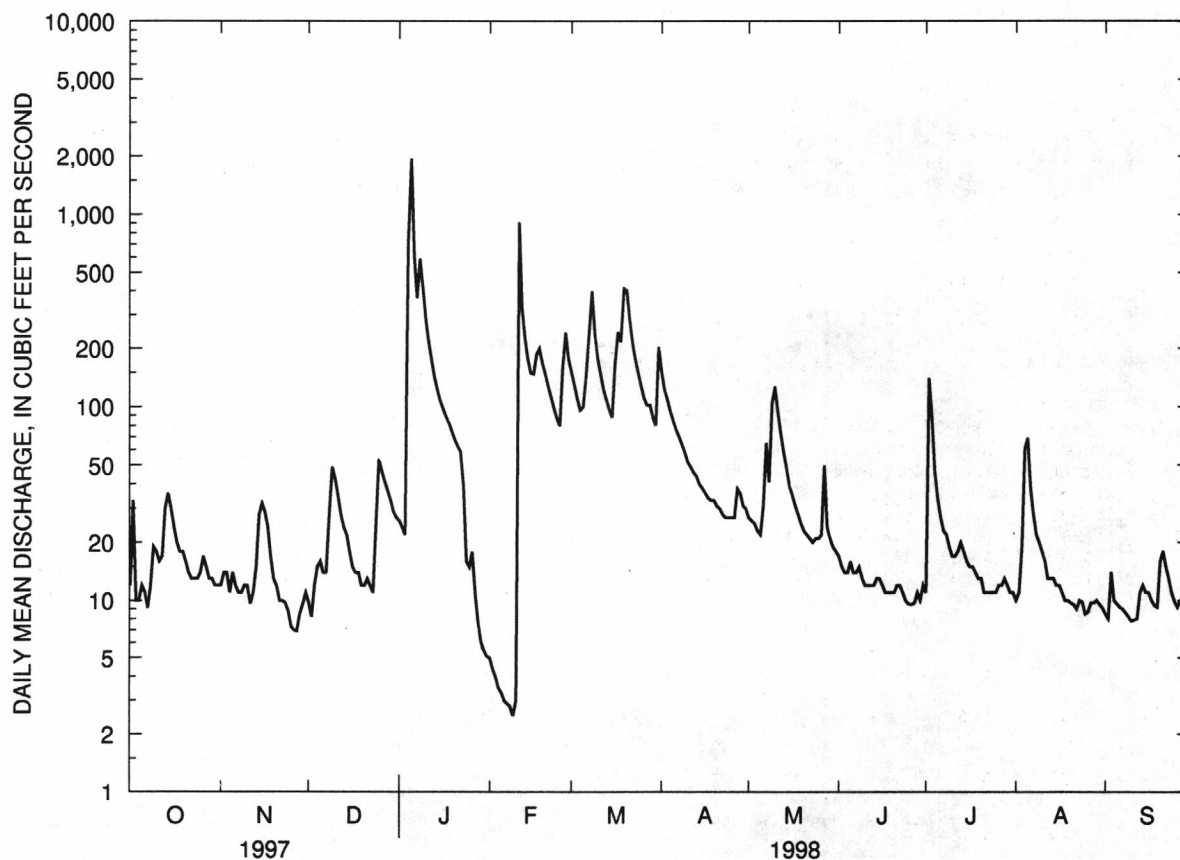
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1993 - 1998

ANNUAL TOTAL	13634.2		21966.7		
ANNUAL MEAN	37.4		60.2		55.1
HIGHEST ANNUAL MEAN					63.0
LOWEST ANNUAL MEAN					40.2
HIGHEST DAILY MEAN	696	Feb 21	1940	Jan 5	1940
LOWEST DAILY MEAN	6.9	Nov 27	2.5	Feb 9	2.5
ANNUAL SEVEN-DAY MINIMUM	8.2	Nov 23	3.0	Feb 4	3.0
INSTANTANEOUS PEAK FLOW			^a 3740	Jan 5	^a 3740
INSTANTANEOUS PEAK STAGE			10.05	Jan 5	10.05
INSTANTANEOUS LOW FLOW			2.3	Feb 9,10	2.3
ANNUAL RUNOFF (AC-FT)	27040		43570		39880
ANNUAL RUNOFF (CFSM)	.71		1.14		1.04
ANNUAL RUNOFF (INCHES)	9.61		15.48		14.17
10 PERCENT EXCEEDS	81		148		127
50 PERCENT EXCEEDS	21		18		26
90 PERCENT EXCEEDS	10		9.2		9.7

^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 1997 TO SEPTEMBER 1998

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) (MG/L) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
OCT												
15...	0830	80513	80020	31	380	8.1	760	14.8	10.3	102	83	30
NOV												
19...	0830	80513	80020	13	385	8.4	743	8.1	10.1	88	220	170
DEC												
17...	1500	80513	80020	14	372	8.3	739	10.4	12.9	119	K16	K1
JAN												
15...	0840	80513	80020	110	317	8.1	770	8.5	10.9	92	62	26
FEB												
10...	0755	80513	80020	2.7	340	8.1	735	9.0	10.4	93	27	K17
MAR												
17...	0845	80513	80020	223	273	7.9	729	10.0	10.6	98	K1300	1400
APR												
14...	1430	80513	80020	40	290	8.9	733	19.3	13.8	156	44	48
27...	1135	80513	80020	40	320	8.0	733	18.1	14.1	155	--	--
MAY												
13...	0635	80513	80020	61	318	8.1	770	15.7	7.0	70	170	140
25...	0940	80513	80020	22	305	8.1	760	18.0	7.4	79	--	--
JUN												
09...	1550	80513	80020	13	331	8.2	738	23.7	8.9	108	K13	K12
22...	1025	80513	80020	12	345	8.0	742	22.0	8.9	105	--	--
JUL												
08...	1435	80513	80020	22	344	8.1	739	23.4	5.0	61	240	230
22...	1115	80513	80020	11	323	8.2	739	26.6	8.8	114	--	--
AUG												
04...	1450	80513	80020	15	327	8.3	740	26.7	8.8	113	560	640
25...	1135	80513	80020	8.7	334	8.3	--	25.9	7.0	--	--	--
SEP												
10...	0925	80513	80020	8.1	341	8.0	742	19.6	7.3	82	K1200	1200
21...	1200	80513	80020	12	340	7.9	738	20.5	8.6	99	--	--
DATE		STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00932)	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												
15...	210	190	26	69	3.5	4.2	5	.1	2.2	161	0	197
NOV												
19...	170	180	19	67	3.4	4.1	5	.1	2.1	160	0	197
DEC												
17...	30	170	23	63	3.5	4.4	5	.1	2.1	147	0	181
JAN												
15...	170	150	25	55	2.9	3.7	5	.1	2.4	122	0	151

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO SODIUM PERCENT (00932)	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)	
FEB												
10...	K23	160	11	59	3.2	4.1	5	.1	2.0	150	0	181
MAR												
17...	K3700	130	18	46	3.0	3.6	6	.1	2.8	108	0	132
APR												
14...	K7	140	25	52	2.9	3.5	5	.1	2.2	114	0	141
MAY												
13...	290	150	14	54	2.8	3.4	5	.1	2.4	131	0	160
JUN												
09...	48	150	18	57	2.9	3.8	5	.1	2.1	136	0	166
JUL												
08...	420	150	16	57	2.7	3.8	5	.1	2.5	139	0	169
AUG												
04...	1500	150	16	55	2.6	4.2	6	.1	2.6	132	0	162
SEP												
10...	370	160	22	61	2.7	3.9	5	.1	2.3	140	0	172
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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT												
15...	161	6.1	9.4	<.10	11	222	218	.30	18.6	--	--	<.010
NOV												
19...	161	6.1	9.8	<.10	9.1	224	217	.30	7.86	--	--	<.010
DEC												
17...	148	6.9	9.9	<.10	8.3	221	206	.30	8.35	--	--	<.010
JAN												
15...	124	4.1	7.6	<.10	9.6	187	184	.25	55.5	--	--	<.010
FEB												
10...	148	5.3	8.9	<.10	5.6	192	194	.26	1.40	--	--	<.010
MAR												
17...	108	5.4	6.7	<.10	8.5	165	157	.22	99.3	3.58	16	.019
APR												
14...	115	4.2	7.4	<.10	5.1	164	159	.22	17.7	--	--	<.010
MAY												
13...	131	4.8	5.8	<.10	8.5	184	174	.25	30.3	3.15	14	.012
JUN												
09...	136	4.7	8.1	<.10	12	197	184	.27	6.91	--	--	<.010
JUL												
08...	139	4.3	7.7	<.10	12	203	187	.28	12.1	--	--	<.010
AUG												
04...	133	4.1	8.8	.11	12	194	179	.26	7.86	2.16	9.6	.010
SEP												
10...	141	3.7	9.5	<.10	12	205	189	.28	4.48	--	--	<.010

WHITE RIVER BASIN

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07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

DATE	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. (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...	--	3.49	<.015	--	--	--	<.20	<.20	--	--	.021	.026
NOV												
19...	--	4.28	.201	.26	--	--	<.10	<.10	--	--	.032	.014
DEC												
17...	--	4.28	<.020	--	--	--	.12	.17	4.4	4.5	.034	.028
JAN												
15...	--	5.51	<.020	--	--	--	.11	.16	5.6	5.7	.055	.066
FEB												
10...	--	3.94	.025	.03	--	--	<.10	<.10	--	--	.047	.027
MAR												
17...	.06	3.60	<.020	--	--	--	.39	.26	4.0	3.9	.220	.179
APR												
14...	--	2.94	.027	.03	.07	--	.10	<.10	3.0	--	.031	.019
MAY												
13...	.04	3.16	.056	.07	.10	.06	.15	.11	3.3	3.3	.065	.132
JUN												
09...	--	2.75	.032	.04	.24	--	.28	<.10	3.0	--	.060	.040
JUL												
08...	--	3.09	<.020	--	--	--	<.10	<.10	--	--	.040	.034
AUG												
04...	.03	2.17	.024	.03	.12	.12	.14	.15	2.3	2.3	.031	.025
SEP												
10...	--	2.08	.053	.07	--	--	<.10	<.10	--	--	.033	.042
DATE	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)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DI- AZINON, WAT FLT 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)
OCT												
15...	.035	.11	<3.0	<1.0	65	5.4	65	--	--	--	--	--
NOV												
19...	.025	.08	<3.0	<1.0	100	3.5	62	--	--	--	--	--
DEC												
17...	.028	.09	<10	<4.0	81	3.1	88	--	--	--	--	--
JAN												
15...	.057	.17	<10	<4.0	38	11	88	--	--	--	--	--
FEB												
10...	.037	.11	<10	<4.0	34	.25	77	--	--	--	--	--
MAR												
17...	.169	.52	13	<4.0	28	17	94	--	--	--	--	--
APR												
14...	.026	.08	<10	<4.0	15	1.6	87	<.001	<.002	108	<.001	107
27...	--	--	--	--	--	--	--	<.001	<.002	87.9	<.001	89.6
MAY												
13...	.059	.18	<10	5.3	43	7.1	85	E.003	<.002	99.0	<.001	102
25...	--	--	--	--	--	--	--	E.001	<.002	93.5	<.001	92.6

WHITE RIVER BASIN
07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

DATE	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, DIS- 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)	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)
JUN												
09...	.038	.12	<10	<4.0	75	2.6	61	E.004	<.002	78.4	<.001	89.0
22...	--	--	--	--	--	--	--	<.001	<.002	110	<.001	117
JUL												
08...	.047	.14	<10	<4.0	68	4.0	71	<.001	<.002	90.3	<.001	89.1
22...	--	--	--	--	--	--	--	<.001	<.002	72.8	<.001	76.6
AUG												
04...	.038	.12	<10	<4.0	27	1.1	93	<.001	<.002	79.8	<.001	76.2
25...	--	--	--	--	--	--	--	<.001	<.002	84.7	<.001	85.4
SEP												
10...	.048	.15	<10	<4.0	47	1.0	56	<.001	<.002	44.4	<.001	45.8
21...	--	--	--	--	--	--	--	<.001	<.002	111	<.001	100
DATE	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THON, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	PARA- THON, 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)	P,P' DDE DISSOLV (UG/L) (34653)
APR												
14...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
27...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
MAY												
13...	<.004	<.005	E.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	E.0016
25...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0010	<.0030	<.0060
JUN												
09...	<.004	<.005	.004	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0012	<.0030	<.0060
22...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
JUL												
08...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
22...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
AUG												
04...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
25...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	E.0012
SEP												
10...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
21...	<.004	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060

WHITE RIVER BASIN

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07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

DATE	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 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)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
APR											
14...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
27...	<.100	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
MAY											
13...	E.0057	<.0070	.0078	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
25...	<.0180	<.0070	.0077	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JUN											
09...	E.0026	<.0070	E.0023	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
22...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JUL											
08...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
22...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
AUG											
04...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
25...	<.0180	<.0070	<.0050	<.004	<.0030	E.0033	.0043	<.0020	<.0070	<.0020	<.0060
SEP											
10...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
21...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 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)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC PERCENT (91064)	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											
14...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	88.8	<.0030	<.0170
27...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	85.9	<.0030	<.0170
MAY											
13...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	87.2	<.0030	<.0170
25...	<.0020	<.0040	E.0055	<.0040	<.0030	<.0020	<.0030	<.0130	97.6	<.0030	<.0170
JUN											
09...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	91.0	<.0030	<.0170
22...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	126	<.0030	<.0170
JUL											
08...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	105	<.0030	<.0170
22...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	85.5	<.0030	<.0170
AUG											
04...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	99.7	<.0030	<.0170
25...	<.0020	<.0040	<.0100	<.0040	<.0030	E.0033	<.0030	<.0130	101	<.0030	<.0170
SEP											
10...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	50.3	<.0030	<.0170
21...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	115	<.0030	<.0170

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

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											
14...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
27...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY											
13...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
25...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUN											
09...	<.0010	<.0040	<.0030	E.0023	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
22...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL											
08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
22...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
AUG											
04...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
25...	<.0010	<.0040	<.0030	<.0020	E.0018	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
SEP											
10...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
21...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

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 1997 TO SEPTEMBER 1998

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 OF WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
08...	0821	80513	.00	190	198	8.5	742	23.0	9.2	110	3.10
08...	0822	80513	10.0	190	199	8.5	742	23.1	9.2	110	--
08...	0823	80513	20.0	190	199	8.4	742	23.1	9.1	110	--
08...	0824	80513	30.0	190	200	8.0	742	22.4	6.8	81	--
08...	0825	80513	37.0	190	214	7.4	742	21.4	2.3	27	--
08...	0827	80513	39.0	190	223	7.3	742	20.5	.3	3	--
08...	0828	80513	40.0	190	227	7.3	742	19.8	.1	1	--
08...	0829	80513	41.0	190	229	7.3	742	18.9	.1	1	--
08...	0830	80513	42.0	190	229	7.3	742	18.7	.1	1	--
08...	0831	80513	44.0	190	228	7.3	742	17.7	.1	1	--
08...	0832	80513	50.0	190	218	7.3	742	16.6	.1	1	--
08...	0833	80513	60.0	190	198	7.2	742	15.3	.1	1	--
08...	0834	80513	70.0	190	205	7.3	742	14.6	.1	1	--
08...	0835	80513	80.0	190	216	7.3	742	13.9	.1	1	--
08...	0836	80513	90.0	190	209	7.3	742	13.1	.5	5	--
08...	0837	80513	100	190	195	7.3	742	12.4	1.3	12	--
08...	0838	80513	110	190	192	7.3	742	12.0	1.7	16	--
08...	0839	80513	120	190	189	7.3	742	11.4	1.9	18	--
08...	0840	80513	130	190	226	7.3	742	11.2	1.2	11	--
08...	0842	80513	140	190	203	7.2	742	10.6	.5	4	--
08...	0843	80513	150	190	209	7.2	742	10.3	.1	1	--
08...	0844	80513	160	190	222	7.1	742	9.7	.1	1	--
08...	0845	80513	170	190	234	7.1	742	9.1	.1	1	--
08...	0846	80513	180	190	244	7.2	742	8.7	.1	1	--
08...	0847	80513	190	190	245	7.2	742	8.5	.1	0	--
NOV											
04...	1438	80513	.00	170	206	7.2	745	16.1	7.4	77	4.10
04...	1439	80513	10.0	170	205	7.4	745	16.0	7.3	76	--
04...	1440	80513	20.0	170	205	7.4	745	16.0	7.2	74	--
04...	1441	80513	30.0	170	205	7.4	745	16.0	7.1	73	--
04...	1442	80513	40.0	170	205	7.4	745	15.9	7.1	73	--
04...	1443	80513	50.0	170	205	7.4	745	15.9	7.1	73	--
04...	1444	80513	60.0	170	205	7.4	745	15.9	7.1	73	--
04...	1445	80513	70.0	170	205	7.4	745	15.9	7.0	73	--
04...	1446	80513	80.0	170	205	7.4	745	15.9	7.0	73	--
04...	1448	80513	86.0	170	220	7.1	745	15.2	3.0	30	--
04...	1449	80513	90.0	170	233	7.0	745	14.4	.2	2	--
04...	1450	80513	100	170	234	7.0	745	13.5	.1	1	--
04...	1451	80513	110	170	234	7.0	745	12.8	.1	1	--
04...	1452	80513	120	170	233	7.0	745	12.2	.1	1	--
04...	1453	80513	130	170	233	7.0	745	11.5	.1	1	--
04...	1454	80513	140	170	227	6.9	745	10.9	.1	1	--
04...	1455	80513	150	170	236	6.9	745	10.6	.1	1	--
04...	1456	80513	160	170	224	6.9	745	10.1	.1	1	--
04...	1457	80513	170	170	231	6.8	745	9.8	.1	1	--
MAR											
04...	0956	80513	.00	175	219	7.8	735	7.7	11.2	97	4.00
04...	0957	80513	10.0	175	219	7.8	735	7.7	11.1	97	--
04...	0958	80513	20.0	175	217	7.8	735	7.7	11.1	96	--
04...	0959	80513	30.0	175	220	7.9	735	7.7	11.0	96	--
04...	1000	80513	40.0	175	219	7.9	735	7.7	11.0	96	--
04...	1001	80513	50.0	175	216	7.9	735	7.7	11.0	95	--
04...	1002	80513	60.0	175	218	7.8	735	7.7	10.9	95	--
04...	1003	80513	70.0	175	219	7.8	735	7.7	10.6	92	--
04...	1004	80513	80.0	175	219	7.8	735	7.7	10.6	92	--
04...	1005	80513	90.0	175	217	7.8	735	7.7	10.5	92	--
04...	1006	80513	100	175	218	7.8	735	7.6	10.4	90	--
04...	1007	80513	110	175	218	7.7	735	7.6	10.2	88	--
04...	1008	80513	120	175	219	7.7	735	7.6	9.9	86	--
04...	1009	80513	130	175	219	7.6	735	7.6	9.8	85	--
04...	1010	80513	140	175	219	7.6	735	7.5	9.8	85	--
04...	1011	80513	150	175	222	7.6	735	7.5	9.6	83	--
04...	1012	80513	160	175	231	7.6	735	7.4	9.4	81	--
04...	1013	80513	170	175	236	7.5	735	7.3	9.0	77	--
04...	1014	80513	175	175	244	7.5	735	7.3	8.6	74	--

WHITE RIVER BASIN

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
JUN										
01...	1526	80513	.00	173	203	8.4	737	27.3	9.7	127
01...	1527	80513	10.0	173	203	8.5	737	26.8	10.2	133
01...	1528	80513	17.0	173	206	8.5	737	25.9	10.5	134
01...	1529	80513	18.0	173	205	8.5	737	25.0	10.8	136
01...	1530	80513	20.0	173	207	8.6	737	23.7	11.1	136
01...	1531	80513	21.0	173	209	8.6	737	22.4	11.3	135
01...	1532	80513	22.0	173	210	8.6	737	22.1	11.3	135
01...	1533	80513	24.0	173	217	8.6	737	19.8	10.6	121
01...	1534	80513	26.0	173	219	8.6	737	19.0	9.5	106
01...	1535	80513	28.0	173	221	8.4	737	17.7	8.3	90
01...	1536	80513	30.0	173	222	8.3	737	17.0	7.6	81
01...	1537	80513	32.0	173	224	8.1	737	16.5	6.7	71
01...	1538	80513	35.0	173	225	8.0	737	15.9	6.3	66
01...	1539	80513	40.0	173	225	8.0	737	15.5	6.2	64
01...	1540	80513	50.0	173	224	7.9	737	14.1	6.6	66
01...	1541	80513	60.0	173	225	7.8	737	13.0	6.5	64
01...	1542	80513	70.0	173	223	7.8	737	12.0	6.7	64
01...	1543	80513	80.0	173	224	7.7	737	11.6	6.8	65
01...	1545	80513	100	173	223	7.7	737	10.1	7.3	67
01...	1546	80513	110	173	226	7.7	737	9.4	7.5	68
01...	1547	80513	120	173	229	7.7	737	8.8	7.4	66
01...	1548	80513	130	173	230	7.6	737	8.5	6.9	61
01...	1549	80513	140	173	256	7.6	737	8.4	6.5	57
01...	1550	80513	150	173	268	7.5	737	8.2	5.7	50
01...	1551	80513	160	173	270	7.5	737	8.1	5.4	47
01...	1552	80513	170	173	271	7.5	737	8.1	5.3	46
01...	1553	80513	173	173	271	7.4	737	8.1	5.3	46
JUL										
30...	0812	80513	.00	172	190	8.2	745	28.7	8.5	113
30...	0813	80513	10.0	172	190	8.2	745	28.7	8.5	113
30...	0816	80513	20.0	172	190	8.2	745	28.6	8.5	112
30...	0819	80513	30.0	172	190	8.2	745	28.6	8.4	111
30...	0821	80513	23.0	172	203	8.1	745	26.9	7.2	92
30...	0822	80513	24.0	172	214	7.9	745	25.1	6.6	82
30...	0824	80513	25.0	172	219	7.8	745	24.3	5.9	73
30...	0825	80513	26.0	172	220	7.8	745	23.9	5.3	64
30...	0826	80513	27.0	172	224	7.6	745	23.2	4.1	49
30...	0827	80513	30.0	172	232	7.4	745	21.5	1.6	18
30...	0828	80513	32.0	172	236	7.3	745	20.5	.8	9
30...	0829	80513	34.0	172	237	7.3	745	19.9	.3	4
30...	0830	80513	36.0	172	240	7.3	745	18.8	.2	2
30...	0831	80513	40.0	172	241	7.3	745	17.2	.1	1
30...	0837	80513	45.0	172	240	7.4	745	15.8	.3	3
30...	0838	80513	50.0	172	238	7.4	745	14.9	1.0	10
30...	0839	80513	60.0	172	229	7.4	745	13.9	2.1	21
30...	0840	80513	70.0	172	207	7.4	745	13.4	2.9	28
30...	0841	80513	80.0	172	231	7.4	745	13.1	3.0	30
30...	0842	80513	90.0	172	229	7.4	745	12.6	3.1	30
30...	0843	80513	100	172	235	7.4	745	12.0	3.3	31
30...	0844	80513	110	172	233	7.4	745	11.4	4.2	39
30...	0845	80513	120	172	237	7.4	745	10.8	3.8	35
30...	0846	80513	130	172	238	7.3	745	10.2	3.6	33
30...	0847	80513	140	172	238	7.3	745	9.8	3.2	29
30...	0848	80513	150	172	239	7.2	745	9.2	2.4	21
30...	0849	80513	160	172	242	7.2	745	9.0	1.6	14
30...	0850	80513	170	172	246	7.1	745	8.8	1.0	9
30...	0851	80513	172	172	246	7.1	745	8.8	.9	8

WHITE RIVER BASIN

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07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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) (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)
AUG										
12...	0815	80513	.00	186	184	8.3	750	28.2	8.4	110
12...	0816	80513	10.0	186	187	8.3	750	28.3	8.4	110
12...	0817	80513	20.0	186	186	8.3	750	28.3	8.4	109
12...	0818	80513	22.0	186	187	8.3	750	28.3	8.3	109
12...	0819	80513	23.0	186	188	8.3	750	28.0	8.1	105
12...	0820	80513	25.0	186	191	8.2	750	27.5	7.5	97
12...	0821	80513	30.0	186	205	7.9	750	25.7	5.4	68
12...	0823	80513	31.0	186	214	7.5	750	24.4	3.6	44
12...	0824	80513	33.0	186	223	7.3	750	23.0	1.7	20
12...	0825	80513	35.0	186	230	7.2	750	21.6	.2	2
12...	0826	80513	37.0	186	233	7.2	750	20.3	.1	1
12...	0827	80513	39.0	186	237	7.2	750	19.0	.1	1
12...	0828	80513	40.0	186	239	7.2	750	18.4	.1	1
12...	0829	80513	45.0	186	239	7.2	750	16.8	.1	1
12...	0830	80513	50.0	186	239	7.1	750	15.9	.1	1
12...	0831	80513	55.0	186	236	7.1	750	14.9	.1	1
12...	0832	80513	60.0	186	231	7.1	750	14.3	.7	7
12...	0833	80513	70.0	186	210	7.1	750	13.4	2.0	20
12...	0834	80513	80.0	186	214	7.1	750	13.0	2.4	24
12...	0835	80513	90.0	186	210	7.0	750	12.5	2.6	25
12...	0836	80513	100	186	229	7.1	750	12.1	2.9	27
12...	0837	80513	110	186	231	7.1	750	11.7	3.0	28
12...	0838	80513	120	186	232	7.1	750	11.4	3.2	30
12...	0839	80513	130	186	231	7.0	750	10.7	3.2	29
12...	0840	80513	140	186	232	7.0	750	10.1	3.1	28
12...	0841	80513	150	186	233	6.9	750	9.5	1.8	16
12...	0842	80513	160	186	236	6.9	750	9.2	.9	8
12...	0843	80513	170	186	240	6.8	750	8.9	.2	2
12...	0844	80513	180	186	243	6.8	750	8.7	.1	1
12...	0845	80513	186	186	244	6.8	750	8.7	.1	1
SEP										
07...	1315	80513	.00	185	187	--	745	29.3	8.1	109
07...	1316	80513	10.0	185	186	--	745	29.2	8.1	109
07...	1317	80513	20.0	185	186	--	745	29.2	8.1	108
07...	1319	80513	26.0	185	187	--	745	28.9	7.8	103
07...	1320	80513	27.0	185	205	--	745	26.5	4.3	54
07...	1321	80513	28.0	185	208	--	745	25.9	3.5	44
07...	1322	80513	29.0	185	210	--	745	25.6	2.8	35
07...	1323	80513	30.0	185	216	--	745	24.5	1.7	21
07...	1324	80513	32.0	185	223	--	745	23.3	1.1	13
07...	1325	80513	33.0	185	224	--	745	23.0	1.1	13
07...	1326	80513	34.0	185	227	--	745	22.3	1.3	15
07...	1327	80513	35.0	185	230	--	745	21.4	1.6	18
07...	1328	80513	37.0	185	232	--	745	20.4	1.2	14
07...	1329	80513	40.0	185	233	--	745	19.3	.2	2
07...	1330	80513	43.0	185	234	--	745	18.4	.1	1
07...	1331	80513	47.0	185	232	--	745	17.3	.1	1
07...	1332	80513	50.0	185	232	--	745	16.7	.1	1
07...	1333	80513	60.0	185	229	--	745	15.2	.1	1
07...	1334	80513	70.0	185	206	--	745	14.1	.2	2
07...	1335	80513	80.0	185	186	--	745	13.5	1.6	15
07...	1336	80513	90.0	185	187	--	745	13.0	2.1	20
07...	1337	80513	100	185	211	--	745	12.7	1.8	18
07...	1338	80513	110	185	202	--	745	12.1	1.8	18
07...	1339	80513	120	185	210	--	745	11.7	1.9	18
07...	1340	80513	130	185	215	--	745	11.3	1.8	16
07...	1341	80513	140	185	220	--	745	10.7	1.0	9
07...	1342	80513	150	185	227	--	745	10.2	.1	1
07...	1343	80513	160	185	229	--	745	9.8	.1	1
07...	1344	80513	170	185	231	--	745	9.4	.1	1
07...	1345	80513	180	185	236	--	745	9.1	.1	1
07...	1346	80513	185	185	237	--	745	9.1	.1	0

WHITE RIVER BASIN

07053450 WHITE RIVER BELOW TABLE ROCK DAM, NEAR BRANSON, MISSOURI

LOCATION.--Lat 36°35'40", long 93°18'33", in NW1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek and 6.1 mi southwest of Branson, Missouri.

DRAINAGE AREA.--4,020 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 08...	0756	80513	205	7.4	748	11.7	6.9	65
NOV 04...	1526	80513	245	7.4	748	13.6	9.3	91
MAR 04...	0930	80513	224	7.4	740	7.6	10.3	88
JUN 01...	1618	80513	244	7.9	736	10.0	9.7	89
JUL 30...	0920	80513	233	7.7	745	11.4	8.2	77
AUG 12...	0746	80513	225	6.7	749	10.2	4.0	36
SEP 07...	1249	80513	220	--	748	16.0	10.3	107

WHITE RIVER BASIN

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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 1997 TO SEPTEMBER 1998

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 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)
OCT											
09...	1137	80513	.00	165	244	8.0	753	23.1	9.6	114	5.20
09...	1138	80513	10.0	165	245	8.1	753	23.1	9.6	114	--
09...	1139	80513	20.0	165	255	7.7	753	22.7	6.5	77	--
09...	1140	80513	30.0	165	257	7.4	753	22.2	4.3	50	--
09...	1141	80513	37.0	165	269	7.3	753	21.1	3.9	44	--
09...	1143	80513	40.0	165	269	7.3	753	20.7	3.6	41	--
09...	1144	80513	43.0	165	271	7.2	753	19.8	1.0	11	--
09...	1145	80513	46.0	165	268	7.2	753	19.2	.1	1	--
09...	1146	80513	50.0	165	272	7.2	753	18.6	.1	1	--
09...	1147	80513	60.0	165	271	7.2	753	17.9	.1	1	--
09...	1150	80513	70.0	165	264	7.3	753	17.0	.1	1	--
09...	1151	80513	80.0	165	262	7.3	753	16.2	.1	1	--
09...	1152	80513	90.0	165	267	7.3	753	15.4	.1	1	--
09...	1153	80513	100	165	270	7.3	753	14.5	.1	1	--
09...	1154	80513	110	165	269	7.3	753	13.3	.3	3	--
09...	1155	80513	120	165	266	7.3	753	12.4	.1	1	--
09...	1156	80513	130	165	266	7.3	753	11.5	.1	1	--
09...	1157	80513	140	165	267	7.3	753	10.6	.1	1	--
09...	1158	80513	150	165	268	7.3	753	9.7	.1	0	--
09...	1159	80513	160	165	268	7.3	753	9.2	.1	1	--
09...	1200	80513	165	165	268	7.3	753	8.7	.1	1	--
NOV											
05...	1028	80513	.00	163	261	7.4	750	16.4	6.4	67	5.20
05...	1029	80513	10.0	163	262	7.4	750	16.4	6.3	66	--
05...	1030	80513	20.0	163	261	7.5	750	16.4	6.3	65	--
05...	1031	80513	30.0	163	258	7.5	750	16.4	6.3	65	--
05...	1032	80513	40.0	163	257	7.5	750	16.5	6.3	66	--
05...	1033	80513	50.0	163	258	7.5	750	16.5	6.3	66	--
05...	1034	80513	60.0	163	258	7.5	750	16.5	6.3	66	--
05...	1035	80513	70.0	163	259	7.5	750	16.4	6.3	65	--
05...	1036	80513	80.0	163	263	7.5	750	16.3	6.2	64	--
05...	1037	80513	90.0	163	261	7.4	750	16.2	5.5	57	--
05...	1038	80513	95.0	163	267	7.2	750	15.8	1.0	11	--
05...	1039	80513	100	163	272	7.1	750	14.9	.2	2	--
05...	1040	80513	105	163	276	7.1	750	14.0	.1	1	--
05...	1041	80513	110	163	276	7.1	750	13.4	.1	1	--
05...	1042	80513	120	163	276	7.1	750	12.4	.1	1	--
05...	1043	80513	130	163	276	7.1	750	11.4	.1	1	--
05...	1044	80513	140	163	277	7.1	750	10.5	.1	1	--
05...	1045	80513	150	163	275	7.1	750	9.7	.1	1	--
05...	1046	80513	160	163	275	7.1	750	9.2	.1	1	--
05...	1047	80513	163	163	275	7.1	750	9.1	.1	1	--
MAR											
03...	1449	80513	.00	171	255	8.1	742	8.5	12.0	105	4.00
03...	1450	80513	10.0	171	255	8.1	742	8.4	11.5	101	--
03...	1451	80513	20.0	171	255	8.1	742	8.4	11.4	100	--
03...	1452	80513	30.0	171	255	8.1	742	8.4	11.3	99	--
03...	1453	80513	40.0	171	255	8.1	742	8.4	11.2	98	--
03...	1454	80513	50.0	171	256	8.3	742	8.3	11.3	99	--
03...	1455	80513	60.0	171	257	8.2	742	8.3	11.2	98	--
03...	1456	80513	70.0	171	256	8.1	742	8.3	11.1	97	--
03...	1457	80513	80.0	171	255	8.1	742	8.3	11.1	97	--
03...	1458	80513	90.0	171	255	8.0	742	8.2	10.9	95	--
03...	1459	80513	100	171	256	8.0	742	8.1	10.8	94	--
03...	1500	80513	110	171	257	7.9	742	8.0	10.5	91	--
03...	1501	80513	120	171	257	7.9	742	8.0	10.2	89	--
03...	1502	80513	130	171	258	7.9	742	8.0	10.2	88	--
03...	1503	80513	140	171	254	7.9	742	7.8	10.2	88	--
03...	1504	80513	150	171	253	7.9	742	7.8	10.2	88	--
03...	1505	80513	160	171	250	7.8	742	7.7	10.1	87	--
03...	1506	80513	171	171	251	7.8	742	7.7	9.6	83	--

WHITE RIVER BASIN

07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

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)
JUN										
02...	0937	80513	.00	184	255	8.1	742	26.9	8.8	114
02...	0938	80513	10.0	784	256	8.2	742	26.2	9.3	119
02...	0939	80513	15.0	184	254	8.3	742	25.0	10.5	130
02...	0940	80513	16.0	184	253	8.3	742	24.4	10.9	134
02...	0941	80513	17.0	184	248	8.4	742	22.9	11.6	139
02...	0942	80513	18.0	184	249	8.4	742	21.7	11.9	139
02...	0943	80513	20.0	184	249	8.4	742	20.8	11.7	134
02...	0944	80513	22.0	184	249	8.4	742	19.9	11.6	131
02...	0945	80513	25.0	184	247	8.3	742	19.0	10.9	121
02...	0946	80513	30.0	184	249	8.3	742	17.7	10.4	112
02...	0947	80513	35.0	184	250	8.2	742	16.8	9.5	101
02...	0948	80513	40.0	184	250	8.1	742	16.1	9.1	95
02...	0949	80513	50.0	184	249	8.0	742	14.8	8.5	87
02...	0950	80513	60.0	184	250	7.9	742	13.9	8.2	81
02...	0951	80513	70.0	184	250	7.8	742	13.3	7.9	77
02...	0952	80513	80.0	184	249	7.8	742	12.5	7.6	73
02...	0953	80513	90.0	184	249	7.8	742	11.9	7.7	73
02...	0954	80513	100	184	249	7.8	742	11.3	7.8	73
02...	0955	80513	110	184	250	7.8	742	10.5	7.8	72
02...	0956	80513	120	184	250	7.7	742	9.9	7.9	72
02...	0957	80513	130	184	249	7.7	742	9.0	7.7	69
02...	0958	80513	140	184	249	7.6	742	8.7	7.5	66
02...	0959	80513	150	184	248	7.6	742	8.4	7.3	64
02...	1000	80513	160	184	250	7.5	742	8.1	6.4	56
02...	1001	80513	170	184	251	7.4	742	8.1	5.8	51
02...	1002	80513	180	184	251	7.4	742	8.0	5.7	50
02...	1003	80513	184	184	252	7.4	742	7.9	5.7	49
JUL										
29...	1134	80513	.00	172	254	8.3	754	28.8	8.6	113
29...	1135	80513	10.0	172	253	8.3	754	28.5	8.8	114
29...	1136	80513	20.0	172	253	8.2	754	28.4	8.7	113
29...	1137	80513	27.0	172	252	8.2	754	26.9	11.2	142
29...	1138	80513	28.0	172	254	8.2	745	25.5	11.4	143
29...	1139	80513	30.0	172	255	8.2	754	24.8	11.1	136
29...	1140	80513	31.0	172	256	8.2	754	24.7	11.1	135
29...	1141	80513	32.0	172	261	8.2	754	23.7	9.9	118
29...	1142	80513	34.0	172	260	8.1	754	22.5	9.2	108
29...	1143	80513	36.0	172	262	8.0	754	21.6	8.8	101
29...	1144	80513	38.0	172	262	7.9	754	20.7	8.6	97
29...	1145	80513	40.0	172	262	7.8	754	19.9	8.5	94
29...	1146	80513	45.0	172	262	7.8	754	19.0	8.2	89
29...	1147	80513	50.0	172	261	7.7	754	18.2	7.8	84
29...	1148	80513	55.0	172	262	7.6	754	17.5	7.2	76
29...	1149	80513	60.0	172	261	7.6	754	16.8	6.6	68
29...	1150	80513	70.0	172	262	7.5	754	15.8	5.6	57
29...	1151	80513	80.0	172	263	7.5	754	14.9	5.0	50
29...	1152	80513	90.0	172	264	7.5	754	13.8	4.8	47
29...	1153	80513	100	167	262	7.5	754	13.0	4.9	47
29...	1154	80513	110	172	259	7.5	754	12.3	5.1	48
29...	1155	80513	120	172	258	7.4	754	11.8	5.0	47
29...	1156	80513	130	172	257	7.4	754	11.2	4.6	42
29...	1157	80513	140	172	259	7.3	754	10.3	3.9	35
29...	1158	80513	150	172	260	7.3	754	9.6	3.1	27
29...	1159	80513	160	172	260	7.2	754	9.4	2.6	23
29...	1200	80513	170	172	261	7.2	754	9.0	1.5	13
29...	1201	80513	172	172	261	7.2	754	9.1	1.3	11

WHITE RIVER BASIN

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07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

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 FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
AUG										
12...	1250	80513	.00	176	247	8.3	758	28.7	8.9	115
12...	1251	80513	10.0	176	247	8.4	758	28.7	8.9	116
12...	1252	80513	20.0	176	247	8.3	758	28.6	8.8	115
12...	1253	80513	30.0	176	248	8.3	758	28.2	9.1	118
12...	1254	80513	31.0	176	250	8.3	758	27.4	9.7	123
12...	1255	80513	33.0	176	254	8.2	758	26.5	10.3	129
12...	1256	80513	35.0	176	255	8.2	758	25.1	10.4	127
12...	1257	80513	36.0	176	257	8.2	758	24.3	10.0	120
12...	1258	80513	38.0	176	258	8.1	758	23.6	9.4	112
12...	1259	80513	40.0	176	261	7.9	758	22.3	8.1	94
12...	1300	80513	42.0	176	261	7.8	758	21.4	7.6	86
12...	1301	80513	45.0	176	262	7.7	758	20.5	7.3	81
12...	1302	80513	50.0	176	262	7.5	758	19.0	6.7	72
12...	1303	80513	55.0	176	269	7.3	758	18.0	4.4	47
12...	1304	80513	60.0	176	267	7.3	758	17.2	4.8	50
12...	1305	80513	70.0	176	268	7.3	758	16.2	4.1	42
12...	1306	80513	80.0	176	266	7.2	758	15.3	4.2	42
12...	1307	80513	90.0	176	267	7.2	758	14.4	3.9	39
12...	1308	80513	100	176	266	7.2	758	13.6	3.8	37
12...	1309	80513	110	176	264	7.2	758	13.0	3.9	37
12...	1310	80513	120	176	262	7.2	758	12.3	4.0	38
12...	1311	80513	130	176	260	7.2	758	11.7	3.9	36
12...	1312	80513	140	176	261	7.1	758	10.9	3.3	30
12...	1313	80513	150	176	261	7.1	758	10.1	2.5	22
12...	1314	80513	160	176	262	7.0	758	9.5	1.2	10
12...	1315	80513	170	176	263	7.0	758	9.2	.7	6
12...	1316	80513	176	176	262	6.9	756	9.0	.4	3
SEP										
09...	0725	80513	.00	167	247	--	756	27.6	8.4	108
09...	0726	80513	10.0	167	249	--	756	27.7	8.5	109
09...	0727	80513	20.0	167	248	--	756	27.7	8.5	109
09...	0728	80513	26.0	167	254	--	756	26.9	9.1	115
09...	0729	80513	27.0	167	262	--	756	25.5	9.6	119
09...	0730	80513	28.0	167	261	--	756	25.1	9.4	115
09...	0731	80513	30.0	167	261	--	756	24.7	9.4	114
09...	0732	80513	33.0	167	262	--	756	24.0	8.1	97
09...	0733	80513	35.0	167	265	--	756	23.0	7.1	83
09...	0734	80513	40.0	167	265	--	756	21.7	5.7	65
09...	0735	80513	44.0	167	267	--	756	20.8	4.6	52
09...	0736	80513	48.0	167	277	--	756	19.9	1.7	19
09...	0737	80513	50.0	167	277	--	756	19.6	1.4	16
09...	0738	80513	58.0	167	280	--	756	18.5	1.1	12
09...	0739	80513	60.0	167	279	--	756	18.2	.8	9
09...	0740	80513	70.0	167	279	--	756	17.1	.9	10
09...	0741	80513	80.0	167	277	--	756	16.1	1.3	14
09...	0742	80513	90.0	167	272	--	756	15.3	1.9	19
09...	0743	80513	100	167	272	--	756	14.4	2.0	20
09...	0744	80513	110	167	270	--	756	13.5	2.0	19
09...	0745	80513	120	167	268	--	756	12.7	1.6	16
09...	0746	80513	130	167	266	--	756	11.9	.5	5
09...	0747	80513	140	167	262	--	756	11.3	.2	2
09...	0748	80513	150	167	263	--	756	10.6	.1	1
09...	0749	80513	160	167	266	--	756	9.8	.1	1
09...	0750	80513	167	167	265	--	756	9.7	.1	1

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM, NEAR FLIPPIN

LOCATION.--Lat 36°21'56", long 92°34'29", in NW1/4 sec.21, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, at dam on White River, 11.9 mi upstream from gaging station, 6.3 mi northwest of Flippin, 12.5 mi downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,051 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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								
09...	1219	80513	267	7.4	759	14.1	8.8	86
NOV								
05...	1112	80513	278	7.4	753	13.4	5.4	53
MAR								
03...	1432	80513	255	8.1	748	8.3	11.6	101
JUN								
02...	1030	80513	251	7.7	752	10.1	8.4	76
JUL								
29...	1115	80513	260	7.8	754	13.3	6.4	61
AUG								
12...	1406	80513	264	7.3	757	13.4	7.3	71
SEP								
09...	0848	80513	275	--	763	12.8	5.2	49

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.2	3.4	4.9	7.5	2.1	4.3	12.7	9.1	11.1	---	---	---
2	7.1	3.2	4.1	8.6	2.5	5.4	12.6	7.4	10.2	---	---	---
3	8.2	3.2	4.6	9.9	3.1	7.1	12.1	6.1	9.3	---	---	---
4	8.8	2.9	5.8	10.9	2.8	6.2	12.6	9.1	11.1	---	---	---
5	7.8	3.0	5.2	8.9	2.4	4.7	14.2	9.7	11.5	---	---	---
6	8.0	2.8	4.4	10.4	3.0	6.7	12.6	9.2	11.0	---	---	---
7	8.2	2.3	4.7	9.7	3.3	5.9	14.3	9.8	11.1	---	---	---
8	8.5	2.7	4.7	9.3	2.9	5.3	11.4	7.9	10.2	---	---	---
9	8.9	2.9	6.7	9.1	2.9	5.3	10.4	7.5	8.9	---	---	---
10	8.4	2.5	4.7	10.9	3.1	7.4	10.9	8.8	10.0	---	---	---
11	7.3	2.7	4.5	11.4	3.4	7.9	11.8	9.8	10.6	---	---	---
12	9.0	3.5	6.5	10.6	3.8	7.7	11.9	9.0	10.4	---	---	---
13	7.9	3.0	5.5	11.2	3.1	7.8	10.9	7.7	9.5	---	---	---
14	8.4	2.5	4.9	11.3	3.0	7.6	11.9	9.2	10.1	---	---	---
15	8.5	3.5	5.8	13.1	4.3	9.0	12.2	7.3	9.4	---	---	---
16	8.3	3.1	5.3	12.9	7.3	8.8	9.7	7.4	8.5	---	---	---
17	8.4	3.3	5.8	12.8	8.0	10.2	12.1	8.1	9.4	---	---	---
18	8.4	2.4	5.1	---	---	---	9.6	7.5	8.3	---	---	---
19	8.2	2.4	4.8	10.6	5.5	8.6	8.8	6.4	7.5	---	---	---
20	8.1	2.4	4.6	12.4	6.1	8.5	10.3	6.1	8.3	---	---	---
21	8.5	2.7	5.2	11.4	6.2	9.1	11.4	5.6	9.5	---	---	---
22	8.9	2.3	4.8	12.3	7.1	8.6	10.0	5.8	8.3	---	---	---
23	10.0	2.2	4.6	10.2	6.7	8.2	11.9	9.1	10.6	---	---	---
24	7.9	2.2	3.9	12.6	6.6	9.5	12.4	4.9	10.3	---	---	---
25	---	---	---	---	---	---	11.1	4.9	9.2	---	---	---
26	---	---	---	9.1	6.1	7.7	12.1	10.4	11.0	---	---	---
27	---	---	---	8.0	4.8	6.8	11.9	9.3	10.6	---	---	---
28	---	---	---	8.0	4.8	5.9	10.7	8.6	9.6	---	---	---
29	---	---	---	12.8	5.3	7.3	11.8	9.1	10.5	---	---	---
30	8.6	2.3	5.5	9.9	5.9	7.9	11.6	9.0	10.0	---	---	---
31	8.2	2.1	3.8	---	---	---	11.3	9.4	10.3	---	---	---
MONTH	---	---	---	---	---	---	14.3	4.9	9.9	---	---	---

WHITE RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.4	11.6	12.7	15.2	13.1	14.3	13.0	12.5	12.8	---	---	---
2	13.4	11.5	12.8	16.1	12.9	14.2	12.6	12.1	12.4	---	---	---
3	13.6	11.9	13.2	16.1	14.0	15.4	12.6	12.0	12.3	---	---	---
4	13.7	12.5	13.4	15.1	12.9	14.4	12.6	11.5	12.3	---	---	---
5	13.8	11.9	13.4	14.4	12.6	13.2	12.5	10.8	11.6	---	---	---
6	13.8	12.1	13.3	15.3	12.7	14.3	11.9	10.7	11.1	---	---	---
7	13.9	12.2	13.4	14.7	13.3	14.2	12.2	10.9	11.3	---	---	---
8	13.9	12.4	13.6	14.3	12.6	13.3	11.7	10.4	11.2	---	---	---
9	13.9	12.6	13.6	14.2	12.4	13.1	11.3	10.9	11.2	---	---	---
10	14.1	12.5	13.6	14.4	12.6	13.8	11.1	10.3	10.7	---	---	---
11	14.0	12.6	13.6	14.4	12.7	13.7	11.3	10.7	10.9	---	---	---
12	13.9	13.5	13.8	14.2	12.3	13.6	11.0	10.5	10.8	---	---	---
13	14.7	12.5	13.9	13.9	12.1	13.4	11.1	10.2	10.6	---	---	---
14	14.6	12.3	13.9	13.9	12.4	13.3	11.2	10.1	10.4	---	---	---
15	14.5	13.0	14.0	14.1	11.9	13.4	11.1	10.0	10.4	---	---	---
16	14.3	12.6	13.9	13.8	12.5	13.0	11.1	9.8	10.2	---	---	---
17	14.4	13.1	14.1	13.6	12.2	13.1	10.9	9.8	10.2	---	---	---
18	14.2	12.4	13.4	---	---	---	10.9	9.7	10.0	---	---	---
19	14.3	12.2	13.3	13.8	12.3	13.0	11.0	9.7	10.1	---	---	---
20	14.5	12.5	14.0	13.3	12.3	12.8	10.9	9.9	10.2	---	---	---
21	14.6	12.9	14.1	13.2	12.6	12.9	10.3	9.9	10.1	---	---	---
22	14.4	12.0	13.3	13.4	12.2	12.7	10.2	9.9	10.0	---	---	---
23	14.1	11.9	12.9	13.4	12.1	12.6	10.1	9.8	10.0	---	---	---
24	14.3	12.5	13.3	13.5	12.1	12.7	10.7	9.6	10.0	---	---	---
25	---	---	---	---	---	---	9.9	9.5	9.7	---	---	---
26	---	---	---	13.2	12.0	12.5	9.9	9.2	9.7	---	---	---
27	---	---	---	12.8	12.0	12.4	10.1	9.1	9.4	---	---	---
28	---	---	---	13.2	12.3	12.6	9.8	9.0	9.3	---	---	---
29	---	---	---	13.3	12.3	12.7	9.8	9.0	9.3	---	---	---
30	14.6	12.7	14.1	12.6	12.2	12.5	10.0	9.0	9.4	---	---	---
31	14.3	12.7	13.3	---	---	---	9.7	8.6	9.0	---	---	---
MONTH	---	---	---	---	---	---	13.0	8.6	10.5	---	---	---

WHITE RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	11.8	10.3	11.2	12.3	11.4	11.9	14.8	12.5	13.4
2	---	---	---	13.8	10.2	11.1	15.2	11.4	12.4	14.0	12.5	13.3
3	9.8	8.6	9.4	11.6	10.4	11.0	12.7	11.5	12.3	14.0	12.4	13.4
4	---	---	---	14.5	10.4	11.5	12.9	11.4	12.2	14.3	12.6	13.7
5	---	---	---	11.8	10.5	11.1	12.9	11.6	12.4	14.6	12.6	13.6
6	10.3	8.8	9.7	11.5	10.3	11.1	12.8	11.7	12.4	15.2	12.6	13.7
7	10.0	8.7	9.6	11.7	10.5	11.2	12.8	11.6	12.2	15.8	12.8	13.9
8	10.3	8.9	9.7	12.0	10.7	11.3	12.9	11.6	12.4	14.6	13.0	13.9
9	10.5	9.1	10.0	12.4	10.5	11.3	14.3	11.7	12.6	15.4	12.4	13.6
10	10.4	9.4	10.1	13.4	10.7	11.4	13.0	12.0	12.7	14.5	12.4	13.5
11	10.4	9.6	10.1	12.9	10.9	11.5	15.1	11.8	12.5	14.4	12.7	13.8
12	10.9	9.2	10.2	---	---	---	---	---	---	14.3	12.8	13.7
13	11.6	9.3	10.3	---	---	---	---	---	---	14.3	13.0	13.6
14	10.8	9.7	10.4	---	---	---	14.0	11.9	12.6	14.5	13.2	14.1
15	10.8	9.6	10.3	12.7	10.9	11.4	13.1	11.8	12.4	14.7	13.6	14.3
16	10.7	9.4	10.3	11.8	10.8	11.5	15.3	11.8	12.9	14.6	13.3	14.3
17	10.7	9.5	10.3	12.9	10.9	11.6	13.1	11.8	12.6	14.7	13.1	14.3
18	10.9	9.7	10.6	11.9	10.9	11.6	13.2	11.9	12.8	14.7	13.0	14.2
19	11.0	9.9	10.6	13.0	11.0	11.7	13.3	12.0	12.8	14.8	14.4	14.6
20	12.3	10.2	10.8	12.1	11.1	11.8	13.3	12.1	12.8	15.2	13.2	14.1
21	11.9	10.1	10.7	12.1	11.2	11.9	13.3	12.0	12.8	14.8	14.3	14.5
22	13.4	10.1	11.3	12.4	11.2	11.8	13.4	12.2	13.0	15.1	13.3	14.0
23	13.7	10.1	11.3	13.1	11.1	12.0	13.5	12.1	13.0	15.1	12.9	13.8
24	13.6	9.9	11.0	12.9	11.2	11.9	13.7	12.2	13.3	15.3	12.8	14.0
25	11.4	10.0	10.7	13.3	11.3	12.0	13.8	12.3	13.2	14.8	13.2	14.3
26	11.5	10.0	10.8	13.5	11.2	12.3	13.7	12.3	13.1	15.1	13.3	14.5
27	11.2	10.2	10.8	12.3	11.3	11.9	14.6	12.4	13.2	15.0	13.1	14.2
28	12.4	10.3	10.9	12.5	11.4	11.9	14.1	12.4	13.3	15.1	13.4	14.5
29	11.4	10.4	11.0	---	---	---	14.0	12.4	13.4	15.0	13.4	14.5
30	11.6	10.5	11.2	12.7	12.0	12.3	13.8	12.2	13.2	15.1	13.4	14.4
31	---	---	---	12.7	11.8	12.3	13.9	12.4	13.4	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	15.8	12.4	14.0

WHITE RIVER BASIN

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07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS

LOCATION.--Lat 36°21'44", long 92°23'11", in NW1/4SE1/4 sec.20, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, on White River, 11.8 mi upstream from gaging station, 3 mi southeast of Bull Shoals.

DRAINAGE AREA.--6,051 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.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.5	5.1	6.4	11.0	5.6	7.3	11.9	8.9	10.3	---	---	---
2	7.9	4.1	5.8	16.3	5.3	8.8	12.8	9.5	10.5	---	---	---
3	7.7	4.7	6.0	10.3	6.7	8.1	13.7	9.4	10.8	---	---	---
4	8.5	3.6	6.2	16.6	6.8	9.4	15.0	9.2	11.6	---	---	---
5	8.3	4.0	6.6	13.8	.0	8.9	15.4	10.2	12.1	---	---	---
6	7.2	4.8	6.1	13.4	7.3	8.9	15.9	11.2	13.0	---	---	---
7	8.5	6.0	6.9	16.0	7.1	9.8	16.0	10.9	12.7	---	---	---
8	7.7	5.6	6.8	17.7	6.7	10.5	14.5	9.7	11.9	---	---	---
9	9.9	5.0	7.3	17.5	7.1	10.5	14.1	10.3	11.8	---	---	---
10	7.6	4.6	6.1	10.1	6.3	8.8	16.1	10.6	12.2	---	---	---
11	8.0	4.4	6.1	15.3	8.2	9.9	16.3	11.3	12.9	---	---	---
12	10.4	5.3	7.4	13.1	8.6	9.8	16.4	11.3	13.0	---	---	---
13	11.1	5.7	7.4	13.6	8.1	9.9	17.3	11.3	13.2	---	---	---
14	8.1	4.6	6.3	13.5	8.7	10.5	17.2	11.3	13.4	---	---	---
15	11.2	4.4	7.0	15.7	8.6	10.7	17.5	10.5	13.0	---	---	---
16	8.3	4.7	6.5	17.6	9.9	12.5	16.4	10.3	12.6	---	---	---
17	8.2	4.5	6.9	12.7	8.8	10.5	17.0	10.7	13.0	---	---	---
18	17.4	5.7	9.3	16.4	9.5	11.2	16.9	10.9	13.3	---	---	---
19	18.3	4.4	9.0	16.3	9.2	11.3	16.8	10.0	12.6	---	---	---
20	8.1	4.5	6.1	15.9	8.4	11.0	17.3	9.9	12.6	---	---	---
21	14.2	4.6	7.0	11.4	8.2	9.5	15.6	9.9	12.5	---	---	---
22	17.7	5.9	9.8	16.3	8.7	11.3	15.3	9.4	11.8	---	---	---
23	18.5	4.8	9.8	17.6	8.8	11.7	15.4	10.9	12.9	---	---	---
24	17.2	4.3	8.5	15.0	8.9	10.8	17.1	10.6	13.5	---	---	---
25	11.4	4.6	7.4	---	---	---	15.6	9.9	12.4	---	---	---
26	16.1	4.9	9.5	---	---	---	16.1	11.4	13.3	---	---	---
27	16.6	6.2	8.8	12.9	6.6	9.7	18.1	12.2	14.2	---	---	---
28	9.6	5.8	7.5	13.9	6.2	8.8	17.4	11.5	13.7	---	---	---
29	13.4	6.1	8.4	14.7	6.2	10.1	17.8	9.7	12.9	---	---	---
30	11.4	5.6	7.4	13.0	7.9	9.9	16.9	10.3	13.2	---	---	---
31	16.3	4.8	9.2	---	---	---	17.4	12.2	14.4	---	---	---
MONTH	18.5	3.6	7.4	---	---	---	18.1	8.9	12.6	---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

[illegible]

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 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.3	12.1	13.3	15.9	12.4	14.5	12.9	11.2	12.4	---	---	---
2	13.6	12.9	13.4	16.1	11.8	14.0	12.6	10.5	12.1	---	---	---
3	13.8	13.2	13.5	15.8	12.0	14.6	12.5	11.2	12.2	---	---	---
4	14.0	13.3	13.7	16.1	11.8	14.3	14.0	8.9	12.0	---	---	---
5	14.1	12.9	13.7	14.1	11.6	13.1	12.5	8.2	10.5	---	---	---
6	14.1	13.5	13.8	15.0	11.4	13.7	12.5	7.9	9.6	---	---	---
7	14.1	13.6	13.9	14.5	12.5	13.5	12.7	8.2	10.0	---	---	---
8	14.2	13.7	13.9	16.3	11.5	13.3	11.5	7.5	9.3	---	---	---
9	14.4	13.9	14.1	15.4	11.2	13.2	10.0	8.8	9.5	---	---	---
10	14.3	14.0	14.1	14.3	12.1	13.7	9.9	8.7	9.1	---	---	---
11	14.2	13.7	14.1	14.3	11.8	13.5	10.2	9.0	9.4	---	---	---
12	14.6	13.9	14.1	14.0	11.8	13.3	9.6	8.6	9.1	---	---	---
13	15.5	13.7	14.6	13.8	11.3	13.0	12.2	7.7	9.4	---	---	---
14	14.9	13.1	14.2	13.7	11.2	12.9	12.5	7.5	9.5	---	---	---
15	16.0	13.4	14.3	13.8	9.8	12.4	13.0	8.0	10.0	---	---	---
16	14.3	13.5	14.1	14.5	9.4	11.5	13.2	7.6	9.8	---	---	---
17	14.5	13.2	14.1	13.9	9.1	12.6	13.2	7.8	9.8	---	---	---
18	18.0	12.4	14.2	15.5	10.5	13.1	12.9	7.2	9.3	---	---	---
19	18.3	12.0	14.2	15.9	10.9	13.0	13.4	7.7	9.9	---	---	---
20	14.6	13.2	14.3	14.1	10.5	12.7	11.8	8.7	9.8	---	---	---
21	14.6	13.2	14.3	13.3	11.5	12.7	10.1	8.2	9.0	---	---	---
22	17.4	11.5	14.2	15.0	10.5	12.4	9.8	9.1	9.4	---	---	---
23	16.0	11.0	13.7	14.3	10.6	11.9	9.3	8.2	8.9	---	---	---
24	16.2	13.1	14.5	14.9	10.6	12.6	9.9	8.1	8.8	---	---	---
25	13.8	12.9	13.3	15.5	10.9	13.1	8.9	8.2	8.6	---	---	---
26	12.9	10.7	11.7	15.8	10.5	12.8	9.0	7.5	8.4	---	---	---
27	16.4	11.0	14.8	13.0	10.5	12.0	11.5	7.1	8.4	---	---	---
28	14.9	13.6	14.5	14.6	12.3	13.3	8.9	6.7	7.7	---	---	---
29	16.3	12.8	14.5	15.2	12.0	13.3	9.6	6.7	8.2	---	---	---
30	15.6	12.7	14.5	12.5	11.7	12.1	10.5	6.4	8.5	---	---	---
31	17.6	13.1	14.8	---	---	---	---	---	---	---	---	---
MONTH	18.3	10.7	14.0	16.3	9.1	13.1	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

[illegible]

WHITE RIVER BASIN

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07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW

LOCATION.--Lat 36°20'37", long 92°34'27", in SW1/4SE1/4SE1/4 sec.3, T.19 N., R.3 W., Marion County, Hydrologic Unit 11010003, 2.0 mi downstream from Bull Shoals Dam, and 4.0 mi east of Fairview.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1992 to current year.

DISSOLVED OXYGEN: June 1992 to current year.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.4	4.8	6.5	8.2	5.5	7.0	11.7	9.1	10.1	---	---	---
2	8.0	4.0	5.8	14.0	7.0	9.4	11.3	8.8	10.1	---	---	---
3	7.3	4.6	5.5	10.7	7.6	9.0	12.3	8.6	10.2	---	---	---
4	10.1	4.2	6.7	13.8	7.9	9.8	13.4	8.5	10.9	---	---	---
5	10.9	4.3	7.0	12.2	6.8	9.7	13.7	10.1	11.5	---	---	---
6	7.8	5.1	6.3	11.3	7.9	9.4	15.1	10.9	12.9	---	---	---
7	8.0	5.1	6.7	13.6	7.6	10.2	15.0	11.2	12.6	---	---	---
8	7.4	4.4	6.1	13.9	8.0	10.3	13.7	8.5	11.4	---	---	---
9	10.0	5.2	7.5	14.1	7.7	10.5	13.1	9.5	11.2	---	---	---
10	7.4	4.1	5.9	10.5	7.8	9.0	14.1	10.0	12.3	---	---	---
11	9.0	4.0	5.9	12.4	8.0	9.8	16.1	12.0	13.6	---	---	---
12	9.7	4.0	7.1	11.1	7.9	9.5	16.0	12.1	13.6	---	---	---
13	10.4	4.8	7.1	10.9	8.4	9.5	16.7	10.8	13.6	---	---	---
14	7.3	4.0	6.0	12.3	8.3	10.4	15.3	11.2	13.1	---	---	---
15	10.4	4.1	6.7	12.9	9.1	10.9	15.8	10.4	13.1	---	---	---
16	7.8	4.4	6.2	15.3	10.7	12.6	16.3	11.6	13.6	---	---	---
17	8.1	4.3	6.7	12.2	9.3	11.0	16.6	10.6	13.1	---	---	---
18	15.1	6.0	9.8	14.3	9.8	11.5	16.7	11.8	13.9	---	---	---
19	15.4	4.7	9.6	13.5	9.4	11.1	16.5	11.6	13.5	---	---	---
20	8.5	4.8	6.8	14.0	9.2	11.4	16.7	11.0	13.1	---	---	---
21	12.3	5.2	7.7	12.1	9.3	10.6	15.2	10.6	12.7	---	---	---
22	15.7	6.4	10.5	14.7	11.0	12.4	15.5	10.8	12.7	---	---	---
23	15.6	7.1	10.7	15.6	11.0	12.9	15.4	11.5	13.2	---	---	---
24	13.7	5.2	8.8	14.1	10.7	12.0	16.9	12.9	14.3	---	---	---
25	10.2	6.5	8.3	13.4	9.5	11.9	15.7	11.8	13.6	---	---	---
26	14.3	7.0	10.5	13.8	8.5	10.9	17.7	12.5	14.5	---	---	---
27	13.3	5.7	8.4	12.5	8.8	10.6	18.5	13.4	15.5	---	---	---
28	9.1	5.6	7.2	12.4	8.2	9.7	18.2	13.0	15.3	---	---	---
29	11.4	6.2	8.5	13.0	8.0	10.1	19.1	10.4	14.3	---	---	---
30	10.1	5.6	7.7	12.5	9.1	10.4	18.0	10.3	14.2	---	---	---
31	14.1	7.7	10.4	---	---	---	18.7	11.5	15.5	---	---	---
MONTH	15.7	4.0	7.6	15.6	5.5	10.4	19.1	8.5	13.0	---	---	---

WHITE RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	12.5	7.4	9.3	10.5	6.3	7.6	9.8	4.4	6.4
2	---	---	---	12.0	7.0	9.0	13.9	6.5	9.4	9.6	4.3	6.2
3	10.0	7.0	8.8	11.4	7.3	8.7	9.1	6.5	7.3	8.5	4.0	5.7
4	9.6	7.8	9.0	12.9	6.6	9.1	10.1	6.2	7.3	7.3	4.3	5.8
5	9.5	7.4	8.8	11.0	7.0	8.2	8.4	6.0	6.8	10.9	4.4	6.3
6	9.5	8.0	8.9	8.7	6.3	7.4	11.0	5.8	7.0	11.3	4.3	6.8
7	10.0	7.9	9.0	11.6	6.6	7.8	9.2	6.0	7.1	12.0	5.2	7.7
8	9.5	7.9	8.8	10.4	6.3	7.5	11.4	5.9	7.1	11.0	5.0	6.4
9	9.3	7.9	8.8	12.4	6.4	8.0	13.1	5.6	7.5	11.9	5.6	8.7
10	9.2	7.5	8.7	12.1	6.7	8.2	7.2	5.5	6.3	11.2	5.0	6.9
11	10.0	7.7	8.8	12.8	6.2	7.9	13.0	5.5	8.0	6.9	4.8	5.7
12	9.9	8.1	9.0	12.3	5.8	7.8	12.0	5.7	7.3	8.6	4.8	5.9
13	14.1	7.7	9.5	12.3	5.7	7.4	11.7	5.4	7.0	8.6	3.9	6.1
14	10.9	8.0	9.3	12.4	6.5	8.0	12.4	5.8	7.6	6.7	3.3	4.8
15	10.8	7.8	8.9	12.0	6.0	7.6	11.4	5.2	7.1	9.0	3.9	5.6
16	9.6	8.0	8.8	7.9	6.4	6.9	12.5	4.9	8.2	11.2	5.3	6.7
17	10.8	8.0	8.7	11.7	6.2	7.7	8.5	4.6	5.6	8.8	4.6	6.3
18	9.1	8.0	8.6	9.5	5.5	6.6	7.4	4.8	5.6	9.5	4.5	6.8
19	10.3	7.3	8.5	11.1	5.7	6.8	9.0	4.6	5.9	7.8	5.2	6.7
20	12.5	7.5	9.1	6.8	5.8	6.2	7.6	4.2	5.5	13.1	5.2	8.2
21	13.3	7.3	9.1	7.3	5.6	6.2	8.7	4.4	5.7	11.2	4.7	7.2
22	14.3	7.8	10.5	8.9	5.1	6.3	9.4	4.3	5.6	13.2	6.3	8.4
23	13.5	8.0	10.1	9.5	4.8	6.3	10.0	3.9	5.5	13.4	5.6	8.2
24	12.9	7.6	9.3	10.6	5.3	6.8	6.3	3.7	4.9	12.3	5.6	7.5
25	12.2	7.8	9.0	10.2	4.8	7.1	8.5	3.6	4.7	7.9	3.8	5.7
26	12.2	7.3	8.7	10.9	5.0	7.8	10.4	4.0	5.5	6.9	4.4	5.6
27	12.2	7.7	8.9	6.8	3.6	5.4	11.5	3.9	5.8	8.7	3.7	5.9
28	12.7	7.7	8.9	7.3	3.7	4.9	10.8	4.2	6.0	6.4	3.7	5.0
29	11.5	7.9	8.8	10.8	5.3	6.9	10.2	3.8	5.3	6.6	3.8	5.0
30	9.1	7.7	8.4	8.1	6.9	7.4	9.7	3.8	5.3	8.0	3.7	5.3
31	---	---	---	9.0	6.0	7.3	8.0	4.1	5.1	---	---	---
MONTH	---	---	---	12.9	3.6	7.4	13.9	3.6	6.5	13.4	3.3	6.4

WHITE RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.6	13.6	14.1	15.6	13.9	14.8	13.1	11.4	12.5	---	---	---
2	13.9	13.1	13.6	15.7	12.6	14.3	12.6	11.2	12.3	---	---	---
3	13.9	13.5	13.7	15.9	12.8	15.0	12.6	11.7	12.3	---	---	---
4	14.4	13.6	13.9	16.0	13.1	14.7	13.4	11.0	12.3	---	---	---
5	15.3	13.8	14.1	14.3	13.4	13.9	12.4	9.0	10.8	---	---	---
6	14.6	13.7	14.1	15.0	12.3	14.0	10.9	7.8	9.2	---	---	---
7	14.4	13.8	14.1	14.5	13.4	14.0	11.1	7.9	9.5	---	---	---
8	15.4	13.9	14.1	15.7	13.1	14.0	11.5	8.2	9.5	---	---	---
9	14.9	14.0	14.4	14.8	12.3	13.5	10.5	9.4	9.8	---	---	---
10	15.3	14.1	14.4	14.4	13.0	13.9	10.0	8.8	9.1	---	---	---
11	15.8	14.0	14.5	14.4	13.0	13.9	9.7	8.8	9.2	---	---	---
12	15.7	13.9	14.5	14.1	12.7	13.5	9.3	8.7	9.0	---	---	---
13	16.5	14.0	14.8	13.8	12.4	13.4	10.9	8.2	9.3	---	---	---
14	15.2	13.6	14.5	13.8	12.4	13.2	11.9	7.6	9.6	---	---	---
15	16.0	14.1	14.6	13.8	10.7	12.9	12.5	8.1	10.2	---	---	---
16	14.4	13.8	14.2	13.9	10.2	11.8	11.6	7.9	9.6	---	---	---
17	14.6	14.2	14.4	13.8	9.0	12.3	11.8	8.3	9.8	---	---	---
18	18.3	13.5	15.0	14.8	11.3	13.1	11.5	8.0	9.6	---	---	---
19	18.6	13.5	15.0	14.8	11.5	13.1	12.0	8.0	9.8	---	---	---
20	14.7	13.6	14.4	13.8	11.1	12.7	10.9	9.1	9.9	---	---	---
21	15.1	14.3	14.6	13.3	12.5	12.9	10.0	8.6	9.2	---	---	---
22	17.1	13.5	15.0	14.2	11.4	12.6	9.8	9.4	9.7	---	---	---
23	16.3	12.5	14.6	13.3	11.1	11.8	9.4	8.8	9.2	---	---	---
24	16.7	14.3	15.3	13.8	10.7	12.4	10.2	8.7	9.4	---	---	---
25	15.5	14.2	14.6	14.6	11.3	13.0	9.0	8.5	8.8	---	---	---
26	14.2	11.5	13.0	14.8	11.4	13.0	8.9	7.8	8.6	---	---	---
27	16.6	11.3	14.5	12.8	10.8	11.8	10.1	7.1	8.3	---	---	---
28	15.0	14.2	14.7	14.1	12.6	13.3	8.2	6.6	7.5	---	---	---
29	15.9	13.5	14.7	14.9	12.4	13.6	9.6	7.2	8.3	---	---	---
30	15.3	13.4	14.5	12.6	12.1	12.3	9.5	7.1	8.5	---	---	---
31	18.4	14.1	15.8	---	---	---	10.0	6.9	8.3	---	---	---
MONTH	18.6	11.3	14.4	16.0	9.0	13.3	13.4	6.6	9.6	---	---	---

WHITE RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	17.0	11.5	13.5	15.8	12.4	13.7	20.7	14.1	15.7
2	---	---	---	20.6	11.3	13.7	22.3	12.8	15.6	19.9	14.0	15.5
3	11.6	9.8	10.3	16.9	11.4	13.0	16.0	12.6	13.9	17.6	14.0	14.8
4	11.9	9.8	10.3	21.5	11.8	14.9	16.4	12.8	13.8	16.3	14.2	14.9
5	12.0	9.9	10.5	18.0	11.8	13.2	15.7	12.8	13.8	20.7	14.2	15.8
6	10.8	10.0	10.3	13.7	11.5	12.1	16.9	12.9	13.7	21.5	14.3	15.8
7	11.8	10.0	10.4	15.9	11.6	12.5	15.3	12.9	13.7	23.0	14.5	16.6
8	11.8	10.0	10.4	16.4	11.6	12.9	18.0	12.9	14.1	19.1	14.4	16.0
9	12.1	10.3	10.8	18.0	11.6	12.9	20.1	12.9	14.5	21.9	14.6	17.8
10	12.0	10.2	10.8	18.3	11.7	13.0	14.7	13.1	13.7	20.7	14.4	15.8
11	13.0	10.3	11.0	18.9	12.1	14.1	21.2	13.2	15.5	15.8	14.6	15.0
12	11.9	10.4	10.9	20.1	11.9	15.3	17.9	13.2	15.0	17.7	14.5	15.2
13	16.7	10.7	11.7	17.8	11.7	13.2	18.0	13.0	14.6	17.9	14.4	15.9
14	12.8	10.6	11.0	18.2	11.7	13.4	20.4	13.3	14.9	16.6	14.2	15.0
15	13.4	10.7	11.4	18.1	11.7	13.4	18.5	13.7	15.0	16.6	14.6	15.3
16	12.2	10.6	11.1	13.6	11.8	12.5	23.1	14.4	17.7	16.9	14.6	15.4
17	13.0	10.6	11.2	19.2	11.8	13.5	16.8	13.1	14.4	16.0	14.5	15.1
18	12.1	10.7	11.1	17.0	11.9	12.9	15.5	13.2	13.8	15.9	14.6	15.1
19	13.3	11.0	11.6	18.5	12.0	13.2	16.6	13.4	14.3	15.7	14.7	15.2
20	17.1	10.9	12.5	13.7	12.1	12.5	15.7	13.3	14.2	21.4	14.8	16.2
21	16.8	10.8	12.6	13.6	12.1	12.6	16.3	13.4	14.2	17.9	14.8	15.4
22	21.4	11.1	14.6	15.9	12.1	13.2	16.8	13.4	14.3	20.1	15.2	16.8
23	22.2	11.0	14.3	16.1	12.5	13.5	19.0	13.6	14.6	20.7	15.3	16.8
24	20.6	11.0	13.0	18.6	12.6	14.4	14.8	13.6	14.1	19.0	14.8	16.2
25	16.6	11.1	12.2	18.3	12.9	15.4	16.7	13.7	14.4	16.4	14.9	15.4
26	16.6	11.1	12.3	20.4	13.0	16.5	19.5	13.7	15.1	16.0	15.0	15.4
27	15.9	11.1	12.2	17.7	12.8	14.1	20.9	13.7	15.5	18.0	15.1	16.0
28	17.8	11.2	12.5	15.9	12.3	13.8	19.0	13.8	15.3	16.4	15.0	15.5
29	14.7	11.3	12.0	15.0	12.4	13.0	18.4	14.0	14.9	16.1	15.0	15.5
30	13.8	11.3	12.0	13.8	12.4	12.7	19.2	13.8	15.0	17.5	15.0	15.8
31	---	---	---	16.2	12.7	14.1	17.0	14.0	14.7	---	---	---
MONTH	---	---	---	21.5	11.3	13.5	23.1	12.4	14.6	23.0	14.0	15.7

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.

PERIOD OF RECORD.--April 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	BARO-	TEMPER-	OXYGEN,	OXYGEN,
		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										
14...	1220	80513	80020	3.8	174	7.9	760	15.8	10.8	109
DEC										
18...	0900	80513	80020	25	66	7.7	736	5.5	11.2	92
FEB										
10...	1130	80513	80020	164	59	7.4	728	7.2	10.7	93
APR										
14...	1030	80513	80020	64	57	7.6	732	13.1	7.6	75
JUN										
09...	1130	80513	80020	11	101	7.7	737	19.9	7.6	86
AUG										
04...	1115	80513	80020	.60	175	7.6	738	25.9	7.4	94
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)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (SODIUM PERCENT (00932) (00931)
OCT										
14...	170	71	110	84	6	30	2.4	1.5	4	.1
DEC										
18...	K8	K5	150	28	2	9.5	1.0	1.0	7	.1
FEB										
10...	K4	K5	K2	19	--	6.5	.74	.77	8	.1
APR										
14...	K7	K1	K12	25	3	8.3	.94	.87	7	.1
JUN										
09...	K8	K9	39	46	2	16	1.6	1.2	5	.1
AUG										
04...	29	K15	74	80	3	28	2.4	1.7	4	.1

WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

DATE	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)	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)
OCT										
14...	1.2	78	0	95	78	4.6	.91	<.10	5.1	96
DEC										
18...	.55	26	0	32	26	3.1	1.4	<.10	4.5	42
FEB										
10...	.50	26	0	30	25	3.1	1.1	<.10	4.1	26
APR										
14...	.65	22	0	26	21	2.8	1.0	<.10	5.6	36
JUN										
09...	.88	46	0	54	44	3.0	.89	<.10	5.6	60
AUG										
04...	1.3	78	0	94	77	3.3	.75	<.10	5.9	101
DATE	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, 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)
OCT										
14...	92	.13	.98	<.010	<.050	<.015	--	--	--	<.20
DEC										
18...	37	.06	2.84	<.010	<.050	<.020	--	--	--	<.10
FEB										
10...	32	.04	11.5	<.010	<.050	<.020	--	--	--	<.10
APR										
14...	33	.05	6.22	<.010	<.050	.023	.03	--	--	<.10
JUN										
09...	56	.08	1.78	<.010	<.050	.035	.05	.07	--	.11
AUG										
04...	90	.14	.16	<.010	<.050	.026	.03	--	.09	<.10
DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (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, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
14...	<.20	<.010	<.010	<.010	--	8.9	25	20	.21	81
DEC										
18...	<.10	<.010	<.010	<.010	--	<10	<4.0	14	.94	81
FEB										
10...	<.10	<.010	<.010	.019	.06	<10	<4.0	5	2.2	100
APR										
14...	<.10	<.010	.014	.010	.03	<10	<4.0	5	.86	87
JUN										
09...	<.10	.010	<.010	<.010	--	<10	8.8	19	.56	100
AUG										
04...	.12	<.010	<.010	<.010	--	10	46	16	.03	93

WHITE RIVER BASIN

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07055875 RICHLAND CREEK NEAR WITTS SPRING

LOCATION.--Lat 35°47'49", long 92°55'43", in SE1/4SW1/4 sec.5, T.13 N., R.18 W., Searcy County, Hydrologic Unit 11010005.

DRAINAGE AREA.--67.4 mi².

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

GAGE.--Water-stage recorder.

REMARKS.--1995 water year (May 31 to Sept. 30), water-discharge records good. 1996-1997 water years, water-discharge records good, except estimated daily discharges, which are poor. 1998 water year, no estimated daily discharges. Water-discharge records good, except those below 1 ft³/s, which are fair to poor.

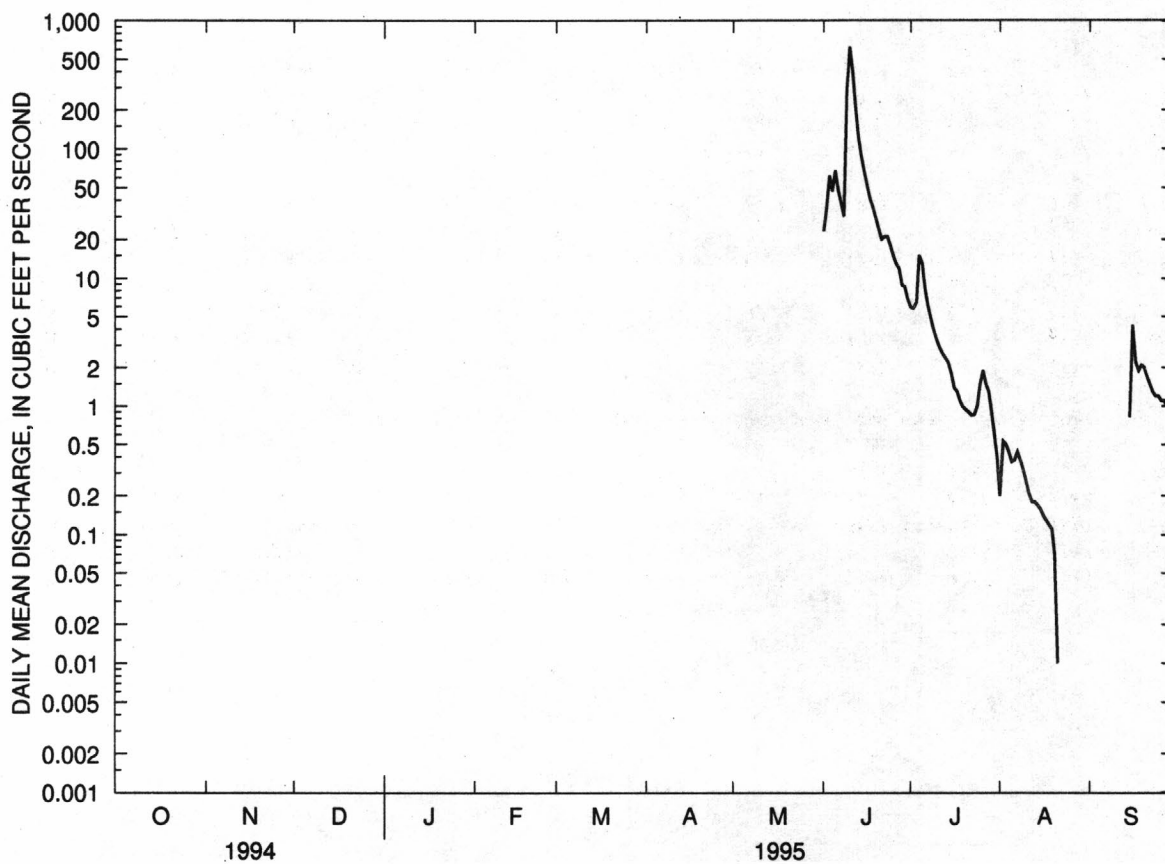
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	23	5.9	.20	.00
2	---	---	---	---	---	---	---	---	35	5.8	.53	.00
3	---	---	---	---	---	---	---	---	62	6.5	.50	.00
4	---	---	---	---	---	---	---	---	47	15	.44	.00
5	---	---	---	---	---	---	---	---	68	13	.37	.00
6	---	---	---	---	---	---	---	---	48	8.1	.38	.00
7	---	---	---	---	---	---	---	---	38	6.0	.44	.00
8	---	---	---	---	---	---	---	---	30	4.8	.38	.00
9	---	---	---	---	---	---	---	---	292	3.9	.32	.00
10	---	---	---	---	---	---	---	---	624	3.3	.26	.00
11	---	---	---	---	---	---	---	---	405	2.9	.21	.00
12	---	---	---	---	---	---	---	---	214	2.6	.18	.00
13	---	---	---	---	---	---	---	---	125	2.4	.18	.00
14	---	---	---	---	---	---	---	---	89	2.2	.17	.00
15	---	---	---	---	---	---	---	---	68	1.8	.16	.82
16	---	---	---	---	---	---	---	---	53	1.4	.14	4.3
17	---	---	---	---	---	---	---	---	42	1.3	.13	2.2
18	---	---	---	---	---	---	---	---	35	1.1	.12	1.9
19	---	---	---	---	---	---	---	---	29	.99	.11	2.1
20	---	---	---	---	---	---	---	---	24	.94	.07	2.0
21	---	---	---	---	---	---	---	---	20	.90	.01	1.7
22	---	---	---	---	---	---	---	---	21	.85	.00	1.5
23	---	---	---	---	---	---	---	---	21	.86	.00	1.3
24	---	---	---	---	---	---	---	---	18	1.0	.00	1.2
25	---	---	---	---	---	---	---	---	15	1.5	.00	1.2
26	---	---	---	---	---	---	---	---	13	1.9	.00	1.1
27	---	---	---	---	---	---	---	---	12	1.5	.00	1.1
28	---	---	---	---	---	---	---	---	8.8	1.3	.00	1.0
29	---	---	---	---	---	---	---	---	8.6	e.90	.00	1.0
30	---	---	---	---	---	---	---	---	6.9	e.60	.00	1.0
31	---	---	---	---	---	---	---	---	---	e.40	.00	---
TOTAL	---	---	---	---	---	---	---	---	2495.3	101.64	5.30	25.42
MEAN	---	---	---	---	---	---	---	---	83.2	3.28	.17	.85
MAX	---	---	---	---	---	---	---	---	624	15	.53	4.3
MIN	---	---	---	---	---	---	---	---	6.9	.40	.00	.00
AC-FT	---	---	---	---	---	---	---	---	4950	202	11	50
CFSM	---	---	---	---	---	---	---	---	1.24	.05	.00	.01
IN.	---	---	---	---	---	---	---	---	1.39	.06	.00	.01

^eEstimated

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED



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DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)[illegible]

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

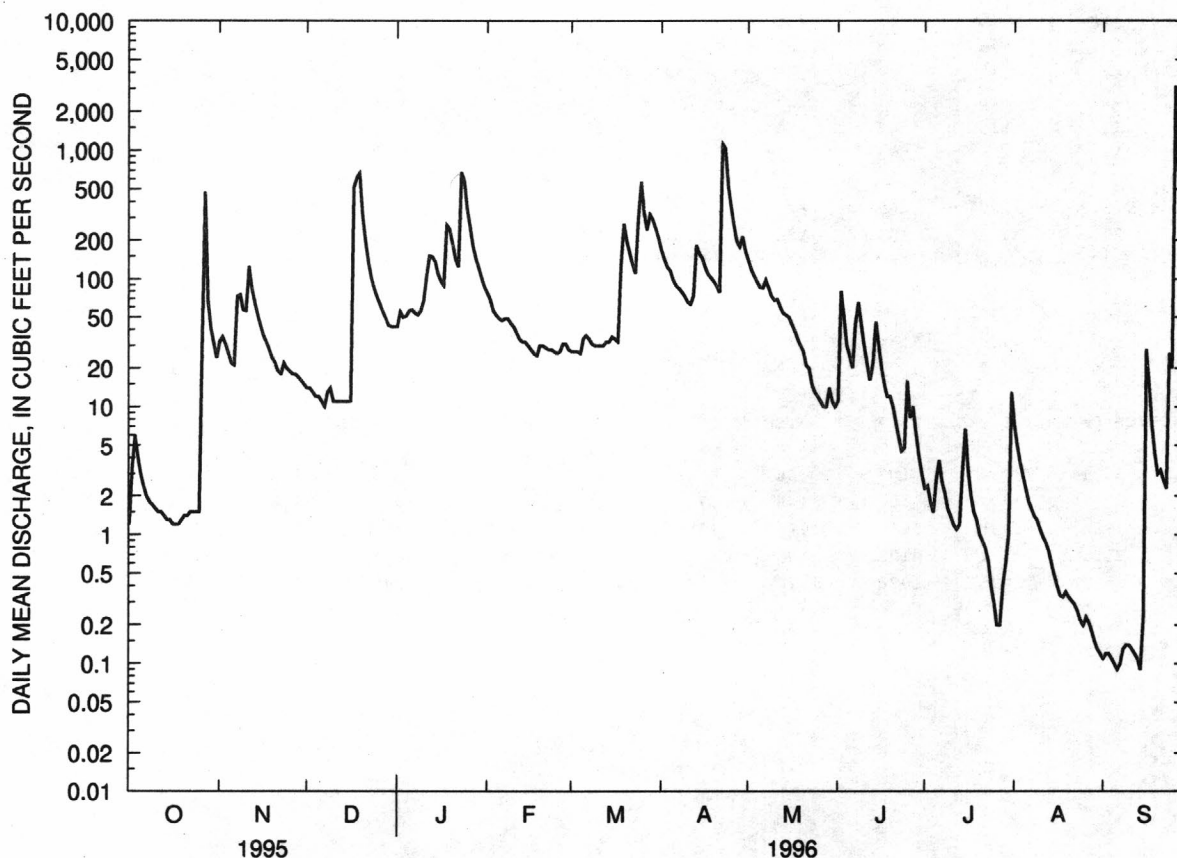
SUMMARY STATISTICS

FOR 1996 WATER YEAR

WATER YEARS 1995 - 1996

ANNUAL TOTAL	28004.37			
ANNUAL MEAN	76.5		76.5	
HIGHEST ANNUAL MEAN			76.5	1996
LOWEST ANNUAL MEAN			76.5	1996
HIGHEST DAILY MEAN	3130	Sep 26	3130	Sep 26 1996
LOWEST DAILY MEAN	.09	Sep 6	.00	Aug 22 1995
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 1	.00	Aug 22 1995
INSTANTANEOUS PEAK FLOW	12500	Sep 26	12500	Sep 26 1996
INSTANTANEOUS PEAK STAGE	10.35	Sep 26	10.35	Sep 26 1996
INSTANTANEOUS LOW FLOW	.05	Sep 14,15	.00	at times
ANNUAL RUNOFF (AC-FT)	55550		55430	
ANNUAL RUNOFF (CFSM)	1.14		1.14	
ANNUAL RUNOFF (INCHES)	15.55		15.52	
10 PERCENT EXCEEDS	169		144	
50 PERCENT EXCEEDS	27		15	
90 PERCENT EXCEEDS	.46		.17	

eEstimated



WHITE RIVER BASIN

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07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	2140	542	72	77	678	51	54	51	10	.78	.18
2	42	511	370	70	71	641	48	50	35	7.5	.68	.21
3	33	287	269	68	194	678	46	46	27	6.1	.58	.21
4	26	197	209	66	333	437	358	40	22	5.6	.48	.17
5	22	143	269	60	236	312	2520	37	19	4.7	.36	.13
6	19	544	227	54	194	232	699	34	16	4.1	.26	.11
7	16	5380	185	49	180	186	393	32	14	3.7	.21	.11
8	17	757	154	49	157	153	520	37	12	3.3	.18	.12
9	13	396	132	52	139	175	565	32	10	13	.18	.12
10	11	258	117	49	129	191	391	27	e17	33	.17	.14
11	9.2	183	105	43	123	161	387	25	9.2	20	.16	.12
12	8.0	138	110	39	122	141	338	23	9.3	9.8	.21	.11
13	7.1	120	95	35	128	811	265	21	8.7	6.3	.28	.10
14	6.4	174	88	34	126	605	210	20	7.3	4.6	.40	.09
15	5.9	192	203	37	148	377	171	18	6.8	3.6	.77	.05
16	5.3	178	217	35	172	277	142	15	9.1	2.8	.88	.02
17	5.0	889	194	30	169	220	118	14	46	2.3	.98	.07
18	e9.4	467	162	30	160	184	102	12	30	1.9	2.6	.07
19	e9.0	315	136	32	158	149	92	11	21	1.7	2.5	.09
20	e6.0	236	114	40	802	124	83	10	15	1.5	1.5	.11
21	e8.0	181	106	133	1860	105	76	9.5	12	1.3	1.2	.11
22	e25	140	107	288	622	91	71	8.3	9.5	1.2	1.1	.10
23	e60	119	103	221	399	80	81	7.6	7.5	1.2	.91	.13
24	e53	1700	95	201	296	72	67	8.9	6.3	1.4	.71	.16
25	49	1610	85	157	241	87	60	14	5.4	1.2	.56	.29
26	44	674	91	136	1670	80	57	12	4.4	1.0	.47	.24
27	40	417	91	124	1060	73	69	23	4.3	.87	.37	.22
28	39	310	88	102	571	72	68	19	7.7	.75	.31	.24
29	37	747	83	92	---	64	62	16	10	.86	.25	.23
30	36	783	78	87	---	61	59	96	11	.92	.22	.22
31	620	---	75	83	---	55	---	88	---	.88	.19	---
TOTAL	1334.3	20186	4900	2568	10537	7572	8169	860.3	463.5	157.08	20.45	4.27
MEAN	43.0	673	158	82.8	376	244	272	27.8	15.4	5.07	.66	.14
MAX	620	5380	542	288	1860	811	2520	96	51	33	2.6	.29
MIN	5.0	119	75	30	71	55	46	7.6	4.3	.75	.16	.02
AC-FT	2650	40040	9720	5090	20900	15020	16200	1710	919	312	41	8.5
CFSM	.64	10.0	2.36	1.24	5.62	3.65	4.06	.41	.23	.08	.01	.00
IN.	.74	11.21	2.72	1.43	5.85	4.20	4.54	.48	.26	.09	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	33.1	355	130	120	204	187	241	39.1	40.4	3.46	.67	48.9
MAX	43.0	673	158	156	376	244	272	50.4	83.2	5.07	1.17	146
(WY)	1997	1997	1997	1996	1997	1997	1997	1996	1995	1997	1996	1996
MIN	23.1	37.4	103	82.8	37.8	130	210	27.8	15.4	2.03	.17	.14
(WY)	1996	1996	1996	1997	1996	1996	1996	1997	1997	1996	1995	1997

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

SUMMARY STATISTICS

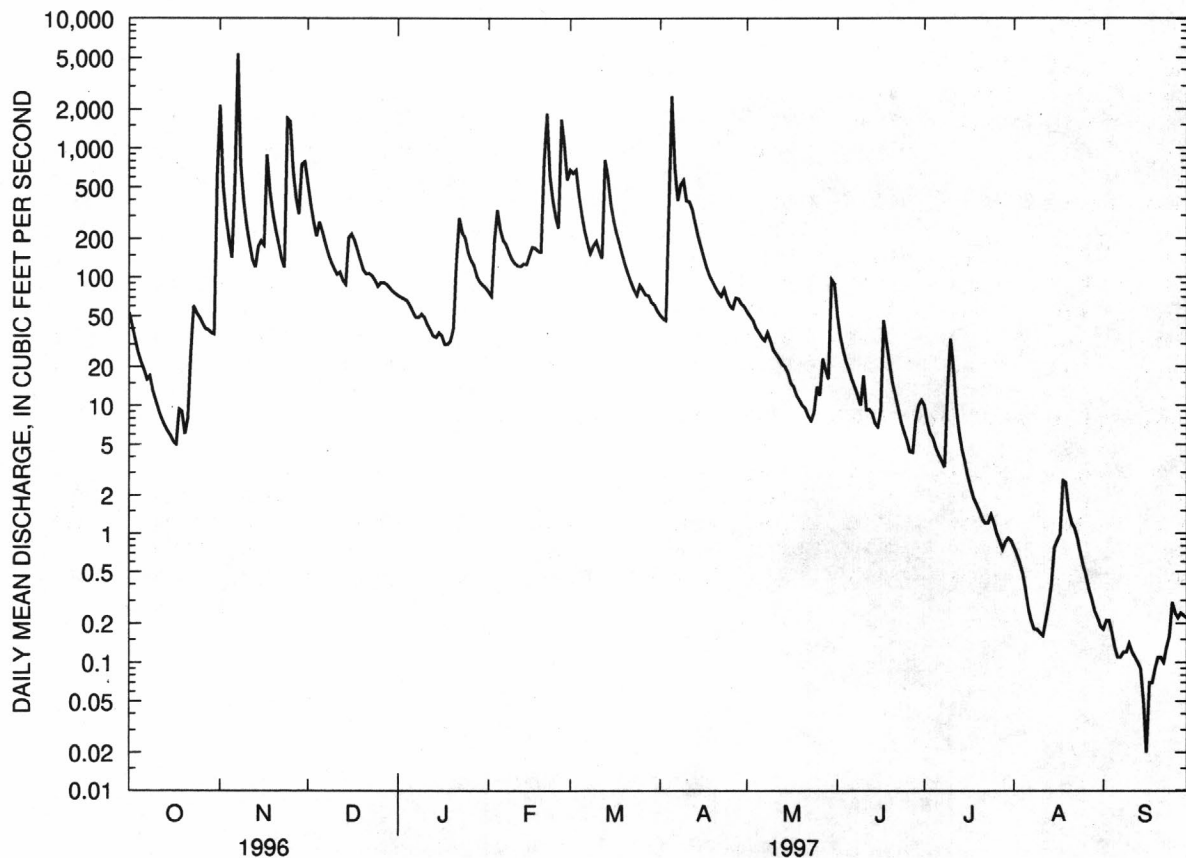
FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	49397.87		56771.90		
ANNUAL MEAN	135		156		116
HIGHEST ANNUAL MEAN					156 1997
LOWEST ANNUAL MEAN					76.5 1996
HIGHEST DAILY MEAN	5380	Nov 7	5380	Nov 7	5380 Nov 7 1996
LOWEST DAILY MEAN	.09	Sep 6	.02	Sep 16	.00 Aug 22 1995
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 1	.07	Sep 13	.00 Aug 22 1995
INSTANTANEOUS PEAK FLOW			14400	Nov 7	14400 Nov 7 1996
INSTANTANEOUS PEAK STAGE			10.99	Nov 7	10.99 Nov 7 1996
INSTANTANEOUS LOW FLOW			.00	Sep 16,17	.00 at times
ANNUAL RUNOFF (AC-FT)	97980		112600		84020
ANNUAL RUNOFF (CFSM)	2.01		2.32		1.73
ANNUAL RUNOFF (INCHES)	27.43		31.52		23.52
10 PERCENT EXCEEDS	269		381		230
50 PERCENT EXCEEDS	39		46		24
90 PERCENT EXCEEDS	.46		.24		.21

eEstimated



WHITE RIVER BASIN

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07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	4.7	24	66	116	182	609	139	13	.71	.01	.00
2	.16	4.1	23	63	100	153	386	111	11	.64	.00	.00
3	.15	3.6	39	61	88	130	301	98	9.2	.58	.00	.00
4	.13	3.2	47	651	79	115	225	84	8.1	.52	.00	.00
5	.13	13	43	3010	72	168	182	76	25	.45	.02	.00
6	.13	21	37	926	65	238	153	102	16	.37	.01	.00
7	.12	15	34	590	60	286	194	84	12	.31	.06	.00
8	.12	12	52	655	55	1170	165	63	10	.26	.09	.00
9	.86	10	67	442	52	554	144	54	11	.21	.10	.00
10	5.2	12	74	310	160	362	123	52	10	.18	.15	.00
11	4.4	13	64	237	2040	271	106	44	10	.17	.14	.00
12	3.2	13	53	189	595	210	96	38	9.0	.35	.16	.00
13	41	29	46	150	365	177	90	33	7.3	.36	.16	.00
14	25	60	41	128	259	150	81	27	5.8	.30	.34	.00
15	14	45	36	117	203	142	75	25	4.5	.29	.47	.00
16	9.6	35	33	102	262	439	251	22	3.5	.25	.41	.28
17	7.0	28	30	91	423	948	193	19	3.0	.23	.31	.61
18	5.5	24	27	82	426	636	161	16	2.7	.20	.24	.58
19	4.4	22	25	77	311	1640	139	14	2.3	.17	.19	.42
20	3.5	19	25	70	240	916	117	11	2.0	.15	.16	.45
21	3.2	17	33	65	191	494	105	10	2.3	.13	.13	.83
22	3.0	15	64	68	160	343	92	8.7	2.6	.11	.11	23
23	2.8	14	73	67	136	259	81	8.0	2.2	.12	.09	20
24	3.2	13	641	63	111	204	71	6.9	1.7	.11	.05	9.1
25	3.8	12	311	60	100	167	65	6.5	1.4	.15	.03	5.3
26	8.9	11	190	231	171	140	59	12	1.2	.15	.02	4.0
27	7.3	9.7	146	375	275	169	529	13	1.1	.14	.00	3.2
28	6.5	9.7	116	267	222	243	334	37	.98	.14	.00	2.7
29	5.7	18	100	204	---	196	223	27	.87	.13	.00	2.3
30	5.3	23	86	161	---	177	167	19	.79	.10	.00	2.0
31	4.9	---	75	135	---	1590	---	15	---	.07	.00	---
TOTAL	179.38	529.0	2655	9713	7337	12869	5517	1275.1	190.54	8.05	3.45	74.77
MEAN	5.79	17.6	85.6	313	262	415	184	41.1	6.35	.26	.11	2.49
MAX	41	60	641	3010	2040	1640	609	139	25	.71	.47	23
MIN	.12	3.2	23	60	52	115	59	6.5	.79	.07	.00	.00
AC-FT	356	1050	5270	19270	14550	25530	10940	2530	378	16	6.8	148
CFSM	.09	.26	1.28	4.68	3.91	6.20	2.74	.61	.09	.00	.00	.04
IN.	.10	.29	1.47	5.39	4.07	7.15	3.06	.71	.11	.00	.00	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1998, BY WATER YEAR (WY)

MEAN	24.0	243	116	184	223	263	222	39.7	31.9	2.66	.53	37.3
MAX	43.0	673	158	313	376	415	272	50.4	83.2	5.07	1.17	146
(WY)	1997	1997	1997	1998	1997	1998	1997	1996	1995	1997	1996	1996
MIN	5.79	17.6	85.6	82.8	37.8	130	184	27.8	6.35	.26	.11	.14
(WY)	1998	1998	1998	1997	1996	1996	1998	1997	1998	1998	1998	1997

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

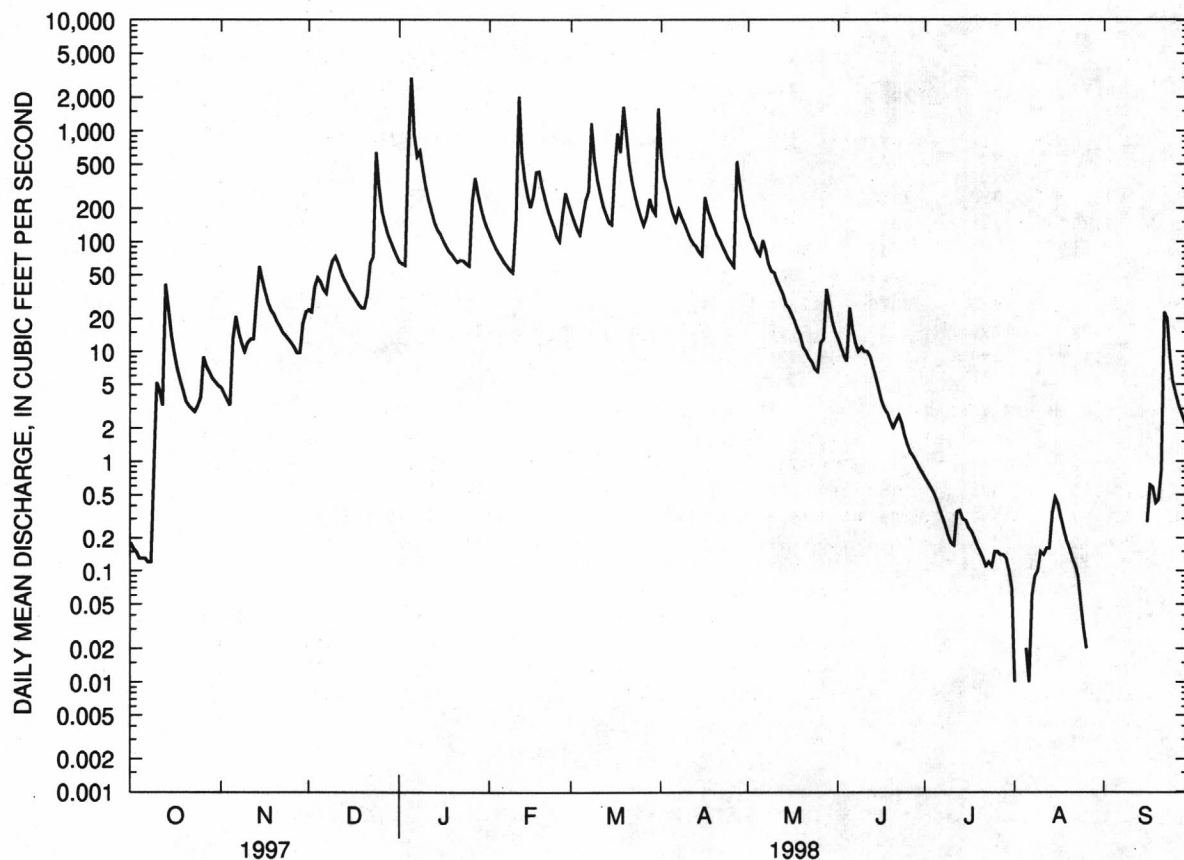
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1995 - 1998

ANNUAL TOTAL	33714.98	40351.29	
ANNUAL MEAN	92.4	111	114
HIGHEST ANNUAL MEAN			156 1997
LOWEST ANNUAL MEAN			76.5 1996
HIGHEST DAILY MEAN	2520 Apr 5	3010 Jan 5	5380 Nov 7 1996
LOWEST DAILY MEAN	.02 Sep 16	.00 Aug 2	.00 Aug 22 1995
ANNUAL SEVEN-DAY MINIMUM	.07 Sep 13	.00 Aug 27	.00 Aug 22 1995
INSTANTANEOUS PEAK FLOW		5600 Jan 5	14400 Nov 7 1996
INSTANTANEOUS PEAK STAGE		7.51 Jan 5	10.99 Nov 7 1996
INSTANTANEOUS LOW FLOW		.00 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	66870	80040	82710
ANNUAL RUNOFF (CFSM)	1.38	1.65	1.70
ANNUAL RUNOFF (INCHES)	18.72	22.40	23.15
10 PERCENT EXCEEDS	214	264	241
50 PERCENT EXCEEDS	22	20	23
90 PERCENT EXCEEDS	.21	.11	.16



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.--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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	58	99	414	e1090	2000	6810	1320	259	61	29	22
2	43	55	109	375	e1020	1700	3980	1160	241	58	27	22
3	40	55	124	346	933	1490	3140	1040	221	56	30	21
4	36	55	142	385	858	1350	2770	969	206	53	39	21
5	32	64	187	14700	795	1320	2290	867	218	50	35	20
6	30	57	229	10900	742	1960	1970	800	215	50	33	20
7	28	53	239	5970	695	2040	1860	832	206	52	35	19
8	28	53	246	7100	657	6610	1840	801	212	51	35	19
9	29	55	260	6020	623	5970	1620	772	230	51	35	18
10	28	61	347	3680	627	3750	1450	1410	229	50	44	18
11	27	57	370	2630	12600	2820	1310	1240	212	48	94	18
12	27	58	368	2060	8490	2280	1210	948	196	50	136	18
13	41	70	335	1700	4010	1960	1150	791	180	45	117	19
14	36	81	298	1440	2760	1760	1080	683	166	46	111	20
15	40	101	269	1280	2130	1590	1050	608	153	48	103	27
16	44	205	244	1160	2060	1980	2040	544	141	48	92	26
17	46	237	222	1040	3160	6890	1930	490	130	48	79	29
18	48	226	203	944	4550	7460	1530	443	122	46	70	154
19	49	199	188	869	3310	8730	1330	408	115	40	63	238
20	50	181	176	801	2530	13700	1200	375	108	37	56	193
21	50	162	176	744	2040	6210	1110	347	104	35	48	178
22	50	143	177	719	1740	4060	1030	322	99	36	41	168
23	50	128	200	717	1540	3080	959	299	94	36	35	152
24	53	117	1080	700	1370	2500	892	279	91	31	32	148
25	54	107	2370	667	1230	2100	838	259	88	28	30	155
26	59	98	1360	821	1350	1830	789	265	84	26	28	201
27	53	90	954	2340	2660	1710	2280	267	79	27	26	180
28	56	86	751	2050	2530	2330	3170	268	73	32	26	158
29	61	91	631	1650	---	2140	2020	274	67	31	26	148
30	62	91	538	e1390	---	1860	1550	275	63	31	24	138
31	60	---	467	e1230	---	8100	---	272	---	30	23	---
TOTAL	1356	3094	13359	76842	68100	113280	56198	19628	4602	1331	1602	2568
MEAN	43.7	103	431	2479	2432	3654	1873	633	153	42.9	51.7	85.6
MAX	62	237	2370	14700	12600	13700	6810	1410	259	61	136	238
MIN	27	53	99	346	623	1320	789	259	63	26	23	18
AC-FT	2690	6140	26500	152400	135100	224700	111500	38930	9130	2640	3180	5090
CFSM	.05	.12	.52	2.99	2.93	4.41	2.26	.76	.19	.05	.06	.10
IN.	.06	.14	.60	3.45	3.06	5.08	2.52	.88	.21	.06	.07	.12

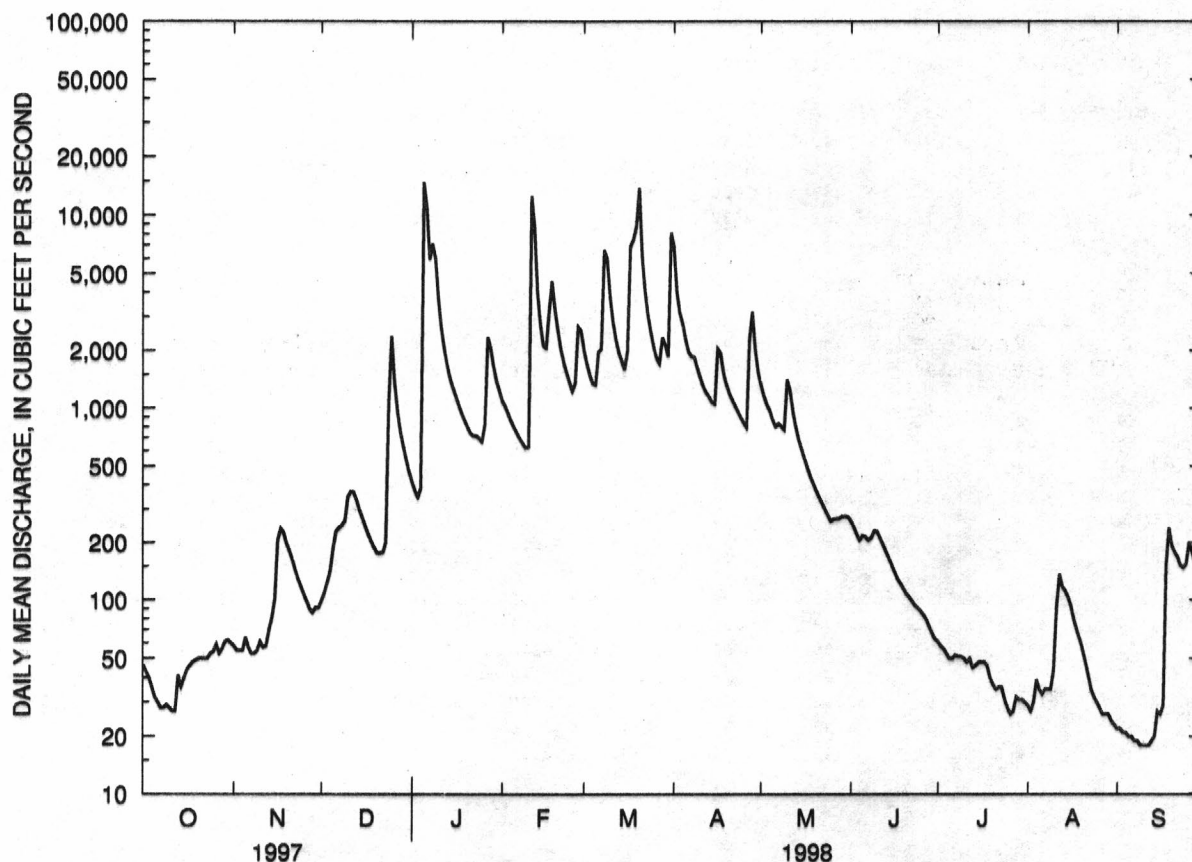
WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	317	1036	1218	1188	1595	2003	2190	1870	770	224	168	178
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1940 - 1998	
ANNUAL TOTAL	309172		361960			
ANNUAL MEAN	847		992		1059	
HIGHEST ANNUAL MEAN					2619	
LOWEST ANNUAL MEAN					316	
HIGHEST DAILY MEAN	18900	Feb 21	14700	Jan 5	124000	Dec 3 1982
LOWEST DAILY MEAN	27	Oct 11	18	Sep 9	7.0	Sep 17 1954
ANNUAL SEVEN-DAY MINIMUM	28	Oct 6	18	Sep 7	7.4	Sep 11 1954
INSTANTANEOUS PEAK FLOW			24700	Jan 5	^a 158000	Dec 3 1982
INSTANTANEOUS PEAK STAGE			21.39	Jan 5	53.75	Dec 3 1982
INSTANTANEOUS LOW FLOW			17	Sep 10-12	6.6	Sep 16,17,20 1954
ANNUAL RUNOFF (AC-FT)	613200		717900		767300	
ANNUAL RUNOFF (CFSM)	1.02		1.20		1.28	
ANNUAL RUNOFF (INCHES)	13.87		16.24		17.36	
10 PERCENT EXCEEDS	1890		2350		2350	
50 PERCENT EXCEEDS	214		212		314	
90 PERCENT EXCEEDS	46		30		45	

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

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 1997 TO SEPTEMBER 1998

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)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
NOV										
18...	1425	80513	80020	224	265	8.2	754	8.9	10.1	88
FEB										
09...	1430	80513	80020	622	181	8.1	748	8.7	12.6	110
MAY										
12...	1350	80513	80020	926	192	8.1	744	21.4	9.1	106
AUG										
05...	0755	80513	80020	36	237	7.8	752	26.5	5.0	63

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 PER (COLS. / 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)
NOV										
18...	K5	K2	37	130	--	44	4.1	2.0	3	.1
FEB										
09...	<1	<1	K2	89	6	32	2.1	1.4	3	.1
MAY										
12...	47	22	24	92	5	33	2.2	1.4	3	.1
AUG										
05...	K19	K11	52	110	1	39	3.3	1.8	3	.1

DATE	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)	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)
NOV										
18...	.89	127	0	155	127	5.9	3.1	<.10	5.5	146
FEB										
09...	.62	83	0	102	83	5.4	2.2	<.10	3.5	108
MAY										
12...	.79	88	0	106	87	5.0	1.5	<.10	6.0	111
AUG										
05...	1.1	109	0	135	110	3.8	2.4	<.10	9.3	132

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

DATE	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, 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, AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)
NOV										
18...	142	.20	88.3	<.010	.079	.193	.25	--	<.10	<.10
FEB										
09...	98	.15	181	<.010	<.050	.023	.03	--	<.10	<.10
MAY										
12...	102	.15	278	<.010	<.050	.038	.05	.06	.10	<.10
AUG										
05...	127	.18	12.8	<.010	<.050	<.020	--	--	<.10	.12

DATE	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- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV									
18...	.013	<.010	.015	.05	5.4	2.8	37	22	46
FEB									
09...	.033	<.010	.011	.03	<10	<4.0	10	17	100
MAY									
12...	<.010	<.010	<.010	--	12	7.9	22	55	94
AUG									
05...	<.010	<.010	<.010	--	<10	17	22	2.1	93

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 Norfolk.

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 1997 TO SEPTEMBER 1998

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											
09...	1431	80513	.00	150	298	8.1	756	23.8	8.6	103	3.40
09...	1432	80513	10.0	150	298	8.1	756	23.5	8.5	101	--
09...	1433	80513	20.0	150	298	8.1	756	23.5	8.4	99	--
09...	1435	80513	30.0	150	309	7.7	756	23.4	5.5	65	--
09...	1436	80513	40.0	150	327	7.3	756	22.9	1.6	19	--
09...	1437	80513	45.0	150	315	7.2	756	22.1	.2	2	--
09...	1438	80513	47.0	150	321	7.2	756	21.0	.1	1	--
09...	1439	80513	50.0	150	316	7.2	756	20.4	.1	1	--
09...	1440	80513	53.0	150	311	7.2	756	19.3	.1	1	--
09...	1441	80513	57.0	150	314	7.3	756	18.5	.1	1	--
09...	1442	80513	60.0	150	308	7.3	756	17.9	.1	1	--
09...	1443	80513	65.0	150	312	7.3	756	17.1	.1	1	--
09...	1444	80513	70.0	150	310	7.3	756	16.2	.1	1	--
09...	1445	80513	80.0	150	311	7.3	756	15.0	.1	1	--
09...	1446	80513	90.0	150	310	7.3	756	14.0	.1	1	--
09...	1447	80513	100	150	313	7.3	756	13.2	.1	1	--
09...	1448	80513	110	150	318	7.3	756	12.3	.1	1	--
09...	1449	80513	120	150	326	7.3	756	11.6	.1	1	--
09...	1450	80513	130	150	336	7.3	756	11.1	.1	1	--
09...	1451	80513	140	150	339	7.2	756	10.6	.1	1	--
09...	1452	80513	150	150	337	7.2	756	10.0	.1	1	--
NOV											
05...	0751	80513	.00	170	319	7.8	755	16.3	7.6	78	3.70
05...	0752	80513	10.0	170	319	7.8	755	16.4	7.5	77	--
05...	0753	80513	20.0	170	317	7.8	755	16.5	7.4	77	--
06...	0754	80513	30.0	170	317	7.8	755	16.5	7.4	76	--
06...	0755	80513	40.0	170	319	7.8	755	16.5	7.3	76	--
06...	0756	80513	50.0	170	318	7.8	755	16.5	7.3	76	--
06...	0757	80513	60.0	170	318	7.8	755	16.5	7.3	76	--
06...	0758	80513	70.0	170	319	7.8	755	16.5	7.2	75	--
06...	0759	80513	80.0	170	323	7.3	755	15.4	.5	5	--
06...	0800	80513	85.0	170	324	7.2	755	14.5	.2	2	--
06...	0801	80513	90.0	170	325	7.2	755	13.9	.1	1	--
06...	0802	80513	100	170	328	7.2	755	13.2	.1	1	--
06...	0803	80513	110	170	331	7.2	755	12.6	.1	1	--
06...	0804	80513	120	170	341	7.2	755	11.8	.1	1	--
06...	0805	80513	130	170	349	7.2	755	11.4	.1	1	--
06...	0806	80513	140	170	359	7.2	755	10.6	.1	1	--
06...	0807	80513	150	170	358	7.2	755	10.4	.1	1	--
06...	0808	80513	160	170	360	7.2	755	10.1	.1	1	--
06...	0809	80513	170	170	360	7.2	755	9.9	.1	1	--
MAR											
03...	1302	80513	.00	157	319	8.2	747	8.4	11.3	99	4.10
03...	1303	80513	10.0	157	319	8.2	747	8.1	11.3	97	--
03...	1304	80513	20.0	157	320	8.2	747	8.1	11.2	97	--
03...	1305	80513	30.0	157	320	8.2	747	8.1	11.2	97	--
03...	1306	80513	40.0	157	321	8.2	747	8.1	11.1	96	--
03...	1307	80513	50.0	157	317	8.2	747	8.1	11.1	96	--
03...	1308	80513	60.0	157	318	8.2	747	8.1	11.1	95	--
03...	1309	80513	70.0	157	320	8.2	747	8.1	11.0	95	--
03...	1310	80513	80.0	157	318	8.1	747	8.1	11.0	95	--
03...	1311	80513	90.0	157	320	8.1	747	8.1	11.0	95	--
03...	1312	80513	100	157	317	8.2	747	8.1	11.0	95	--
03...	1313	80513	110	157	319	8.1	747	8.1	10.9	94	--
03...	1314	80513	120	157	323	8.1	747	8.0	10.3	89	--
03...	1315	80513	130	157	322	8.0	747	7.9	10.0	86	--
03...	1316	80513	140	157	324	8.0	747	7.9	10.2	87	--
03...	1317	80513	150	157	324	8.0	747	7.8	10.2	87	--
03...	1318	80513	157	157	324	8.0	747	7.8	9.9	85	--

WHITE RIVER BASIN

07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	TEMPER- ATURE WATER (DEG C) (000010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
JUN										
02...	1525	80513	.00	164	297	8.5	749	29.5	8.8	118
02...	1526	80513	10.0	164	294	8.5	749	27.6	9.1	118
02...	1527	80513	15.0	164	293	8.6	749	24.8	12.1	149
02...	1528	80513	17.0	164	292	8.6	749	23.9	12.4	150
02...	1529	80513	18.0	164	292	8.6	749	23.3	12.3	147
02...	1530	80513	20.0	164	291	8.5	749	22.5	12.0	141
02...	1531	80513	22.0	164	293	8.5	749	21.7	11.6	134
02...	1532	80513	25.0	164	294	8.3	749	20.4	10.5	119
02...	1533	80513	30.0	164	297	8.2	749	18.6	9.1	100
02...	1534	80513	35.0	164	297	8.1	749	17.7	8.7	93
02...	1535	80513	40.0	164	299	8.0	749	16.5	8.0	84
02...	1536	80513	45.0	164	299	8.0	749	15.6	7.6	78
02...	1537	80513	50.0	164	299	7.9	749	15.0	7.1	72
02...	1538	80513	55.0	164	300	7.8	749	14.2	7.0	70
02...	1539	80513	60.0	164	300	7.8	749	13.8	6.9	68
02...	1540	80513	70.0	164	305	7.8	749	12.4	7.1	68
02...	1541	80513	80.0	164	307	7.8	749	11.5	7.3	68
02...	1542	80513	90.0	164	307	7.8	749	10.8	7.3	67
02...	1543	80513	100	164	307	7.8	749	10.2	7.2	65
02...	1544	80513	110	164	316	7.7	749	9.9	6.9	62
02...	1545	80513	120	164	316	7.7	749	9.8	6.7	60
02...	1546	80513	130	164	318	7.7	749	9.7	6.7	60
02...	1547	80513	140	164	315	7.7	749	9.6	6.7	60
02...	1548	80513	150	164	314	7.7	749	9.5	6.1	54
02...	1549	80513	160	164	316	7.6	749	9.4	5.9	52
02...	1550	80513	164	164	317	7.6	749	9.3	5.5	48
JUL										
28...	1226	80513	.00	158	292	8.4	754	29.2	8.3	110
28...	1228	80513	20.0	158	292	8.4	754	29.3	8.3	110
28...	1229	80513	30.0	158	303	8.3	754	28.0	9.2	119
28...	1230	80513	31.0	158	308	8.3	754	26.5	9.3	117
28...	1231	80513	32.0	158	310	8.2	754	25.5	8.9	110
28...	1232	80513	33.0	158	311	8.2	754	25.2	8.8	108
28...	1233	80513	35.0	158	310	8.1	754	24.1	8.1	97
28...	1235	80513	36.0	158	312	8.1	754	23.8	7.8	94
28...	1236	80513	37.0	158	309	8.0	754	23.0	7.6	89
28...	1237	80513	39.0	158	307	7.9	754	22.0	7.3	85
28...	1238	80513	40.0	158	307	7.9	754	21.7	7.3	84
28...	1239	80513	42.0	158	306	7.9	754	21.0	7.3	82
28...	1240	80513	45.0	158	304	7.8	754	20.1	6.8	76
28...	1241	80513	50.0	158	306	7.7	754	18.3	5.6	60
28...	1242	80513	55.0	158	305	7.7	754	17.0	4.6	48
28...	1243	80513	60.0	158	306	7.7	754	16.2	4.2	43
28...	1244	80513	65.0	158	305	7.7	754	15.5	3.7	37
28...	1245	80513	70.0	158	307	7.7	754	14.7	3.6	36
28...	1246	80513	80.0	158	308	7.7	754	13.7	3.7	36
28...	1247	80513	90.0	158	310	7.7	754	13.0	3.9	38
28...	1248	80513	100	158	312	7.7	754	12.1	3.7	35
28...	1249	80513	110	158	317	7.6	754	11.5	3.2	30
28...	1250	80513	120	158	322	7.6	754	10.9	2.2	20
28...	1251	80513	130	158	327	7.5	754	10.6	1.8	16
28...	1252	80513	140	158	326	7.5	754	10.3	1.5	13
28...	1253	80513	150	158	329	7.4	754	10.1	.5	4
28...	1254	80513	158	158	332	7.4	754	9.9	.2	1

WHITE RIVER BASIN

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07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
AUG										
13...	1219	80513	.00	162	286	8.2	754	29.2	8.1	107
13...	1221	80513	10.0	162	287	8.3	754	29.0	7.9	103
13...	1222	80513	20.0	162	287	8.3	754	28.9	8.5	111
13...	1223	80513	30.0	162	302	8.1	754	28.2	8.3	107
13...	1224	80513	32.0	162	318	7.9	754	27.0	7.8	99
13...	1225	80513	34.0	162	318	7.9	754	26.1	7.2	90
13...	1226	80513	36.0	162	317	7.8	754	25.1	6.6	81
13...	1227	80513	38.0	162	316	7.7	754	24.4	6.0	73
13...	1228	80513	40.0	162	313	7.7	754	23.6	6.1	72
13...	1229	80513	42.0	162	310	7.6	754	22.8	5.8	69
13...	1230	80513	45.0	162	308	7.5	754	21.3	5.3	60
13...	1231	80513	47.0	162	309	7.4	754	20.1	4.9	55
13...	1232	80513	50.0	162	306	7.4	754	18.9	4.4	48
13...	1233	80513	55.0	162	308	7.3	754	17.7	3.8	40
13...	1234	80513	60.0	162	308	7.3	754	16.8	3.3	34
13...	1235	80513	65.0	162	308	7.3	754	16.2	3.1	32
13...	1236	80513	70.0	162	308	7.2	754	15.4	2.8	28
13...	1237	80513	80.0	162	311	7.2	754	14.1	2.8	27
13...	1238	80513	90.0	162	311	7.2	754	13.2	2.8	27
13...	1239	80513	100	162	313	7.2	754	12.0	2.9	27
13...	1240	80513	110	162	318	7.1	754	11.4	2.0	19
13...	1241	80513	120	162	324	7.1	754	11.0	1.1	10
13...	1242	80513	130	162	330	7.1	754	10.6	.4	4
13...	1243	80513	140	162	333	7.0	754	10.3	.1	1
13...	1244	80513	150	162	332	7.0	754	10.1	.1	1
13...	1245	80513	160	162	333	7.0	754	9.9	.1	1
13...	1246	80513	162	162	334	7.1	754	9.8	.1	1
SEP										
08...	1134	80513	.00	154	287	--	752	29.0	8.1	107
08...	1135	80513	10.0	154	288	--	752	29.0	8.1	107
08...	1136	80513	20.0	154	288	--	752	29.0	8.1	106
08...	1137	80513	30.0	154	288	--	752	29.0	8.0	106
08...	1138	80513	36.0	154	304	--	752	28.3	6.8	88
08...	1139	80513	37.0	154	324	--	752	26.9	6.4	81
08...	1140	80513	38.0	154	323	--	752	26.3	5.9	74
08...	1141	80513	40.0	154	325	--	752	25.5	5.0	62
08...	1142	80513	42.0	154	324	--	752	24.4	3.7	45
08...	1143	80513	45.0	154	316	--	752	23.6	3.3	39
08...	1144	80513	49.0	154	310	--	752	22.3	2.5	29
08...	1145	80513	50.0	154	310	--	752	21.8	2.3	27
08...	1146	80513	53.0	154	308	--	752	20.6	2.0	23
08...	1147	80513	56.0	154	307	--	752	19.4	1.9	21
08...	1148	80513	60.0	154	308	--	752	18.3	1.7	19
08...	1149	80513	65.0	154	309	--	752	17.3	1.5	16
08...	1150	80513	70.0	154	312	--	752	16.0	1.0	10
08...	1151	80513	80.0	154	311	--	752	14.9	1.2	12
08...	1152	80513	90.0	154	312	--	752	13.9	1.2	12
08...	1153	80513	100	154	312	--	752	12.9	.9	9
08...	1154	80513	110	154	316	--	752	12.2	.1	1
08...	1155	80513	120	154	322	--	752	11.6	.1	1
08...	1156	80513	130	154	330	--	752	11.3	.1	1
08...	1157	80513	140	154	334	--	752	10.7	.1	1
08...	1158	80513	150	154	333	--	752	10.2	.1	1
08...	1159	80513	154	154	333	--	752	10.2	.1	0

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

DRAINAGE AREA.--1,808 mi².

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Water years 1967-71, May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

REMARKS.--Flow completely regulated by Norfolk Reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 09...	1551	80513	321	7.6	760	15.6	10.1	102
MAR 03...	1242	80513	327	8.4	752	9.9	12.7	114
JUN 02...	1608	80513	312	7.9	748	11.5	9.0	84
JUL 28...	1330	80513	335	7.8	766	13.3	10.3	98
AUG 13...	1307	80513	326	7.5	758	12.7	10.7	102
SEP 08...	1219	80513	327	--	760	15.1	14.1	141

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.5	1.3	2.5	9.1	2.3	5.6	9.8	2.4	5.7	---	---	---
2	7.4	1.3	5.3	8.9	2.2	5.0	8.8	2.5	4.9	---	---	---
3	7.2	1.1	3.7	8.8	2.1	5.0	9.1	2.3	4.9	---	---	---
4	8.1	.9	4.7	8.0	1.9	4.5	9.6	3.0	6.2	---	---	---
5	7.2	.8	2.5	8.0	1.6	4.0	9.7	4.8	6.9	---	---	---
6	7.3	.8	2.6	8.8	1.5	4.7	10.1	6.1	7.7	---	---	---
7	5.2	.9	2.0	9.6	2.2	5.4	10.0	6.1	7.6	---	---	---
8	5.9	.7	2.0	9.2	2.4	5.7	10.9	6.6	8.4	---	---	---
9	7.8	.5	2.8	9.2	2.7	5.7	10.3	6.6	8.4	---	---	---
10	7.4	1.3	4.5	10.2	3.3	6.4	10.7	7.5	9.3	---	---	---
11	6.9	.8	4.0	8.8	4.1	5.9	11.6	8.4	9.8	---	---	---
12	7.8	.7	3.5	10.2	4.4	6.1	11.8	8.8	10.4	---	---	---
13	8.5	1.3	4.5	10.2	1.4	5.2	12.4	9.5	10.8	---	---	---
14	7.6	1.8	4.3	9.0	1.4	4.4	12.0	9.2	9.9	---	---	---
15	7.1	1.5	4.6	8.6	1.4	4.6	12.1	9.4	10.7	---	---	---
16	6.9	.9	4.0	8.5	2.0	5.1	11.4	9.1	9.6	---	---	---
17	7.2	1.1	4.3	9.0	1.5	4.3	12.2	9.2	10.7	---	---	---
18	7.3	1.5	4.5	8.5	2.2	5.0	12.7	9.7	11.3	---	---	---
19	7.2	1.3	4.1	---	---	---	10.7	9.8	10.2	---	---	---
20	6.8	1.3	3.9	---	---	---	11.1	10.1	10.5	---	---	---
21	6.4	.6	2.8	7.7	1.6	4.7	11.9	10.3	10.8	---	---	---
22	6.8	.6	3.9	7.8	1.9	4.2	12.5	10.6	11.2	---	---	---
23	7.4	2.0	5.0	7.2	1.5	4.4	11.8	10.1	11.1	---	---	---
24	7.1	1.2	4.7	8.1	2.6	4.9	12.0	10.6	11.1	---	---	---
25	7.6	2.5	5.9	7.6	1.3	3.8	11.8	10.8	11.2	---	---	---
26	6.5	4.9	5.8	3.3	1.1	1.7	12.1	11.0	11.4	---	---	---
27	7.5	2.3	4.7	2.4	1.4	1.8	11.9	11.0	11.5	---	---	---
28	7.4	2.6	4.9	8.1	1.0	2.8	12.1	11.1	11.6	---	---	---
29	9.8	2.8	5.3	9.4	1.3	4.4	12.1	11.3	11.7	---	---	---
30	9.7	2.5	5.5	9.9	1.4	6.2	12.6	11.3	11.6	---	---	---
31	9.4	2.5	5.4	---	---	---	12.2	11.3	11.7	---	---	---
MONTH	9.8	.5	4.1	---	---	---	12.7	2.3	9.6	---	---	---

WHITE RIVER BASIN

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07060000 NORTH FORK RIVER AT NORFORK DAM, NEAR NORFORK--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	7.7	5.1	6.3	7.0	2.8	4.4	7.3	1.2	3.5
2	---	---	---	8.2	5.2	6.4	8.9	3.0	5.2	9.5	1.2	3.9
3	8.8	6.8	7.8	8.0	5.1	6.4	9.3	2.9	4.8	7.2	1.2	4.3
4	8.7	6.9	7.7	7.8	5.0	6.3	7.0	3.0	4.8	7.7	1.3	3.6
5	9.2	6.9	7.7	7.6	5.2	6.3	6.4	2.9	4.5	7.8	1.2	4.1
6	9.4	7.3	7.9	9.5	5.0	6.3	9.2	2.7	5.3	8.4	1.6	4.5
7	9.5	7.5	8.0	6.8	5.0	5.8	8.9	2.6	5.0	7.2	1.4	3.7
8	9.5	6.8	7.6	7.6	4.7	5.7	8.1	2.9	5.2	6.8	1.6	4.0
9	9.5	7.0	7.6	8.9	4.6	6.2	7.1	2.6	4.6	7.7	1.1	3.8
10	9.2	7.0	7.6	9.1	4.8	6.3	8.8	2.3	4.4	7.3	1.1	3.5
11	9.2	7.0	7.6	8.5	4.4	5.8	8.2	2.5	4.2	5.8	1.2	3.5
12	8.3	6.7	7.3	8.2	4.6	5.9	7.6	2.3	4.5	5.8	.7	2.8
13	8.9	6.6	7.4	8.3	4.6	5.8	8.5	2.3	4.6	6.7	.7	2.7
14	8.3	6.5	7.2	9.7	4.7	6.3	7.9	2.2	4.2	5.7	1.0	2.6
15	8.7	6.6	7.4	10.3	4.5	7.0	7.8	1.9	3.9	6.5	.9	2.3
16	8.6	6.6	7.3	9.4	4.5	5.8	9.1	2.0	4.1	6.3	.8	2.2
17	8.4	6.3	7.1	8.8	4.2	5.8	5.8	2.1	3.7	7.5	.8	4.9
18	8.0	6.2	7.0	9.6	3.9	5.7	7.9	2.1	4.5	5.2	.9	2.6
19	8.4	5.8	6.9	9.3	4.1	6.1	8.0	2.0	4.2	6.6	.7	2.4
20	8.1	5.7	6.8	8.4	3.8	5.7	7.8	1.9	4.3	5.8	.7	2.2
21	8.6	5.8	6.8	8.6	3.8	5.3	7.8	2.2	4.5	5.2	.6	2.1
22	8.5	5.8	6.8	9.2	3.7	5.2	8.3	2.4	4.9	9.3	.6	3.8
23	8.3	5.5	6.5	8.8	3.5	5.3	7.6	2.0	4.3	---	---	---
24	8.7	5.3	6.6	7.6	3.5	5.4	6.7	2.5	4.1	---	---	---
25	8.2	5.5	6.6	8.4	3.8	6.1	8.0	2.1	4.3	---	---	---
26	8.5	5.4	6.7	9.1	3.2	5.6	6.8	2.8	4.5	5.7	.9	2.4
27	8.4	5.3	6.5	9.1	3.6	5.9	7.3	1.3	3.6	5.7	.9	2.3
28	7.6	5.1	6.2	---	---	---	7.2	1.5	4.0	8.1	.8	3.4
29	7.3	5.1	6.1	6.9	3.3	4.8	5.9	1.3	3.3	6.9	.0	2.6
30	8.4	4.6	6.0	8.0	2.8	4.8	5.4	1.2	3.2	6.8	.8	3.1
31	---	---	---	7.6	3.2	5.5	6.7	1.2	3.6	---	---	---
MONTH	---	---	---	---	---	---	9.3	1.2	4.3	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.7	11.7	12.5	14.6	12.9	13.5	12.5	11.7	12.1	---	---	---
2	13.7	12.0	13.2	14.5	12.6	13.4	12.2	11.5	11.8	---	---	---
3	13.8	12.2	13.1	14.3	12.2	13.1	12.2	11.5	11.9	---	---	---
4	13.8	12.4	13.2	14.1	12.4	13.1	12.2	11.6	11.9	---	---	---
5	14.1	12.1	12.7	14.0	12.5	13.0	12.2	11.7	11.9	---	---	---
6	13.8	12.2	12.7	14.3	12.4	13.1	11.9	11.6	11.7	---	---	---
7	14.1	12.2	12.6	14.4	12.8	13.4	11.8	11.4	11.6	---	---	---
8	13.9	12.3	12.6	14.2	12.7	13.4	11.6	11.3	11.5	---	---	---
9	13.9	12.2	12.8	13.9	12.4	13.2	11.4	11.3	11.4	---	---	---
10	13.9	12.5	13.1	14.1	12.4	13.2	11.4	11.3	11.3	---	---	---
11	13.6	12.4	12.9	14.0	12.5	13.1	11.3	11.1	11.1	---	---	---
12	13.4	12.1	12.7	13.9	12.4	12.9	11.1	10.9	11.0	---	---	---
13	14.1	12.4	12.9	13.7	12.3	12.8	11.1	10.8	10.9	---	---	---
14	14.8	12.3	13.5	13.7	12.3	12.8	11.1	10.5	10.8	---	---	---
15	14.1	12.4	13.3	13.6	12.3	12.9	10.7	10.5	10.6	---	---	---
16	14.0	12.0	12.8	13.5	12.4	13.0	11.3	10.4	10.7	---	---	---
17	13.7	12.3	13.0	13.3	12.1	12.6	11.0	10.4	10.6	---	---	---
18	13.6	12.4	13.0	13.2	12.3	12.8	10.5	10.2	10.4	---	---	---
19	13.6	12.3	13.0	---	---	---	11.2	10.1	10.4	---	---	---
20	14.1	12.4	13.1	---	---	---	10.6	10.0	10.2	---	---	---
21	14.3	12.1	13.0	13.3	12.4	12.8	10.2	10.0	10.1	---	---	---
22	14.3	12.1	13.2	13.0	12.2	12.6	10.1	9.9	9.9	---	---	---
23	14.0	12.1	13.1	12.8	12.1	12.5	10.0	9.8	9.9	---	---	---
24	14.3	12.4	13.4	12.9	12.0	12.4	9.8	9.6	9.7	---	---	---
25	14.4	12.7	14.0	12.7	12.0	12.4	9.7	9.4	9.6	---	---	---
26	14.4	13.7	14.1	13.0	11.7	12.3	9.7	9.5	9.6	---	---	---
27	14.6	12.3	13.4	12.1	11.6	11.9	9.5	9.4	9.5	---	---	---
28	14.3	12.4	13.1	12.4	12.0	12.1	9.4	9.3	9.3	---	---	---
29	13.9	12.3	13.0	12.3	11.6	12.1	9.3	9.2	9.3	---	---	---
30	14.1	12.6	13.2	12.3	11.6	12.0	9.3	9.0	9.2	---	---	---
31	14.1	12.8	13.3	---	---	---	9.5	8.9	9.1	---	---	---
MONTH	14.8	11.7	13.1	---	---	---	12.5	8.9	10.6	---	---	---

WHITE RIVER BASIN

07060000 NORTH FORK RIVER AT NORFORK DAM, NEAR NORFORK--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	11.5	10.4	10.9	12.3	11.2	11.6	13.6	11.9	12.7
2	---	---	---	11.3	10.3	10.8	12.4	11.2	11.8	13.5	11.9	12.7
3	10.4	9.5	10.1	11.5	10.5	11.0	12.4	11.4	11.7	13.4	11.8	12.7
4	10.4	9.8	10.2	11.5	10.5	11.0	12.5	11.3	11.8	13.4	12.0	12.6
5	10.5	9.8	10.2	11.8	10.6	11.1	12.5	11.3	11.8	13.6	12.0	12.8
6	10.7	9.7	10.4	11.6	10.6	11.1	12.5	11.3	11.9	13.5	12.0	12.7
7	10.4	9.9	10.2	11.8	10.6	11.3	12.6	11.4	12.0	13.7	12.0	12.8
8	10.6	9.7	10.3	11.7	10.6	11.2	12.5	11.4	12.0	13.8	12.2	12.8
9	10.9	9.9	10.5	11.6	10.6	11.1	12.7	11.4	11.9	13.5	11.8	12.5
10	11.0	10.0	10.6	11.7	10.6	11.1	12.7	11.5	12.0	13.6	11.9	12.6
11	10.8	10.0	10.6	11.7	10.7	11.1	12.7	11.4	11.8	13.7	12.2	12.9
12	10.9	9.8	10.6	11.8	10.8	11.1	12.6	11.4	11.9	13.8	12.1	12.6
13	11.1	9.8	10.6	11.9	10.7	11.4	12.8	11.4	12.0	13.8	12.1	12.6
14	11.1	10.1	10.7	11.9	10.8	11.3	12.6	11.5	11.9	13.7	12.3	12.7
15	11.2	10.1	10.8	11.7	10.8	11.2	12.7	11.4	11.9	13.6	12.2	12.5
16	11.1	10.1	10.8	11.8	10.7	11.3	12.7	11.4	11.8	13.7	12.1	12.4
17	11.0	10.0	10.7	11.9	10.7	11.3	12.8	11.4	12.0	13.5	12.1	13.0
18	11.2	10.4	10.9	11.9	10.8	11.4	12.6	11.5	11.9	13.7	12.1	12.7
19	11.5	10.3	11.0	12.0	10.9	11.5	12.9	11.5	12.1	13.7	12.3	12.7
20	11.5	10.4	10.8	12.1	10.9	11.5	12.7	11.4	12.2	13.7	12.2	12.6
21	11.4	10.4	10.8	12.3	10.8	11.6	12.9	11.4	12.2	14.1	12.3	12.8
22	11.5	10.3	10.8	12.1	10.9	11.6	12.9	11.6	12.4	13.6	12.3	12.8
23	11.3	10.1	10.6	12.3	10.9	11.5	13.1	11.7	12.4	---	---	---
24	11.4	10.2	10.8	12.1	11.1	11.6	13.1	11.9	12.7	---	---	---
25	11.4	10.5	10.9	12.1	11.2	11.6	13.2	11.8	12.8	---	---	---
26	11.6	10.4	11.0	12.2	11.2	11.6	13.1	12.0	12.8	13.9	12.2	12.7
27	11.6	10.4	11.0	12.5	11.3	11.9	13.0	11.5	12.4	14.0	12.1	12.6
28	11.6	10.4	11.0	---	---	---	13.3	11.8	12.6	13.9	12.1	12.9
29	11.4	10.4	11.0	12.4	11.2	11.8	13.4	11.8	12.7	13.8	12.1	12.8
30	11.7	10.4	11.1	12.6	11.1	11.7	13.3	11.8	12.5	13.8	12.3	12.8
31	---	---	---	12.7	11.4	12.2	13.4	11.6	12.7	---	---	---
MONTH	---	---	---	---	---	---	13.4	11.2	12.1	----	---	---

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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	1720	2230	2080	2870	26600	35300	10400	17200	12400	5700	9260
2	4700	3550	9550	1480	2980	27900	21300	13000	20800	4500	7580	4710
3	10400	2050	5500	1390	13500	24400	19300	13000	18300	5690	2860	7270
4	12500	4200	5440	1430	12700	20800	20600	14200	18600	5120	6210	9510
5	9750	2650	3950	6250	15200	20500	20600	11900	18700	2920	e7500	9500
6	7780	1900	2650	27400	12400	25400	22800	8310	18200	4390	12600	8480
7	8560	2430	1740	20200	8420	26200	19000	9330	19000	16500	10700	6330
8	7750	1730	1300	27600	2900	32800	24900	8100	18200	11200	8940	3360
9	8520	1900	2680	26200	3760	36500	27900	7370	19100	10700	9320	3870
10	4680	2010	4200	21100	8470	19300	28200	8910	19300	11400	10700	2500
11	9360	6110	2680	15700	17800	14900	21200	9750	18500	8000	8560	2570
12	8760	3920	3360	11900	36000	22100	19900	9600	18100	4460	3780	5740
13	5110	5910	3330	15200	28000	16200	18500	7490	16300	5790	4770	3880
14	4550	4340	2330	14900	21100	21000	12300	7480	15200	11700	6100	3350
15	7480	3240	3400	9120	19200	25400	8470	7230	17400	7860	4100	11100
16	7770	3310	3100	9530	18900	30500	10900	6660	18000	7770	2820	4460
17	10100	1770	1780	8060	19500	28900	9300	8110	18800	10700	1710	7070
18	8150	5700	3540	3440	30000	28900	9270	8090	20500	8690	10700	9790
19	2490	5120	1970	3590	27700	31300	8240	10800	18900	12800	10600	9690
20	3590	3210	1030	10400	28300	42100	9360	14000	18200	13200	8660	5950
21	10300	3570	1030	10700	24700	26500	10300	14700	12000	16700	9550	4730
22	6820	4970	1770	8510	22500	16800	15100	14200	12200	13800	9700	7980
23	3670	1930	2540	7920	22600	13300	17300	17200	8240	9150	10500	2130
24	2240	1760	2230	5720	20600	17200	17400	17400	8830	8640	12500	1850
25	3380	3090	3240	3900	14200	14200	18000	17200	9880	5660	15100	2880
26	3670	2740	5620	2220	17900	16500	17800	18100	10200	2200	13200	8760
27	2220	1050	6660	6160	24300	15800	18000	13900	11600	3350	9410	7080
28	6110	889	6220	7020	27800	21100	15000	11400	12400	6200	10200	6190
29	9100	1410	5670	5580	---	20500	11300	12800	13400	13000	8210	8080
30	5460	1410	6380	4100	---	22400	14700	16100	14800	16900	9250	7390
31	5480	---	3440	3950	---	26700	---	17600	---	13500	9920	---
TOTAL	202450	89589	110560	302750	504300	732700	522240	364330	480850	284890	261450	185460
MEAN	6531	2986	3566	9766	18010	23640	17410	11750	16030	9190	8434	6182
MAX	12500	6110	9550	27600	36000	42100	35300	18100	20800	16900	15100	11100
MIN	2000	889	1030	1390	2870	13300	8240	6660	8240	2200	1710	1850
AC-FT	401600	177700	219300	600500	1000000	1453000	1036000	722600	953800	565100	518600	367900

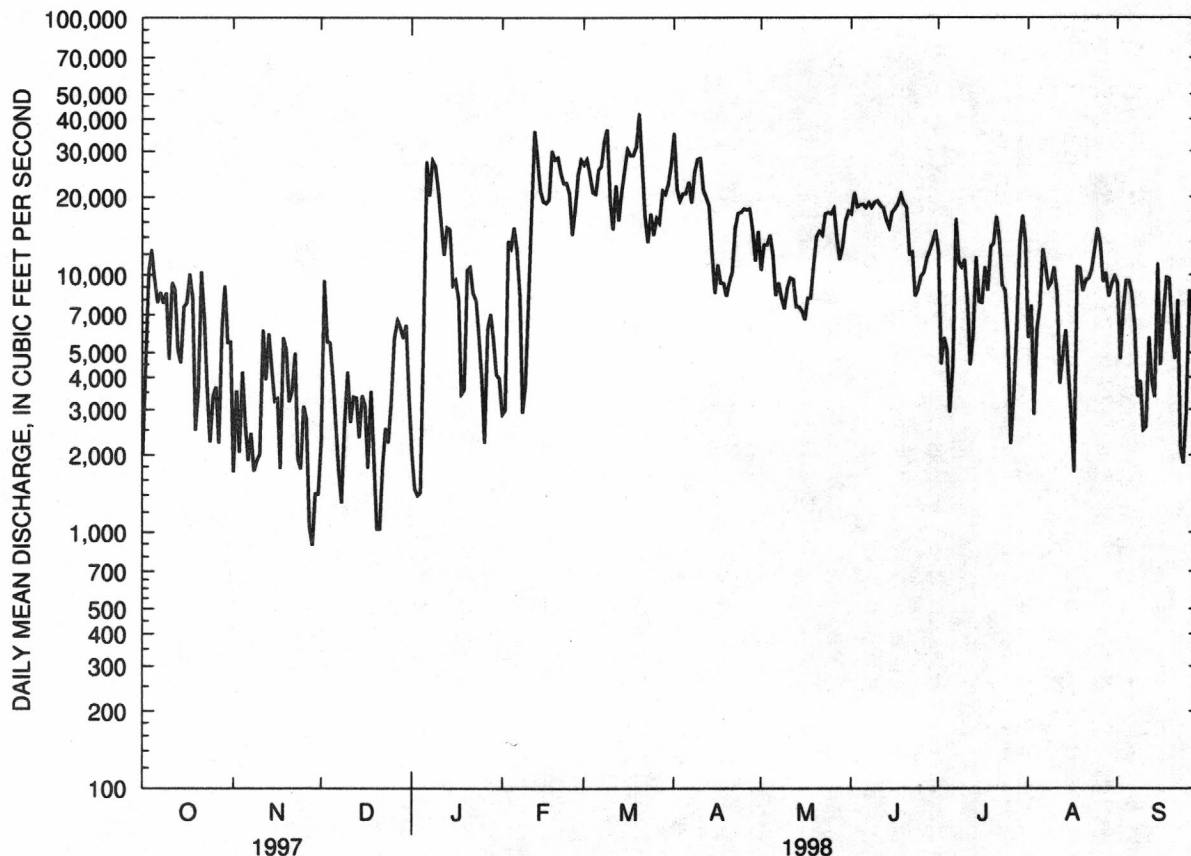
WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	5534	7459	10220	11000	12620	14600	16290	14350	10250	9114	7507	5825
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1940 - 1998	
ANNUAL TOTAL	3876819		4041569			
ANNUAL MEAN	10620		11070		10390	
HIGHEST ANNUAL MEAN					22890	1945
LOWEST ANNUAL MEAN					3482	1981
HIGHEST DAILY MEAN	36200	Mar 22	42100	Mar 20	292000	Apr 16 1945
LOWEST DAILY MEAN	889	Nov 28	889	Nov 28	310	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	1760	Nov 24	1760	Nov 24	412	Sep 23 1954
INSTANTANEOUS PEAK FLOW			46300	Mar 20	310000	Apr 16 1945
INSTANTANEOUS PEAK STAGE			15.33	Mar 20	^a 49.84	Apr 16 1945
INSTANTANEOUS LOW FLOW			877	Nov 28	^b 305	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	7690000		8016000		7524000	
10 PERCENT EXCEEDS	21500		21200		22000	
50 PERCENT EXCEEDS	8640		9270		6990	
90 PERCENT EXCEEDS	2370		2470		2010	

^aAt present datum^bObserved^cEstimated

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 1997 TO SEPTEMBER 1998

		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											
13...	1100	80513	81213	6490	277	8.0	760	9.0	11.2	97	K17
JAN											
27...	1100	80513	81213	8410	290	7.8	770	7.2	14.2	116	K3
MAR											
10...	1015	80513	81213	21500	227	7.8	770	6.7	12.4	100	140
APR											
13...	1015	80513	81213	21400	268	8.3	750	10.5	9.3	85	--
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)
NOV											
13...	K24	130	36	10	3.5	5	.1	1.6	115	6.5	5.7
JAN											
27...	K7	150	42	11	3.3	5	.1	1.5	132	6.8	5.4
MAR											
10...	270	110	33	6.7	2.0	4	.1	1.1	100	5.9	3.3
APR											
13...	K8	140	36	11	3.1	5	.1	1.5	126	6.6	4.9
DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS STO2) (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 DIS. (MG/L AS N) (00623)
NOV											
13...	<.10	4.1	160	137	.22	2800	<.010	.220	.020	.03	<.20
JAN											
27...	<.10	4.1	164	155	.22	3720	<.010	.400	<.010	--	<.20
MAR											
10...	<.10	5.9	122	120	.17	7080	<.010	.350	.028	.04	<.20
APR											
13...	<.10	2.8	148	143	.20	8550	<.010	.230	.016	.02	<.20
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											
13...	<.010	--	21	26	<.50	<.50	<1.0	<1.0	<1.0	10	<1.0
JAN											
27...	.010	.03	15	27	<.50	<.50	<1.0	<1.0	<1.0	3.0	<1.0
MAR											
10...	.010	.03	17	20	<.50	<.50	<1.0	<1.0	<1.0	10	<1.0
APR											
13...	<.010	--	21	26	<.50	<.50	<1.0	<1.0	<1.0	6.0	<1.0

WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
NOV 13...	<4	1.4	<2.0	<1.0	<1.0	32	<1	1.8	35	613	79
JAN 27...	<4	2.3	<2.0	<1.0	<1.0	36	<1	1.5	27	613	93
MAR 10...	<4	2.0	<2.0	<1.0	<1.0	30	<1	1.7	44	2550	62
APR 13...	<4	2.1	<2.0	<1.0	<1.0	32	<1	1.9	25	1440	92

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	DEPTH AT SAMPLE LOC- TION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
JUN							
22...	1230	80513	81213	--	--	--	15400
22...	1410	80513	80513	510	2.50	145	--
22...	1412	80513	80513	510	2.40	196	--
22...	1414	80513	80513	510	2.60	247	--
22...	1416	80513	80513	510	2.40	298	--
22...	1418	80513	80513	510	2.40	349	--
22...	1420	80513	80513	510	2.60	400	--
22...	1422	80513	80513	510	2.30	451	--
22...	1424	80513	80513	510	2.40	502	--
22...	1426	80513	80513	510	2.50	553	--
22...	1428	80513	80513	510	2.50	604	--

DATE	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)
JUN						
22...	260	7.9	13.5	9.2	89	756
22...	258	8.2	13.6	9.2	89	756
22...	259	8.0	13.6	9.0	88	756
22...	259	7.9	13.5	9.1	88	756
22...	260	7.9	13.5	9.1	88	756
22...	260	7.9	13.4	9.0	87	756
22...	260	7.9	13.4	9.1	88	756
22...	260	7.9	13.4	9.2	89	756
22...	260	7.9	13.5	9.2	89	756
22...	260	7.9	13.5	9.3	90	756
22...	260	7.9	13.6	9.4	91	756

WHITE RIVER BASIN

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07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS, TOTAL AS CACO3 (00900)	CALCIUM, DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO SODIUM PERCENT (00932)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ANCIENT WATER UNFILTERED FET FIELD MG/L AS CACO3 (00410)		
22...	JUN 1230	15400	K57	K11	130	35	10	3.0	5	.1	1.5	115	
DATE		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 (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)	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 DIS-SOLVED (MG/L AS NH4) (71846)
22...	JUN 6.8	5.5	<.10	3.2	146	136	.20	6070	<.010	.340	.012	.02	
DATE		NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	
JUN 22...		<.20	<.010	18	26	<.50	<.50	<1.0	<1.0	<1.0	3.0	<1.0	
DATE		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)	SEDI-MENT, DIS-SUSPENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUSPENDED (T/DAY) (80155)	SEDIMENT, SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
JUN 22...		<4	3.0	<2.0	<1.0	<1.0	32	<1	1.6	24	998	88	
DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH, WATER WHOLE FIELD (STANDARD UNITS) (00400)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TEMPERATURE, WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)		
AUG 17...	0915	80513	81213	1340	289	7.8	757	20.8	8.8	99	K23		
DATE		STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS, TOTAL AS CACO3 (00900)	CALCIUM, DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO SODIUM PERCENT (00932)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ANCIENT WATER UNFILTERED FET FIELD MG/L AS CACO3 (00410)	SULFATE, DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)		
AUG 17...	K15	140	36	13	3.3	5	.1	1.5	132	5.9	5.1		

WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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, 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. (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
AUG 17...	<.10	4.0	160	149	.22	579	<.010	.290	<.010	<.20	.010
DATE	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)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
AUG 17...	.03	21	28	<.50	<.50	<1.0	<1.0	<1.0	4.4	<1.0	<4
DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	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)	
AUG 17...	6.7	<2.0	<1.0	<1.0	32	<1	<1.0	21	76	97	

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.9	15.7	16.3	14.9	13.4	14.7	12.4	11.6	12.1	8.1	7.7	7.9
2	17.3	15.8	16.7	14.7	13.3	14.3	11.9	11.2	11.6	9.1	8.1	8.4
3	16.9	15.9	16.2	14.3	11.6	12.6	11.9	11.6	11.7	10.6	9.1	9.9
4	16.2	15.4	15.7	12.4	11.4	11.8	11.8	11.4	11.6	11.7	10.6	11.3
5	15.9	15.5	15.7	13.0	12.4	12.8	11.5	10.3	10.8	11.4	11.1	11.2
6	16.1	15.9	16.0	13.0	12.1	12.6	10.3	9.6	9.9	11.6	11.3	11.5
7	16.2	15.8	16.0	12.1	11.8	11.9	9.8	8.4	9.0	11.5	11.2	11.4
8	15.9	15.8	15.9	12.2	11.9	11.9	8.4	5.7	6.3	11.2	10.4	10.8
9	15.9	15.7	15.8	12.3	11.9	12.1	7.9	6.6	7.2	10.4	10.0	10.1
10	16.8	15.9	16.2	12.5	11.8	12.2	9.2	7.9	8.8	10.0	9.7	9.9
11	16.9	16.0	16.4	12.5	11.6	12.0	9.6	9.2	9.4	9.7	9.5	9.6
12	16.6	16.2	16.4	12.5	11.9	12.3	9.4	8.9	9.2	9.5	9.3	9.3
13	16.3	16.1	16.3	11.9	11.4	11.6	9.8	9.0	9.4	9.5	9.3	9.4
14	16.1	15.2	15.5	11.7	11.7	11.7	9.5	8.3	9.0	9.3	9.2	9.2
15	15.5	14.9	15.2	11.7	10.8	11.2	9.3	7.8	8.5	9.2	8.9	9.0
16	15.4	14.8	15.1	10.8	10.3	10.5	9.5	8.7	9.1	8.9	8.4	8.6
17	15.0	14.5	14.7	10.4	9.3	10.0	9.2	7.4	8.1	9.0	8.6	8.7
18	15.1	14.6	14.8	10.8	8.7	9.4	9.1	8.2	8.6	9.2	9.0	9.0
19	15.6	14.5	15.0	11.5	10.8	11.1	9.6	9.0	9.2	9.3	9.1	9.2
20	15.5	14.8	15.2	11.6	11.4	11.5	9.6	8.8	9.0	9.2	9.0	9.0
21	15.5	14.7	15.2	12.1	11.5	11.8	8.9	7.2	7.8	9.2	9.0	9.1
22	14.7	14.2	14.4	12.4	12.0	12.1	8.5	7.7	8.1	9.2	8.8	9.0
23	14.4	13.9	14.1	12.3	11.8	12.0	8.9	8.5	8.8	8.8	8.5	8.6
24	15.0	14.2	14.5	11.8	11.1	11.4	9.1	8.8	8.9	8.6	8.3	8.4
25	15.0	14.6	14.7	11.5	10.8	11.1	9.1	8.8	8.9	8.5	8.1	8.2
26	14.6	13.9	14.4	12.5	11.5	12.0	9.0	8.7	8.8	8.5	8.2	8.4
27	13.9	11.3	13.1	12.0	10.3	10.8	8.9	8.6	8.7	8.6	8.1	8.3
28	13.1	10.4	11.7	13.2	11.1	12.2	8.9	8.5	8.6	8.9	8.6	8.7
29	14.1	13.1	13.7	13.6	13.2	13.4	8.6	8.4	8.5	9.1	8.7	8.9
30	14.2	13.9	14.0	13.2	12.2	12.4	8.6	8.4	8.5	9.2	8.9	9.0
31	14.9	14.2	14.4	---	---	---	8.6	7.8	8.2	9.2	8.9	9.1
MONTH	17.3	10.4	15.1	14.9	8.7	11.9	12.4	5.7	9.1	11.7	7.7	9.3

WHITE RIVER BASIN

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07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	9.6	9.2	9.3	9.2	9.0	9.1	12.2	11.5	11.8	12.7	12.2	12.4
2	9.9	9.5	9.6	9.0	8.6	8.8	11.8	11.6	11.7	12.8	12.4	12.6
3	9.9	9.4	9.6	8.8	8.5	8.6	11.8	11.4	11.6	12.5	12.2	12.3
4	9.4	9.0	9.2	8.8	8.5	8.7	11.4	10.8	11.1	12.2	11.9	12.0
5	9.0	8.6	8.8	8.6	8.4	8.5	---	---	10.6	12.3	12.0	12.1
6	8.8	8.6	8.7	8.5	8.4	8.4	10.8	10.5	10.6	12.8	12.1	12.4
7	8.8	8.6	8.7	8.6	8.4	8.5	11.1	10.6	10.8	13.2	12.8	13.1
8	9.0	8.6	8.8	8.8	8.6	8.7	11.2	10.7	10.9	14.0	13.2	13.5
9	9.0	8.8	8.9	8.8	8.5	8.7	10.9	10.2	10.6	13.9	13.5	13.6
10	9.0	8.8	8.8	8.5	8.1	8.3	10.6	10.2	10.3	13.6	13.2	13.4
11	9.1	8.9	9.0	8.2	7.9	8.0	10.8	10.6	10.7	14.8	13.6	14.3
12	9.0	8.8	8.9	7.9	7.5	7.7	11.0	10.8	10.8	14.6	14.2	14.4
13	8.8	8.6	8.7	8.3	7.7	7.9	11.2	10.9	11.0	15.1	14.2	14.7
14	8.9	8.8	8.8	8.8	8.3	8.4	11.5	11.1	11.3	15.1	14.7	14.9
15	9.0	8.7	8.9	8.9	8.5	8.7	12.8	11.5	12.1	14.9	14.4	14.6
16	8.8	8.7	8.7	8.5	8.2	8.3	12.8	12.2	12.4	15.0	14.4	14.6
17	8.9	8.8	8.9	8.7	8.2	8.3	13.2	12.4	12.7	15.2	14.5	14.8
18	8.8	8.8	8.8	9.4	8.7	9.0	13.3	12.7	12.9	14.7	14.0	14.4
19	8.8	8.7	8.8	9.5	9.3	9.4	12.7	12.1	12.4	14.4	13.8	14.1
20	8.9	8.7	8.8	9.4	9.2	9.3	12.6	12.1	12.3	14.3	13.4	13.7
21	8.9	8.8	8.9	9.3	9.1	9.2	12.1	11.8	12.0	13.5	12.8	13.1
22	9.0	8.9	8.9	9.7	9.2	9.4	11.9	11.2	11.5	13.1	12.9	13.0
23	9.2	8.9	9.0	10.2	9.7	9.9	11.2	10.9	11.0	12.9	12.5	12.6
24	---	---	9.1	10.1	9.8	9.9	11.4	11.0	11.1	12.5	12.2	12.3
25	---	---	9.3	10.9	9.9	10.2	11.4	11.1	11.2	12.6	12.3	12.5
26	9.7	9.4	9.5	10.9	10.5	10.7	11.5	11.2	11.3	12.5	12.2	12.3
27	9.5	9.1	9.3	10.9	10.8	10.8	11.6	11.3	11.4	12.7	12.4	12.6
28	9.4	9.2	9.3	11.3	10.7	10.9	12.2	11.6	12.0	13.0	12.7	12.9
29	---	---	---	11.4	10.9	11.1	13.3	12.2	12.7	13.0	12.6	12.8
30	---	---	---	11.3	10.9	11.1	13.6	12.4	13.1	12.8	12.5	12.6
31	---	---	---	12.2	11.1	11.3	---	---	---	12.9	12.6	12.7
MONTH	---	---	9.0	12.2	7.5	9.2	---	---	11.5	15.2	11.9	13.3
JUNE			JULY			AUGUST			SEPTEMBER			
1	12.9	12.7	12.8	14.7	14.2	14.4	16.0	15.2	15.5	16.8	16.3	16.5
2	13.0	12.6	12.8	15.4	14.1	14.5	---	---	16.4	17.8	16.4	16.8
3	13.2	12.7	12.9	16.1	15.2	15.7	---	---	e16.0	17.8	17.0	17.3
4	13.2	12.8	13.0	16.4	15.6	15.9	---	---	17.0	17.3	16.8	17.0
5	12.9	12.3	12.7	18.4	16.0	16.7	---	---	16.7	17.2	16.7	16.9
6	12.3	12.0	12.1	18.8	17.7	18.2	---	---	16.2	17.2	16.6	16.9
7	12.5	12.1	12.2	18.9	15.8	17.1	---	---	15.8	17.5	16.7	17.1
8	12.6	12.1	12.4	15.8	15.2	15.3	---	---	15.7	17.7	16.8	17.2
9	12.7	11.9	12.1	15.3	15.0	15.1	---	---	e16.0	18.6	17.7	18.0
10	13.3	12.6	12.8	15.3	15.1	15.2	---	---	e16.0	18.6	17.3	17.8
11	13.4	12.9	13.1	15.3	15.1	15.2	---	---	e16.5	19.2	17.6	18.0
12	13.3	12.8	13.0	16.1	15.2	15.4	---	---	e16.5	19.4	18.0	18.5
13	13.5	13.3	13.4	17.8	16.1	16.7	---	---	e16.0	18.6	18.2	18.4
14	13.7	13.4	13.5	17.7	15.7	16.4	---	---	e16.0	18.6	18.0	18.3
15	13.8	13.4	13.6	15.7	15.2	15.5	---	---	e16.5	18.3	17.1	17.8
16	13.6	13.2	13.4	16.1	15.6	15.9	---	---	e16.5	17.1	16.9	17.0
17	13.5	13.1	13.3	16.1	15.6	15.7	---	---	e17.0	17.1	16.9	17.0
18	13.7	13.3	13.5	15.9	15.2	15.6	---	---	e17.5	16.9	16.5	16.6
19	13.8	13.3	13.4	15.8	15.3	15.4	---	---	17.7	17.1	16.9	17.0
20	14.1	13.5	13.8	15.4	15.2	15.4	---	---	17.1	17.6	17.0	17.3
21	14.1	13.8	13.9	15.4	15.0	15.2	17.3	16.8	17.0	18.2	17.4	17.8
22	13.9	13.5	13.7	---	---	15.1	17.1	16.6	16.8	18.2	17.3	17.6
23	14.8	13.7	14.2	---	---	15.0	17.2	16.6	16.9	18.2	17.1	17.3
24	15.0	14.2	14.6	---	---	15.3	16.9	16.3	16.6	18.7	17.7	18.1
25	15.1	14.6	14.9	---	---	15.5	16.6	16.1	16.3	20.4	18.7	19.2
26	15.3	15.0	15.1	17.2	15.5	16.0	16.3	15.9	16.1	20.5	18.6	19.4
27	15.5	14.9	15.2	18.9	17.1	17.7	16.8	16.1	16.4	18.6	18.3	18.4
28	14.9	14.5	14.7	---	---	18.0	16.8	16.3	16.5	18.4	18.2	18.3
29	15.0	14.6	14.8	---	---	16.6	16.5	15.7	16.1	18.3	17.9	18.0
30	15.0	14.5	14.8	---	---	15.9	16.8	16.2	16.4	18.1	17.6	17.9
31	---	---	---	---	---	15.4	16.8	16.3	16.6	---	---	---
MONTH	15.5	11.9	13.5	---	---	15.8	---	---	16.5	20.5	16.3	17.6

e Estimated

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX
(Hydrologic benchmark station)

LOCATION.--Lat 35°59'30", long 92°12'50", in SW1/4NW1/4 sec.25, T.16 N., R.12 W., Stone County, Hydrologic Unit 11010004, on right bank 30 ft upstream from bridge on Ozark National Forest service road, 200 ft downstream from Gunner Creek, 2.7 mi north of Fifty-Six, and 7.0 mi upstream from South Sylamore Creek.

DRAINAGE AREA.--58.1 mi².

- WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 434.99 ft above sea level.

REMARKS.--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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	1.8	13	11	18	42	313	60	9.9	4.8	5.7	2.8
2	3.7	1.6	11	10	16	30	177	46	9.4	4.8	5.1	2.5
3	e3.5	1.4	13	9.8	14	23	139	36	9.0	4.7	4.4	2.5
4	e3.4	1.3	16	22	12	19	137	30	9.0	4.5	e4.0	2.5
5	e3.2	2.4	14	552	11	84	111	25	11	4.5	e5.0	2.5
6	e3.1	4.3	e12	185	e10	197	90	23	9.4	5.3	e6.5	2.2
7	e3.0	4.4	e9.5	120	9.9	137	84	21	8.3	5.8	14	2.2
8	3.7	3.2	e13	319	9.1	783	72	20	7.7	6.5	11	2.1
9	5.2	2.6	17	141	8.6	296	61	20	13	6.2	e10	1.9
10	5.9	3.3	14	81	19	155	50	85	16	5.9	e9.5	1.6
11	5.1	4.5	9.4	51	988	101	41	77	12	6.4	e13	1.6
12	4.4	5.2	6.4	35	197	70	37	52	10	13	e18	1.9
13	8.5	8.5	5.2	26	96	57	35	33	8.6	12	e16	2.4
14	8.1	16	4.7	21	57	48	33	25	8.1	8.5	41	9.1
15	5.1	11	5.2	e34	35	39	32	23	7.7	7.0	16	15
16	4.5	8.4	5.7	31	44	56	100	21	7.1	5.9	9.9	10
17	3.8	6.6	5.7	25	e180	325	123	19	6.8	5.3	7.3	7.2
18	3.3	6.4	5.2	20	155	233	90	17	6.4	5.7	6.0	5.7
19	3.1	6.0	e4.9	17	90	729	66	16	6.4	6.2	5.5	5.1
20	2.8	6.0	5.2	15	60	535	54	15	6.8	5.1	4.8	5.0
21	e2.7	6.4	9.3	13	42	228	46	15	7.4	4.4	4.5	5.4
22	e2.6	6.8	19	e12	29	148	39	14	9.0	4.1	4.4	5.5
23	e2.5	6.2	19	e11	22	108	34	14	8.0	4.2	4.4	5.2
24	3.3	6.5	37	e11	17	81	30	13	7.0	5.2	4.3	4.8
25	5.4	7.0	41	11	15	64	28	11	6.2	4.8	e4.1	4.5
26	11	7.5	26	16	18	52	25	20	6.0	5.0	e4.0	4.4
27	5.8	7.7	18	e52	e70	50	58	24	5.5	5.8	e4.0	4.0
28	3.3	8.3	15	46	60	113	89	17	5.3	7.3	3.5	3.4
29	2.4	10	13	34	---	104	107	14	5.4	6.5	3.4	3.4
30	2.2	13	11	26	---	84	84	12	5.2	6.4	3.3	3.4
31	2.0	---	11	21	---	843	---	11	---	6.6	3.1	---
TOTAL	131.0	184.3	409.4	1978.8	2302.6	5834	2385	829	247.6	188.4	255.7	129.8
MEAN	4.23	6.14	13.2	63.8	82.2	188	79.5	26.7	8.25	6.08	8.25	4.33
MAX	11	16	41	552	988	843	313	85	16	13	41	15
MIN	2.0	1.3	4.7	9.8	8.6	19	25	11	5.2	4.1	3.1	1.6
AC-FT	260	366	812	3920	4570	11570	4730	1640	491	374	507	257
CFBM	.07	.11	.23	1.10	1.42	3.24	1.37	.46	.14	.10	.14	.07
IN.	.08	.12	.26	1.27	1.47	3.74	1.53	.53	.16	.12	.16	.08

WHITE RIVER BASIN

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07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1998, BY WATER YEAR (WY)

MEAN	16.8	50.9	73.3	44.4	64.4	97.8	108	68.0	23.0	10.2	6.42	11.9
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

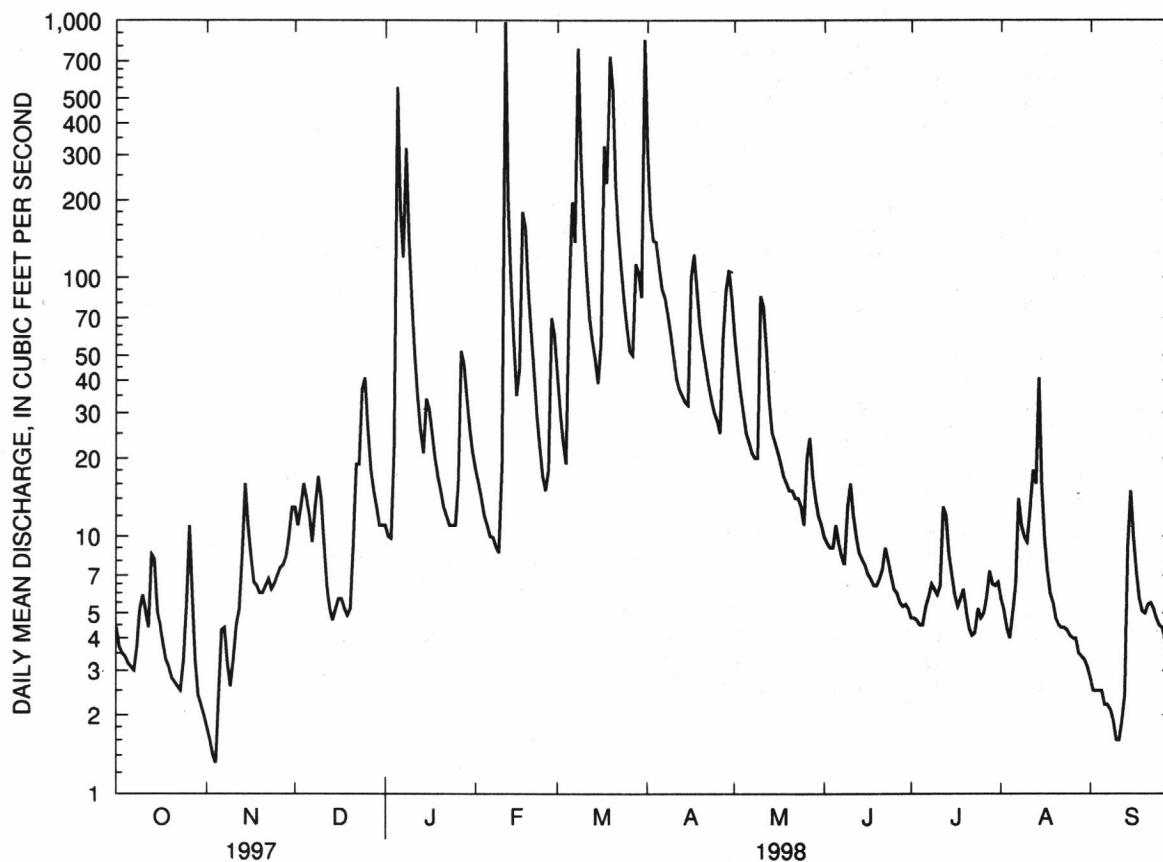
SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1966 - 1998
ANNUAL TOTAL	15351.1	14875.6	
ANNUAL MEAN	42.1	40.8	47.3
HIGHEST ANNUAL MEAN			102
LOWEST ANNUAL MEAN			15.8
HIGHEST DAILY MEAN	1680 Apr 5	988 Feb 11	11500 Dec 3 1982
LOWEST DAILY MEAN	1.3 Nov 4	1.3 Nov 4	1.3 Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	1.8 Oct 29	1.8 Oct 29	1.6 Sep 7 1995
INSTANTANEOUS PEAK FLOW		2570 Feb 11	^a 25200 Dec 3 1982
INSTANTANEOUS PEAK STAGE		7.27 Feb 11	20.60 Dec 3 1982
INSTANTANEOUS LOW FLOW		1.2 Nov 4	^b 1.2 Sep 11 1995
ANNUAL RUNOFF (AC-FT)	30450	29510	34250
ANNUAL RUNOFF (CFSM)	.72	.70	.81
ANNUAL RUNOFF (INCHES)	9.83	9.52	11.05
10 PERCENT EXCEEDS	82	90	89
50 PERCENT EXCEEDS	10	10	13
90 PERCENT EXCEEDS	3.7	3.3	4.1

^aFrom rating curve extended above 3,700 ft³/s on basis of step-backwater computations

^bAlso Nov. 4, 1997

^cEstimated



WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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) (00300) (00301)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
OCT												
15...	1325	80513	80020	4.8	280	8.2	760	16.1	10.4	106	K13	K3
NOV												
18...	1100	80513	80020	6.4	297	7.8	760	6.9	8.2	68	K6	K5
DEC												
17...	1020	80513	80020	5.5	300	7.7	756	4.3	12.6	98	K4	K6
JAN												
14...	0955	80513	80020	19	236	8.2	756	6.9	10.8	89	<1	K2
FEB												
09...	1125	80513	80020	8.6	266	8.2	754	6.6	14.0	115	33	K4
MAR												
16...	1325	80513	80020	43	226	8.3	754	8.4	11.5	99	K11	K10
APR												
15...	1040	80513	80020	31	264	8.2	745	15.1	9.8	100	K12	K3
MAY												
12...	1045	80513	80020	54	239	8.4	748	17.5	8.5	91	26	K10
JUN												
10...	0950	80513	80020	17	263	8.2	755	21.9	7.2	83	K58	46
JUL												
08...	1055	80513	80020	6.4	257	7.9	755	25.5	7.3	90	62	68
AUG												
05...	1015	80513	80020	9.5	259	8.0	754	23.8	6.9	83	380	160
SEP												
09...	1515	80513	80020	2.0	264	8.3	756	25.5	10.4	128	K4	K5
DATE		STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS NONCARB DISSOLV FLD.. AS CACO3 (MG/L) (00900)	HARD- NESS NONCARB DISSOLV FLD.. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	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												
15...	K14	140	11	47	6.5	1.5	2	.1	.75	132	0	163
NOV												
18...	K14	150	1	49	6.3	1.5	2	.1	.69	146	0	181
DEC												
17...	K18	150	--	49	6.3	1.5	2	.1	.63	149	0	183
JAN												
14...	23	120	6	41	5.2	.99	2	.0	.59	116	0	142
FEB												
09...	<1	130	2	43	5.6	1.2	2	.0	.59	128	0	157

WHITE RIVER BASIN

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07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO SODIUM PERCENT (00932)	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)	
MAR												
16...	K11	120	8	40	4.6	1.0	2	.0	.59	111	0	134
APR												
15...	39	130	8	45	4.8	1.1	2	.0	.74	121	0	150
MAY												
12...	42	120	9	39	4.9	1.1	2	.0	.64	108	0	133
JUN												
10...	110	130	6	44	5.3	1.3	2	.0	.68	125	0	154
JUL												
08...	120	120	5	41	5.6	1.5	3	.1	.78	121	0	146
AUG												
05...	680	130	5	41	5.8	1.5	2	.1	.81	120	0	147
SEP												
09...	28	140	16	44	6.6	1.5	2	.1	.80	119	0	146

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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT												
15...	133	3.9	1.9	<.10	7.3	160	149	.22	2.07	--	--	<.010
NOV												
18...	148	4.4	2.1	<.10	6.9	170	161	.23	2.94	--	--	<.010
DEC												
17...	150	5.5	2.5	<.10	6.5	175	162	.24	2.60	--	--	<.010
JAN												
14...	117	4.5	1.3	<.10	6.5	139	130	.19	7.13	--	--	<.010
FEB												
09...	128	5.5	1.6	<.10	6.0	144	141	.20	3.34	--	--	<.010
MAR												
16...	110	5.3	1.3	<.10	6.4	128	125	.17	14.9	.079	.35	.013
APR												
15...	123	5.1	1.3	<.10	7.0	149	139	.20	12.5	--	--	<.010
MAY												
12...	109	4.7	1.1	.35	7.3	135	125	.18	19.7	--	--	<.010
JUN												
10...	126	3.9	1.6	<.10	8.0	149	141	.20	6.84	--	--	<.010
JUL												
08...	120	3.3	1.7	<.10	8.7	147	135	.20	2.54	--	--	<.010
AUG												
05...	120	3.1	1.6	<.10	8.5	153	134	.21	3.92	--	--	<.010
SEP												
09...	120	3.2	1.9	<.10	8.8	159	138	.22	.86	--	--	<.010

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

DATE	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 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 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)
OCT												
15...	--	<.050	<.015	--	--	<.20	<.20	--	<.010	<.010	<.010	--
NOV												
18...	--	.060	.325	.42	--	<.10	<.10	--	<.010	<.010	<.010	--
DEC												
17...	--	<.050	<.020	--	--	<.10	<.10	--	<.010	<.010	<.010	--
JAN												
14...	--	.169	<.020	--	--	<.10	<.10	--	<.010	<.010	.011	.03
FEB												
09...	--	<.050	.023	.03	--	<.10	<.10	--	<.010	<.010	.019	.06
MAR												
16...	.04	.092	<.020	--	--	<.10	<.10	--	<.010	<.010	<.010	--
APR												
15...	--	<.050	.021	.03	--	<.10	<.10	--	.012	.010	.013	.04
MAY												
12...	--	<.050	.034	.04	--	<.10	<.10	--	<.010	<.010	<.010	--
JUN												
10...	--	.051	.040	.05	.07	<.10	.11	.16	<.010	<.010	<.010	--
JUL												
08...	--	.053	.020	.03	--	<.10	<.10	--	.020	<.010	.018	.06
AUG												
05...	--	<.050	<.020	--	--	<.10	<.10	--	<.010	<.010	<.010	--
SEP												
09...	--	<.050	.035	.05	--	<.10	<.10	--	.010	.015	.013	.04

DATE	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)	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)
OCT											
15...	3.3	2.9	34	.44	72	--	--	--	--	--	--
NOV											
18...	<3.0	<1.0	37	.64	64	--	--	--	--	--	--
DEC											
17...	<10	<4.0	28	.42	68	--	--	--	--	--	--
JAN											
14...	<10	<4.0	15	.77	95	--	--	--	--	--	--
FEB											
09...	<10	<4.0	16	.37	100	--	--	--	--	--	--
MAR											
16...	<10	<4.0	18	2.1	92	--	--	--	--	--	--
APR											
15...	<10	<4.0	12	1.0	91	<.001	<.002	103	<.001	98.1	<.004

WHITE RIVER BASIN

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07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

DATE	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)	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)
MAY											
12...	<10	<4.0	23	3.4	90	<.001	<.002	95.5	<.001	87.0	<.004
JUN											
10...	<10	<4.0	51	2.3	77	E.004	<.002	48.7	<.001	49.0	<.004
JUL											
08...	<10	<4.0	43	.74	54	<.001	<.002	61.7	<.001	58.2	<.004
AUG											
05...	<10	4.5	29	.74	95	<.001	<.002	83.1	<.001	77.4	<.004
SEP											
09...	11	<4.0	53	.29	65	<.001	<.002	41.9	<.001	39.7	<.004

DATE	MALA- THON, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	PARA- THON, 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)	P,P' DDE DISSOLV (UG/L) (34653)
APR											
15...	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
MAY											
12...	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
JUN											
10...	<.005	E.001	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
JUL											
08...	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
AUG											
05...	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060
SEP											
09...	<.005	<.002	<.004	<.0020	<.002	<.0020	<.0040	<.0040	<.0020	<.0030	<.0060

DATE	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)	METHYL PARA- THON WAT FLT 0.7 U GF, REC (UG/L) (82667)
APR											
15...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
MAY											
12...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JUN											
10...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JUL											
08...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
AUG											
05...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
SEP											
09...	<.0180	<.0070	<.0050	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 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)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC PERCENT (91064)	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											
15...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	92.0	<.0030	<.0170
MAY											
12...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	82.3	<.0030	<.0170
JUN											
10...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	52.9	<.0030	<.0170
JUL											
08...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	77.1	<.0030	<.0170
AUG											
05...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	104	<.0030	<.0170
SEP											
09...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	45.2	<.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											
15...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY											
12...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUN											
10...	<.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											
09...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

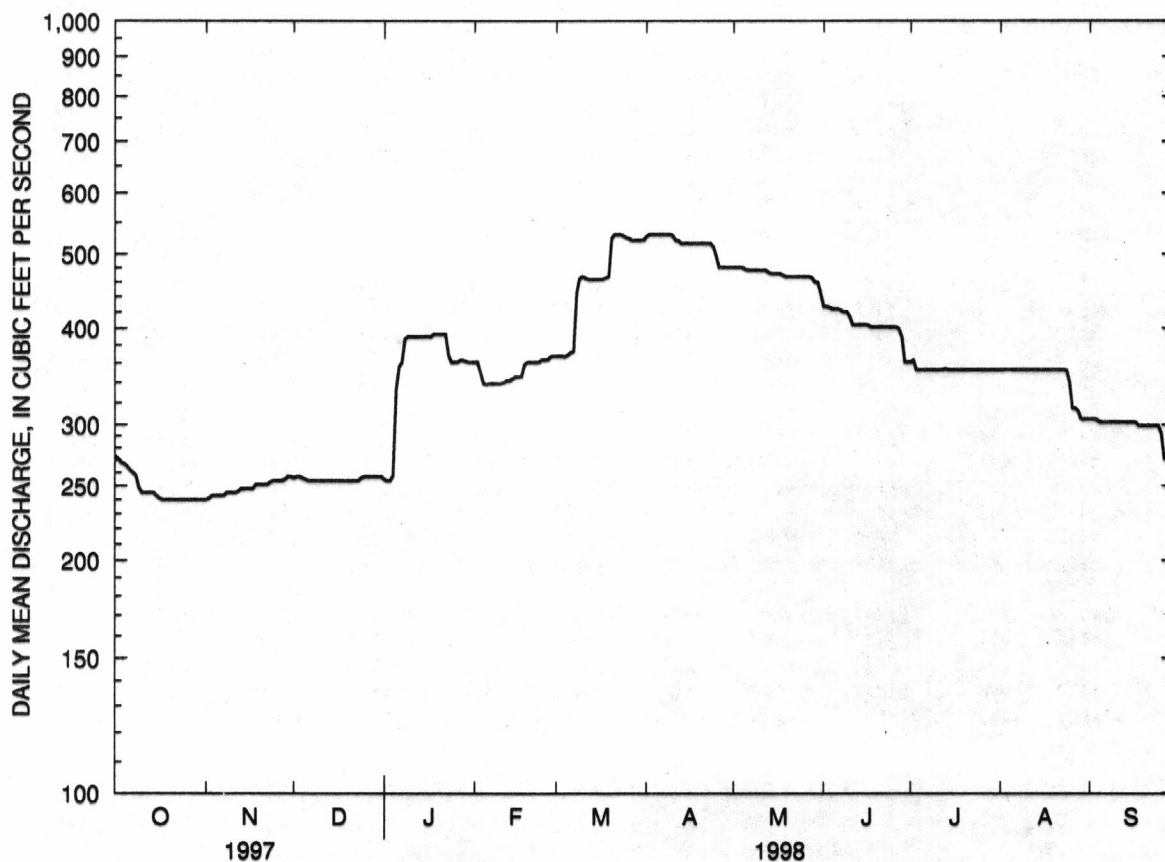
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WHITE RIVER BASIN

07069190 MAMMOTH SPRING AT MAMMOTH SPRING--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1981 - 1998	
ANNUAL TOTAL	133394		131278			
ANNUAL MEAN	365		360		372	
HIGHEST ANNUAL MEAN					453	1985
LOWEST ANNUAL MEAN					285	1987
HIGHEST DAILY MEAN	602	Apr 6	530	Mar 21	689	Apr 13 1991
LOWEST DAILY MEAN	240	Oct 17	240	Oct 17	182	Dec 18 1981
ANNUAL SEVEN-DAY MINIMUM	240	Oct 17	240	Oct 17	183	Dec 26 1981
INSTANTANEOUS PEAK FLOW			530	^a Mar 20	706	Apr 13 1991
INSTANTANEOUS PEAK STAGE			4.80	^a Mar 20	5.13	Apr 13 1991
INSTANTANEOUS LOW FLOW			240	^b Oct 15	182	^c Dec 17 1981
ANNUAL RUNOFF (AC-FT)	264600		260400		269900	
10 PERCENT EXCEEDS	504		503		498	
50 PERCENT EXCEEDS	372		353		368	
90 PERCENT EXCEEDS	248		248		243	

^aAlso Mar. 21-24, Apr. 1-10, 1998^bAlso Oct. 16 to Nov. 2, 1997^cAlso Dec. 28-31, 1981; Jan. 1-2, 1992

WHITE RIVER BASIN

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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. Water-discharge 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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

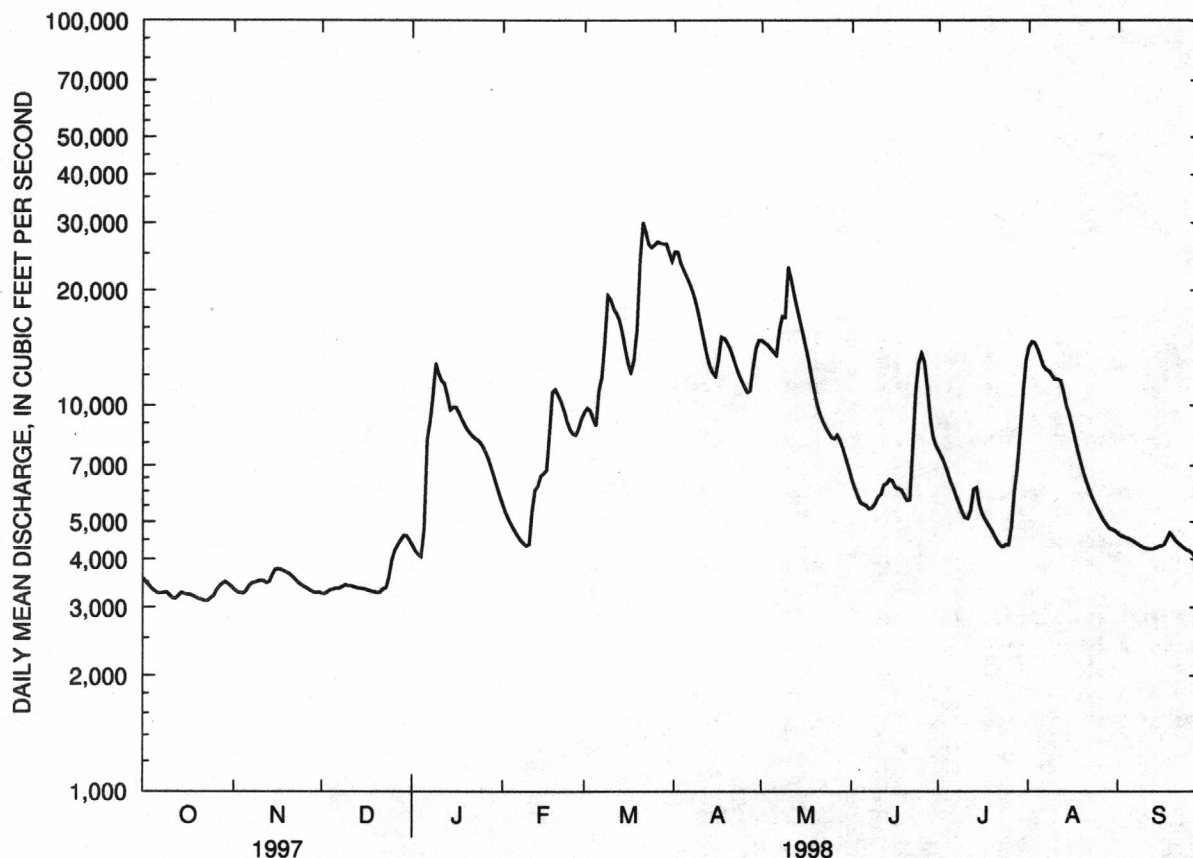
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3560	3340	3260	4350	5530	9610	25300	14800	6450	7610	14200	4670
2	3480	3290	3250	4210	5280	9830	25200	14600	6120	7360	14700	4610
3	3420	3270	3290	4120	5070	9690	23600	14400	5850	7070	14600	4580
4	3350	3260	3330	4060	4900	9240	22700	14100	5610	6740	14100	4550
5	3300	3300	3340	4830	4750	8850	21800	13800	5550	6380	13400	4520
6	3260	3400	3360	8150	4620	10900	20900	13500	5510	6100	12700	4480
7	3260	3460	3360	9080	4500	11800	19900	15700	5410	5810	12400	4430
8	3270	3480	3390	10600	4410	14700	18800	17100	5430	5550	12300	4380
9	3280	3500	3430	12900	4340	19400	17500	17000	5570	5310	12000	4330
10	3220	3520	3410	12100	4370	18900	16100	23100	5800	5120	11700	4290
11	3170	3510	3410	11600	5320	17900	14800	21500	5890	5100	11700	4270
12	3160	3470	3390	11400	6040	17400	13600	19500	6230	5370	11600	4260
13	3210	3490	3370	10600	6190	16700	12700	18000	6280	6070	10900	4260
14	3270	3630	3360	9730	6570	15500	12200	16700	6440	6140	10000	4280
15	3250	3760	3350	9900	6670	14100	11900	15500	6400	5520	9470	4320
16	3240	3780	3340	9890	6800	12900	13200	14300	6150	5240	8850	4340
17	3230	3760	3320	9550	8480	12200	15100	13200	6090	5070	8210	4370
18	3210	3730	3300	9180	10800	13100	15000	12000	6060	4920	7630	4520
19	3180	3700	3290	8870	11000	15700	14600	11000	5870	4780	7150	4690
20	3150	3660	3270	8620	10600	23900	14100	10100	5680	4640	6730	4600
21	3140	3600	3280	8430	10200	30100	13400	9530	5700	4490	6360	4490
22	3120	3530	3350	8270	9680	28300	12700	9080	7770	4370	6050	4410
23	3120	3470	3360	8170	9100	26400	12100	8760	10800	4310	5790	4350
24	3170	3430	3590	8050	8670	25900	11600	8500	12900	4370	5570	4290
25	3210	3390	3980	7860	8440	26300	11200	8250	13700	4360	5390	4240
26	3320	3360	4220	7590	8370	26800	10800	8190	13000	4840	5210	4210
27	3400	3320	4370	7290	8700	26600	10900	8380	11100	6000	5050	4150
28	3450	3290	4500	6920	9240	26500	12600	8100	9270	6900	4930	4030
29	3490	3270	4620	6550	---	26500	14100	7720	8280	8510	4820	3810
30	3450	3280	4610	6180	---	25100	14800	7290	7860	10600	4780	3600
31	3400	---	4490	5840	---	23900	---	6860	---	13100	4740	---
TOTAL	101740	104250	111190	254890	198640	574720	473200	400560	218770	187750	283030	130330
MEAN	3282	3475	3587	8222	7094	18540	15770	12920	7292	6056	9130	4344
MAX	3560	3780	4620	12900	11000	30100	25300	23100	13700	13100	14700	4690
MIN	3120	3260	3250	4060	4340	8850	10800	6860	5410	4310	4740	3600
AC-FT	201800	206800	220500	505600	394000	1140000	938600	794500	433900	372400	561400	258500

WHITE RIVER BASIN

07072500 BLACK RIVER AT BLACK ROCK--CONTINUED

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

MEAN	3948	6576	8965	10440	11040	13550	15550	13560	8208	5135	4043	3768
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 1997 CALENDAR YEAR					FOR 1998 WATER YEAR				WATER YEARS 1930 - 1998		
ANNUAL TOTAL	3216740					3039070						
ANNUAL MEAN	8813					8326				^a 8718		
HIGHEST ANNUAL MEAN										17330		
LOWEST ANNUAL MEAN										3552		
HIGHEST DAILY MEAN	54100					30100				123000		
LOWEST DAILY MEAN	3120					3120				1730		
ANNUAL SEVEN-DAY MINIMUM	3160					3160				1730		
INSTANTANEOUS PEAK FLOW						30900				^b 190000		
INSTANTANEOUS PEAK STAGE						21.13				^c 31.51		
ANNUAL RUNOFF (AC-FT)	6380000					6028000				6316000		
10 PERCENT EXCEEDS	19400					15600				18800		
50 PERCENT EXCEEDS	6380					6070				5610		
90 PERCENT EXCEEDS	3320					3320				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

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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.--Water-discharge records good, except estimated daily discharges, which are fair. 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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7580	9390	5200	10300	12900	36700	52900	32400	24600	23400	25800	15100
2	8530	8130	5360	9070	11900	37800	57700	31100	24500	22500	22700	15400
3	7110	6780	8470	7720	10800	38300	56300	30600	25800	17900	22100	12800
4	10600	6590	9270	6940	14900	38300	53700	30900	25500	15300	21200	12000
5	e13700	6550	8680	6820	17700	36000	52300	31000	25400	14800	20500	13700
6	e12600	7340	8340	13400	19500	36900	51300	30200	25400	13400	22000	14500
7	e12000	6660	7580	28000	19400	41000	51200	27500	25000	12200	25100	14000
8	11900	6150	6640	32200	16800	46900	49500	26800	25100	18000	25400	12700
9	11400	6350	5970	37100	12900	55100	49500	26700	24900	18800	24600	11400
10	11800	6070	5660	39000	10500	58200	50200	27200	25400	e18200	23100	9250
11	10200	6040	6830	37700	15100	54700	50200	28800	25900	e18500	23600	9430
12	11000	7060	7470	34500	24200	50300	47800	30200	25800	e18600	24700	8060
13	11800	8580	6820	30100	36300	49200	45000	31600	25500	e18700	21700	9090
14	10400	8800	7060	29300	37000	46700	42300	30900	24600	e17400	19500	9750
15	8880	9370	6770	29100	34000	45700	37600	30000	23700	18900	18800	9500
16	9720	8310	6580	26900	31800	45900	33200	28700	24600	18100	17700	12000
17	10600	7800	6870	25000	33000	47300	33200	27000	24800	16100	15600	12100
18	11800	7560	6230	23300	37600	48700	31700	25400	25400	17200	13900	10900
19	12500	7340	5900	19700	41500	48500	30800	24100	26100	16300	15600	13700
20	9270	8950	6770	17200	43600	53000	29300	24300	26300	18000	17900	14400
21	7150	8720	5810	19000	43300	59600	28500	24900	25000	18800	17600	13100
22	10500	7610	5290	20900	41900	59100	28300	24600	21900	20900	17100	11000
23	10800	8180	5230	19900	39700	54600	30000	24900	20900	20300	17300	12000
24	9170	7940	6110	19300	38100	50900	31300	26000	20300	17600	17000	11000
25	7370	6430	7370	17600	35800	49700	31700	26500	21400	15900	17700	8400
26	6940	6100	7530	15900	32400	48100	31800	26500	23100	14000	19700	7670
27	7390	6930	8800	14400	31600	47700	32200	26900	23800	11900	19300	10300
28	7380	6280	10500	14300	33900	47400	32600	25000	23900	10900	17000	12000
29	7070	5370	11000	15800	---	48600	32700	22800	23500	12600	16000	10800
30	11000	5130	11000	15400	---	49400	32000	22400	23000	17800	15000	11700
31	10300	---	11300	14100	---	50000	---	23100	---	23200	15200	---
TOTAL	308460	218510	228410	649950	778100	1480300	1216800	849000	731100	536200	610400	347750
MEAN	9950	7284	7368	20970	27790	47750	40560	27390	24370	17300	19690	11590
MAX	13700	9390	11300	39000	43600	59600	57700	32400	26300	23400	25800	15400
MIN	6940	5130	5200	6820	10500	36000	28300	22400	20300	10900	13900	7670
AC-FT	611800	433400	453100	1289000	1543000	2936000	2414000	1684000	1450000	1064000	1211000	689800

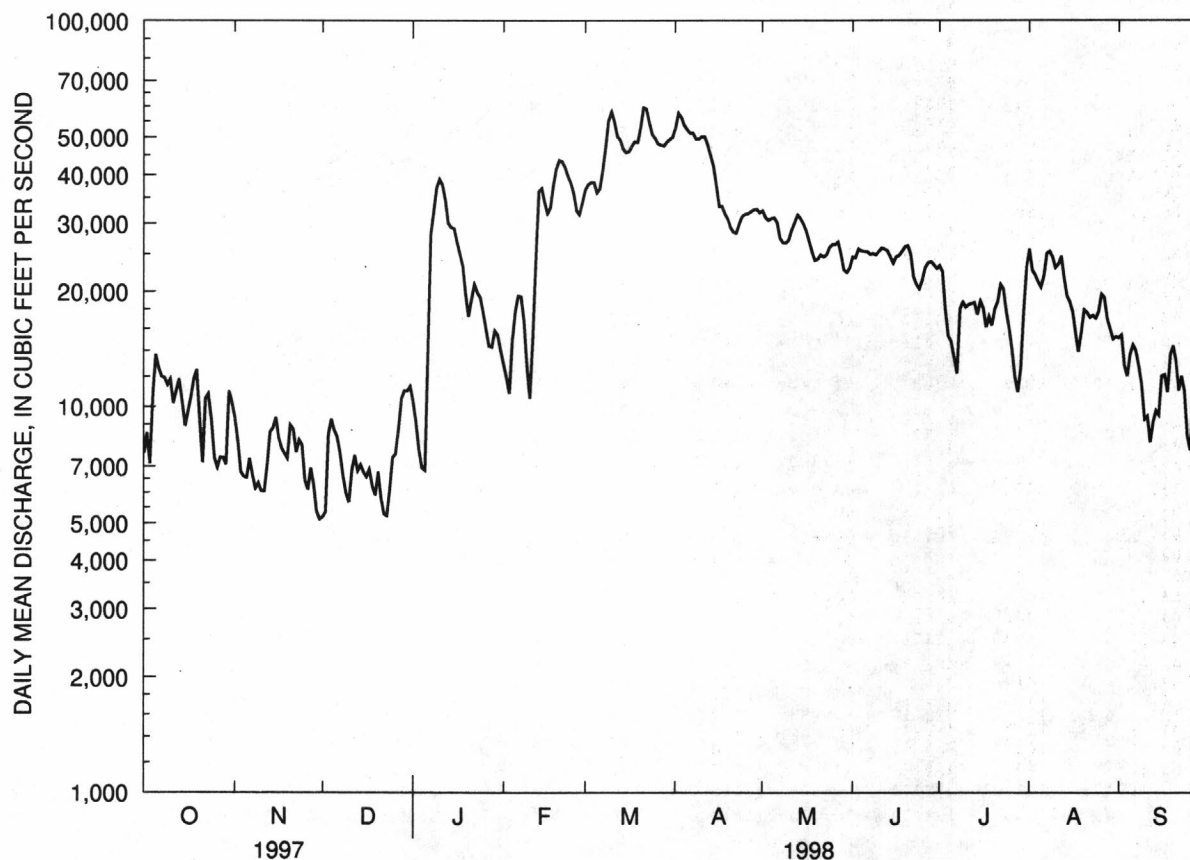
WHITE RIVER BASIN

07074500 WHITE RIVER AT NEWPORT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1998, BY WATER YEAR (WY)

MEAN	10520	15860	23560	26580	29020	34940	38830	34810	22320	16510	13090	10950
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1943 - 1998	
ANNUAL TOTAL	8050520		7954980		^a 23050	
ANNUAL MEAN	22060		21790		46320	
HIGHEST ANNUAL MEAN					8073	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	73700	Apr 8	59600	Mar 21	340000	Apr 18 1945
LOWEST DAILY MEAN	5130	Nov 30	5130	Nov 30	2870	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	5770	Nov 26	5770	Nov 26	2960	Sep 24 1954
INSTANTANEOUS PEAK FLOW			60800	Mar 21	343000	Apr 17 1945
INSTANTANEOUS PEAK STAGE			23.95	Mar 21	^b 35.19	Apr 18 1945
INSTANTANEOUS LOW FLOW			5150	Dec 23	2870	Sep 27-30 1954
ANNUAL RUNOFF (AC-FT)	15970000		15780000		16700000	
10 PERCENT EXCEEDS	53300		45300		48400	
50 PERCENT EXCEEDS	16000		18800		16000	
90 PERCENT EXCEEDS	6960		7070		6680	

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

WHITE RIVER BASIN

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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 1997 TO SEPTEMBER 1998

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 DIS- SOLVED SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)
OCT											
10...	1102	80513	.00	143	36	6.8	758	23.3	8.4	100	3.80
10...	1103	80513	10.0	143	36	6.8	758	23.2	8.3	97	--
10...	1104	80513	20.0	143	36	6.8	758	23.2	8.2	96	--
10...	1105	80513	30.0	143	36	6.4	758	22.8	5.8	67	--
10...	1106	80513	33.0	143	36	6.2	758	21.9	4.1	47	--
10...	1107	80513	35.0	143	36	6.0	758	20.9	2.8	31	--
10...	1108	80513	36.0	143	36	6.0	758	19.9	2.5	28	--
10...	1109	80513	37.0	143	35	5.9	758	19.1	2.4	26	--
10...	1110	80513	38.0	143	35	6.0	758	18.5	2.3	25	--
10...	1111	80513	39.0	143	35	6.2	758	17.8	2.4	25	--
10...	1112	80513	40.0	143	35	6.0	758	17.3	2.4	25	--
10...	1113	80513	43.0	143	35	6.1	758	16.6	2.6	26	--
10...	1114	80513	50.0	143	35	6.1	758	15.4	3.2	32	--
10...	1115	80513	55.0	143	35	6.1	758	14.5	3.7	36	--
10...	1116	80513	60.0	143	35	6.2	758	13.9	4.0	39	--
10...	1117	80513	70.0	143	35	6.2	758	13.0	4.7	45	--
10...	1118	80513	80.0	143	35	6.3	758	11.8	5.3	49	--
10...	1119	80513	90.0	143	35	6.3	758	10.8	5.7	51	--
10...	1120	80513	100	143	35	6.3	758	10.0	5.4	48	--
10...	1121	80513	110	143	35	6.2	758	9.5	5.1	45	--
10...	1122	80513	120	153	35	6.2	758	9.2	4.1	36	--
10...	1123	80513	130	143	36	6.1	758	8.9	3.5	30	--
10...	1124	80513	140	143	37	6.2	758	8.7	3.2	27	--
10...	1125	80513	143	143	37	6.2	758	8.8	3.0	26	--
NOV											
06...	1650	80513	.00	140	39	6.8	758	15.8	8.6	87	4.90
06...	1651	80513	10.0	140	39	6.7	758	15.9	8.3	85	--
06...	1652	80513	20.0	140	39	6.7	758	16.0	8.2	83	--
06...	1653	80513	30.0	140	39	6.6	758	16.0	8.1	83	--
06...	1654	80513	40.0	140	39	6.6	758	16.1	8.1	83	--
06...	1655	80513	50.0	140	39	6.6	758	16.1	8.1	82	--
06...	1656	80513	60.0	140	39	6.5	758	16.0	7.7	78	--
06...	1657	80513	63.0	140	40	6.2	758	15.0	3.7	37	--
06...	1658	80513	66.0	140	40	6.1	758	14.0	3.0	29	--
06...	1659	80513	70.0	140	40	6.1	758	13.6	3.2	31	--
06...	1700	80513	80.0	140	40	6.1	758	12.1	4.3	40	--
06...	1701	80513	90.0	140	40	6.1	758	10.8	4.8	44	--
06...	1702	80513	100	140	39	6.1	758	10.0	4.7	42	--
06...	1703	80513	110	140	40	6.0	758	9.4	4.1	36	--
06...	1704	80513	120	140	41	6.0	758	9.1	3.2	28	--
06...	1705	80513	130	140	42	6.0	758	8.8	2.6	23	--
06...	1706	80513	140	140	42	6.0	758	8.8	2.3	20	--
MAR											
03...	0959	80513	.00	152	40	6.5	752	9.9	10.9	98	6.30
03...	1000	80513	10.0	152	40	6.7	752	9.8	10.7	95	--
03...	1001	80513	20.0	152	40	6.7	752	9.8	10.7	96	--
03...	1002	80513	30.0	152	40	6.8	752	9.8	10.7	95	--
03...	1003	80513	40.0	152	40	6.8	752	9.8	10.9	97	--
03...	1004	80513	50.0	152	40	6.8	752	9.8	10.7	96	--
03...	1005	80513	60.0	152	40	6.8	752	9.8	10.7	95	--
03...	1006	80513	70.0	152	40	6.8	752	9.5	10.7	95	--
03...	1007	80513	80.0	152	40	6.8	752	8.7	10.5	92	--
03...	1008	80513	90.0	152	40	6.7	752	8.5	10.4	90	--
03...	1009	80513	100	152	40	6.7	752	8.4	10.4	90	--
03...	1010	80513	110	152	40	6.7	752	8.3	10.4	89	--
03...	1011	80513	120	152	40	6.6	752	8.2	10.2	88	--
03...	1012	80513	130	152	40	6.6	752	8.1	10.2	87	--
03...	1013	80513	140	152	40	6.6	752	8.1	10.1	87	--
03...	1014	80513	150	152	40	6.6	752	8.1	10.1	87	--
03...	1015	80513	152	152	40	6.6	752	8.1	9.6	82	--

WHITE RIVER BASIN

07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
AUG										
14...	1019	80513	.00	153	--	6.9	758	29.0	8.4	--
14...	1020	80513	10.0	153	--	7.0	758	28.9	8.6	--
14...	1021	80513	20.0	153	--	6.9	758	28.8	8.7	--
14...	1023	80513	28.0	153	--	6.6	758	27.2	8.9	--
14...	1024	80513	29.0	153	--	6.6	758	26.8	9.1	--
14...	1025	80513	30.0	153	--	6.7	758	25.5	9.7	--
14...	1026	80513	31.0	153	--	6.5	758	24.2	9.3	--
14...	1027	80513	32.0	153	--	6.4	758	22.8	8.9	--
14...	1028	80513	33.0	153	--	6.2	758	21.2	8.6	--
14...	1029	80513	34.0	153	--	6.1	758	20.3	8.4	--
14...	1030	80513	36.0	153	--	6.0	758	18.8	8.0	--
14...	1031	80513	38.0	153	--	6.0	758	17.7	7.6	--
14...	1032	80513	40.0	153	--	5.9	758	16.8	7.7	--
14...	1033	80513	42.0	153	--	5.9	758	16.2	7.2	--
14...	1034	80513	45.0	153	--	5.8	758	15.5	7.3	--
14...	1035	80513	50.0	153	--	5.8	758	14.7	6.8	--
14...	1036	80513	60.0	153	--	5.8	758	13.2	6.5	--
14...	1037	80513	70.0	153	--	5.8	758	12.2	7.7	--
14...	1038	80513	80.0	153	--	5.8	758	11.3	7.5	--
14...	1039	80513	90.0	153	--	5.8	758	10.7	8.1	--
14...	1040	80513	100	153	--	5.8	758	10.0	7.4	--
14...	1041	80513	110	153	--	5.8	758	9.6	7.5	--
14...	1042	80513	120	153	--	5.8	758	9.3	7.0	--
14...	1043	80513	130	153	--	5.7	758	9.1	6.3	--
14...	1044	80513	140	153	--	5.7	758	9.1	6.1	--
14...	1045	80513	150	153	--	5.7	758	9.0	5.8	--
14...	1046	80513	153	153	--	5.7	758	9.1	5.5	--
SEP										
09...	1349	80513	.00	145	40	--	763	28.2	8.1	103
09...	1350	80513	10.0	145	40	--	763	28.2	8.0	102
09...	1351	80513	17.0	145	40	--	763	28.1	7.9	101
09...	1352	80513	18.0	145	40	--	763	26.9	8.8	110
09...	1353	80513	19.0	145	39	--	763	26.1	9.1	112
09...	1354	80513	20.0	145	39	--	763	25.8	9.1	112
09...	1355	80513	22.0	145	39	--	763	24.7	9.0	108
09...	1356	80513	24.0	145	38	--	763	23.5	8.4	99
09...	1357	80513	26.0	145	38	--	763	22.1	7.8	90
09...	1358	80513	28.0	145	38	--	763	21.0	7.4	82
09...	1359	80513	30.0	145	38	--	763	19.5	6.6	72
09...	1400	80513	32.0	145	38	--	763	18.4	6.3	67
09...	1401	80513	34.0	145	38	--	763	17.5	6.2	64
09...	1402	80513	36.0	145	38	--	763	16.7	6.0	62
09...	1403	80513	40.0	145	37	--	763	15.5	5.6	56
09...	1404	80513	45.0	145	38	--	763	14.6	5.6	55
09...	1405	80513	50.0	145	38	--	763	13.9	5.7	55
09...	1406	80513	60.0	145	38	--	763	12.9	5.9	56
09...	1407	80513	70.0	145	38	--	763	12.1	6.2	58
09...	1408	80513	80.0	145	38	--	763	11.4	6.5	60
09...	1409	80513	90.0	145	38	--	763	10.7	6.7	60
09...	1410	80513	100	145	39	--	763	10.2	6.4	57
09...	1411	80513	110	145	39	--	763	9.8	5.9	52
09...	1412	80513	120	145	40	--	763	9.6	5.2	45
09...	1413	80513	130	145	40	--	763	9.4	4.5	39
09...	1414	80513	140	145	40	--	763	9.4	4.3	37
09...	1415	80513	145	145	41	--	763	9.4	4.1	35

WHITE RIVER BASIN

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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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT								
10...	1042	80513	36	6.6	757	13.5	12.1	117
NOV								
06...	1630	80513	42	6.9	764	11.3	10.6	97
MAR								
03...	1038	80513	41	6.9	752	8.7	11.9	104
AUG								
14...	0947	80513	--	6.0	758	12.3	8.9	--
SEP								
09...	1319	80513	39	--	766	15.7	11.7	117

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.5	6.7	7.6	7.6	5.8	6.6	7.2	5.9	6.4	---	---	---
2	8.6	6.8	7.5	7.9	6.1	7.0	7.1	5.7	6.3	---	---	---
3	8.6	6.9	7.6	7.9	6.6	7.2	7.1	5.9	6.4	---	---	---
4	8.9	7.0	7.7	7.4	6.5	6.9	9.3	6.1	7.5	---	---	---
5	8.8	7.0	7.7	7.2	6.2	6.7	8.2	6.7	7.3	---	---	---
6	8.7	7.0	7.8	8.4	6.5	7.4	8.0	6.3	7.1	---	---	---
7	8.5	6.9	7.6	7.8	6.4	7.0	7.0	6.0	6.4	---	---	---
8	8.4	5.5	7.3	7.5	6.4	6.9	6.5	5.6	6.0	---	---	---
9	7.7	6.5	7.2	7.3	6.0	6.6	6.4	5.4	5.8	---	---	---
10	7.8	5.4	7.1	6.9	6.0	6.4	8.0	5.6	6.9	---	---	---
11	7.6	5.6	7.0	7.2	6.1	6.5	8.0	6.3	6.9	---	---	---
12	8.1	5.6	7.1	7.9	4.8	6.6	8.4	6.3	7.0	---	---	---
13	8.0	5.1	7.1	7.5	5.0	6.6	7.9	6.2	6.9	---	---	---
14	8.7	5.1	7.3	6.9	5.9	6.3	7.5	6.0	6.6	---	---	---
15	8.8	6.5	7.3	8.1	6.3	7.1	7.4	6.1	6.6	---	---	---
16	8.0	6.8	7.3	7.6	6.5	7.0	7.4	6.2	6.7	---	---	---
17	7.9	6.6	7.1	7.2	6.6	7.0	7.7	6.3	6.8	---	---	---
18	7.4	6.6	7.0	7.2	6.4	6.7	7.7	6.2	6.9	---	---	---
19	8.9	6.6	7.4	7.1	6.4	6.7	7.7	6.1	6.8	---	---	---
20	8.6	5.0	7.1	7.1	6.0	6.6	7.9	6.2	6.8	---	---	---
21	7.3	6.4	6.8	7.1	5.8	6.3	7.5	6.0	6.7	---	---	---
22	8.4	6.5	7.3	7.0	6.0	6.4	8.3	6.0	7.0	---	---	---
23	7.4	6.6	7.0	7.0	6.0	6.5	7.8	6.3	7.0	---	---	---
24	7.1	5.5	6.5	8.5	5.9	6.9	7.8	6.0	6.6	---	---	---
25	8.3	4.9	6.9	7.4	6.0	6.7	8.4	6.2	7.1	---	---	---
26	8.0	4.7	6.6	7.4	5.6	6.4	7.8	6.2	6.8	---	---	---
27	7.6	4.7	6.1	6.9	5.6	6.3	8.2	6.0	6.9	---	---	---
28	7.9	6.8	7.4	7.0	5.6	6.1	8.5	6.0	7.2	---	---	---
29	7.0	4.6	6.1	6.8	5.5	6.0	9.2	5.9	7.9	---	---	---
30	7.0	6.0	6.4	6.6	5.6	6.1	10.0	7.5	9.1	---	---	---
31	6.8	5.9	6.3	---	---	---	12.0	8.9	10.7	---	---	---
MONTH	8.9	4.6	7.2	8.5	4.8	6.7	12.0	5.4	7.0	---	---	---

WHITE RIVER BASIN

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	10.4	8.3	9.2	9.3	7.4	8.2	8.5	6.9	7.6
2	---	---	---	9.3	8.2	8.7	10.2	8.0	8.7	8.3	6.9	7.5
3	---	---	---	10.3	8.6	9.2	9.1	7.3	8.2	8.7	6.3	7.6
4	10.7	9.1	9.8	10.6	8.8	9.5	9.3	7.7	8.3	8.5	6.1	7.5
5	10.0	9.2	9.6	10.5	8.2	9.5	9.4	7.1	8.1	8.4	6.9	7.4
6	10.8	9.0	9.5	9.4	7.9	8.6	9.3	7.5	8.2	9.0	7.1	7.8
7	10.0	9.1	9.6	10.0	7.8	8.7	8.8	7.0	8.0	8.8	6.8	8.0
8	11.0	9.0	9.9	10.4	7.8	8.9	9.3	7.1	8.2	8.5	6.3	7.7
9	10.9	9.5	10.1	9.9	7.7	8.8	8.9	7.0	8.2	8.1	6.1	7.5
10	10.5	9.2	9.9	9.6	7.9	8.8	9.6	7.0	8.4	8.2	6.5	7.3
11	11.1	9.3	10.1	9.4	7.8	8.6	10.1	8.2	8.9	7.9	6.4	7.1
12	11.0	9.5	10.2	10.1	8.2	8.9	9.8	8.3	8.9	8.5	5.9	7.0
13	11.0	9.0	10.1	9.8	8.5	8.9	9.3	7.1	8.2	8.6	5.9	7.4
14	10.5	8.9	9.9	9.9	8.3	8.8	8.3	6.7	7.7	8.4	6.8	7.4
15	10.2	8.8	9.6	---	---	---	7.3	5.8	6.8	8.7	6.8	7.5
16	10.4	8.8	9.6	---	---	---	6.6	4.9	6.0	9.1	6.8	7.5
17	11.5	9.1	10.2	10.1	8.3	9.1	8.1	5.2	6.7	8.3	6.4	7.4
18	11.3	9.0	10.3	10.9	7.5	8.7	9.6	7.0	8.0	8.9	6.7	7.5
19	11.2	9.1	10.2	10.9	8.5	9.3	9.3	6.9	8.0	8.7	6.9	7.6
20	11.2	9.5	10.3	10.1	7.5	8.5	9.6	6.9	8.4	8.7	6.8	7.6
21	11.0	9.1	10.1	9.5	7.5	8.2	9.5	7.0	8.3	8.5	6.8	7.5
22	10.9	9.1	10.0	9.6	7.5	8.2	9.2	7.1	8.1	8.5	6.8	7.6
23	11.4	9.5	10.2	8.9	7.3	8.1	9.5	6.9	8.1	8.8	4.4	7.5
24	11.1	9.2	10.2	9.8	7.9	8.8	9.3	6.9	8.1	8.6	6.9	7.6
25	10.4	8.9	9.7	9.1	8.0	8.5	8.9	6.8	7.9	8.3	5.7	7.3
26	11.4	9.3	10.1	---	---	---	9.7	6.9	8.1	8.0	6.0	7.2
27	10.6	9.3	9.8	---	---	---	9.0	5.7	7.3	8.5	6.6	7.4
28	11.0	8.7	9.6	9.6	7.6	8.5	8.0	5.9	6.9	7.6	5.4	6.8
29	11.0	8.3	9.3	9.7	7.2	8.3	7.7	6.9	7.3	7.4	5.4	6.6
30	10.6	8.6	9.4	9.1	7.8	8.3	7.9	6.0	7.0	8.5	5.7	7.0
31	---	---	---	8.5	7.1	8.0	8.2	6.0	7.2	---	---	---
MONTH	---	---	---	---	---	---	10.2	4.9	7.9	9.1	4.4	7.4

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.9	8.9	10.3	11.3	9.1	9.7	10.1	8.9	9.2	---	---	---
2	12.2	8.9	9.9	10.7	8.7	9.4	9.3	8.8	9.0	---	---	---
3	12.4	9.1	10.0	9.2	8.8	9.0	9.8	9.0	9.3	---	---	---
4	12.3	9.0	10.0	10.1	8.5	9.2	10.3	8.6	9.4	---	---	---
5	12.2	9.0	10.1	9.5	9.0	9.3	9.3	7.9	8.4	---	---	---
6	12.3	9.2	10.0	9.1	8.8	8.9	9.4	7.8	8.4	---	---	---
7	11.2	9.2	10.0	10.2	8.8	9.3	9.4	8.2	8.6	---	---	---
8	11.2	9.3	10.0	10.6	8.8	9.5	8.8	8.5	8.7	---	---	---
9	10.6	9.4	10.0	10.2	8.7	9.2	8.0	8.7	8.9	---	---	---
10	11.0	9.4	10.0	9.2	8.9	9.0	8.9	8.5	8.7	---	---	---
11	12.4	9.2	10.2	9.1	8.8	8.9	8.9	8.5	8.7	---	---	---
12	12.1	9.3	10.2	10.3	8.7	9.2	8.8	8.4	8.5	---	---	---
13	10.4	9.6	10.0	10.2	8.6	9.2	9.4	8.3	8.6	---	---	---
14	11.6	8.8	10.1	9.5	8.8	9.1	9.8	8.2	8.6	---	---	---
15	11.3	8.7	9.6	9.6	8.3	8.7	10.0	8.2	8.8	---	---	---
16	11.2	8.8	9.6	9.7	8.2	8.7	10.1	8.2	8.9	---	---	---
17	11.3	8.7	9.5	9.7	8.1	8.7	10.2	8.4	9.0	---	---	---
18	11.1	8.6	9.4	9.8	8.6	9.0	10.2	8.3	9.0	---	---	---
19	11.2	8.5	9.6	9.9	8.5	9.0	10.3	8.4	9.1	---	---	---
20	11.3	8.9	9.9	9.5	8.5	9.0	9.6	8.9	9.2	---	---	---
21	10.1	8.8	9.3	10.1	9.0	9.3	8.9	8.6	8.8	---	---	---
22	11.1	8.5	9.7	9.9	8.7	9.1	9.5	8.8	9.1	---	---	---
23	10.1	8.5	9.2	9.8	8.6	9.0	9.3	8.8	9.1	---	---	---
24	10.5	9.2	9.7	10.4	8.7	9.3	9.0	8.7	8.8	---	---	---
25	10.4	9.6	10.1	10.1	8.7	9.3	9.1	8.8	8.9	---	---	---
26	10.7	9.5	10.3	10.7	9.0	9.6	9.0	8.5	8.8	---	---	---
27	11.1	10.3	10.7	9.7	8.9	9.2	9.6	8.2	8.7	---	---	---
28	10.7	8.9	9.7	10.5	9.1	9.6	9.0	8.3	8.6	---	---	---
29	11.5	8.9	10.4	10.7	9.1	9.7	9.1	8.0	8.4	---	---	---
30	10.1	9.1	9.5	9.6	9.1	9.3	9.7	8.2	8.8	---	---	---
31	11.1	9.2	9.8	---	---	---	9.8	8.2	8.9	---	---	---
MONTH	12.4	8.5	9.9	11.3	8.1	9.2	10.3	7.8	8.8	---	---	---

WHITE RIVER BASIN

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07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	12.9	9.5	10.5	13.9	10.1	10.9	13.7	10.1	10.7
2	---	---	---	11.1	9.7	10.0	13.9	9.9	10.8	13.0	10.1	10.6
3	---	---	---	13.4	9.7	10.6	12.4	9.9	10.4	13.3	10.0	10.6
4	12.2	9.3	10.5	13.2	9.6	10.7	11.4	9.9	10.4	12.8	10.0	10.4
5	11.5	10.4	10.9	12.9	9.5	10.2	13.5	9.9	10.4	12.6	10.0	10.4
6	12.0	9.4	10.0	10.3	9.6	9.9	12.2	9.9	10.5	12.1	9.9	10.3
7	13.3	9.4	11.1	12.7	9.7	10.2	11.3	10.0	10.4	13.0	9.9	11.0
8	11.2	9.3	9.9	11.3	9.7	10.0	14.7	10.0	11.1	12.9	9.9	10.7
9	11.7	9.3	10.0	12.7	9.6	10.5	13.9	10.0	11.0	13.4	9.8	10.5
10	13.0	9.4	10.4	12.4	9.7	10.3	13.0	10.0	10.7	13.1	9.8	11.0
11	12.5	9.3	10.2	12.5	9.9	10.6	14.9	9.9	11.3	12.1	10.0	10.9
12	13.5	9.2	10.1	12.0	9.7	10.6	13.1	9.9	11.0	12.2	10.0	10.7
13	11.9	9.2	9.7	12.9	9.6	10.6	12.6	9.9	10.3	12.5	10.1	10.7
14	14.1	9.4	10.7	12.1	9.8	10.4	12.7	10.0	10.6	11.3	10.0	10.4
15	12.9	9.4	10.1	---	---	---	12.2	9.8	10.4	10.7	10.0	10.3
16	13.2	9.2	10.2	---	---	---	13.0	9.7	10.4	11.1	10.0	10.3
17	13.1	9.3	10.2	12.7	9.7	10.5	12.8	9.7	10.3	13.0	9.9	10.7
18	12.3	9.4	10.0	12.9	9.6	10.3	11.9	9.8	10.1	12.6	9.9	10.6
19	10.8	9.4	9.7	12.8	9.6	10.2	12.4	9.8	10.2	12.7	9.9	10.5
20	13.6	9.4	10.2	10.8	9.7	10.0	11.8	9.9	10.1	12.5	9.9	10.5
21	10.9	9.4	9.9	12.3	9.8	10.3	12.2	9.7	10.2	11.8	9.9	10.4
22	13.1	9.4	10.1	12.6	9.9	10.4	13.1	9.9	10.4	12.6	9.9	10.6
23	13.0	9.3	10.2	12.7	9.9	10.5	13.0	9.7	10.4	12.5	9.9	10.5
24	13.3	9.4	10.2	12.5	9.8	10.5	12.7	9.8	10.5	12.6	9.7	10.4
25	11.2	9.4	9.7	12.8	9.9	11.0	12.4	9.8	10.3	13.1	9.9	10.5
26	13.2	9.3	10.2	---	---	---	12.5	10.0	10.4	11.8	9.8	10.2
27	11.8	9.5	10.0	---	---	---	11.9	9.9	10.3	11.5	9.9	10.2
28	12.7	9.4	10.0	11.6	9.8	10.3	12.7	9.9	10.4	12.7	9.9	10.6
29	12.8	9.4	10.2	12.4	9.8	10.4	14.4	10.1	11.4	12.4	9.9	10.5
30	12.6	9.5	10.2	12.4	10.0	10.5	13.5	10.1	10.8	12.7	9.9	10.8
31	---	---	---	12.1	9.9	10.6	12.7	10.2	10.6	---	---	---
MONTH	---	---	---	---	---	---	14.9	9.7	10.5	13.7	9.7	10.6

WHITE RIVER BASIN

07076517 LITTLE RED RIVER NEAR DEWEY

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.

DRAINAGE AREA.--1,340 mi².

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

GAGE.--Water-stage recorder.

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

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	870	105	106	476	1790	6470	5740	3440	878	1220	761	1640
2	424	98	113	273	4180	5200	2490	5160	1220	1010	505	1090
3	198	98	122	184	3980	3620	4070	4160	1160	1390	628	1260
4	241	97	123	175	3550	465	3640	5270	1240	925	795	1570
5	240	106	162	349	2920	1270	5350	2910	1050	703	887	1750
6	201	113	148	1200	3160	2430	5080	1150	331	852	822	1570
7	265	109	128	1170	809	902	4350	2030	3060	2890	693	1170
8	204	101	136	1470	202	6740	5200	1170	370	2220	1180	277
9	355	101	149	1510	716	2870	6440	1150	295	2420	711	617
10	266	107	160	1010	2100	1700	4910	1630	361	1970	661	311
11	393	109	157	2310	5690	1980	4900	1790	378	1720	600	270
12	216	109	146	1790	5330	1560	4370	1430	351	572	225	222
13	280	521	141	1620	5330	2730	3330	1070	820	364	276	481
14	292	547	136	1330	6190	4910	2720	1290	717	848	343	576
15	597	270	133	1220	5530	3070	1560	1210	324	1200	378	328
16	354	151	130	572	6060	3950	1700	1300	1240	964	603	268
17	183	131	124	717	6650	3920	896	1350	470	1040	663	257
18	108	125	120	979	6320	4470	2020	1580	487	1050	562	459
19	96	122	117	625	6450	4090	906	1830	920	1260	995	353
20	143	120	117	1310	6020	6190	1510	2460	1130	2040	1300	264
21	377	116	122	689	5170	3060	1440	3630	327	2280	1340	258
22	248	113	139	685	4860	1260	3120	3620	611	2400	1060	325
23	497	114	139	1130	5120	951	3650	2880	987	2070	832	350
24	152	113	430	608	6080	1190	4030	1960	553	1670	969	358
25	875	160	611	316	6200	2330	5240	1790	954	896	1990	344
26	1660	188	380	224	3630	3480	4590	1860	1750	328	2170	976
27	2940	116	316	258	3560	3520	4120	765	805	690	2000	624
28	1600	105	284	1720	5430	4560	958	1410	638	1300	2070	486
29	635	107	261	1680	---	3520	1120	2180	1720	1420	1480	1260
30	427	110	264	4050	---	3850	3890	1260	2370	1540	409	1210
31	140	---	549	3420	---	5580	---	918	---	1090	1420	---
TOTAL	15477	4482	6163	35070	123027	101838	103340	65653	27517	42342	29328	20924
MEAN	499	149	199	1131	4394	3285	3445	2118	917	1366	946	697
MAX	2940	547	611	4050	6650	6740	6440	5270	3060	2890	2170	1750
MIN	96	97	106	175	202	465	896	765	295	328	225	222
AC-FT	30700	8890	12220	69560	244000	202000	205000	130200	54580	83990	58170	41500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

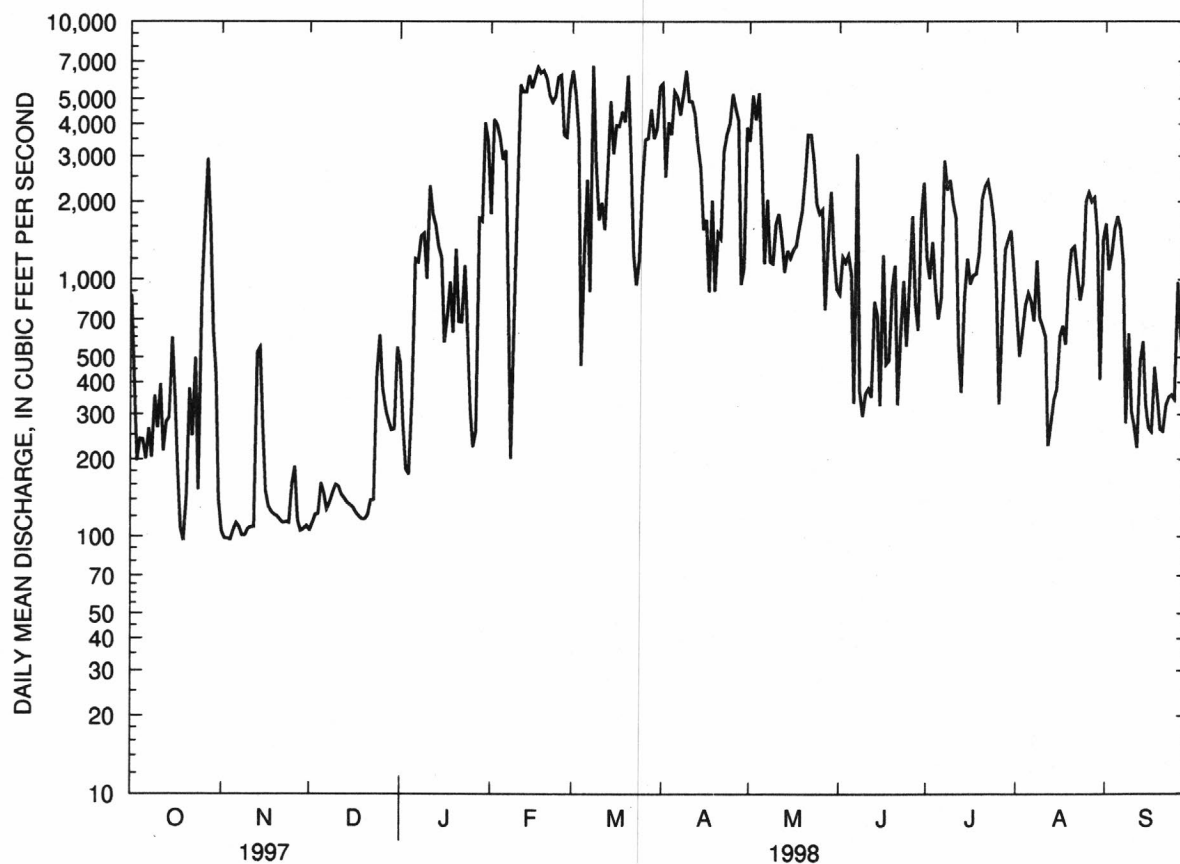
MEAN	499	149	2629	2686	3916	3929	3357	2809	1803	1348	934	640
MAX	499	149	5060	4241	4394	4573	3445	3501	2688	1366	946	697
(WY)	1998	1998	1997	1997	1998	1997	1998	1997	1997	1998	1998	1998
MIN	499	149	199	1131	3439	3285	3269	2118	917	1330	921	583
(WY)	1998	1998	1998	1998	1997	1998	1997	1998	1998	1997	1997	1997

WHITE RIVER BASIN

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07076517 LITTLE RED RIVER NEAR DEWEY--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	770164		575161			
ANNUAL MEAN	2110		1576		1576	
HIGHEST ANNUAL MEAN					1576	1998
LOWEST ANNUAL MEAN					1576	1998
HIGHEST DAILY MEAN	21300	Apr 5	6740	Mar 8	21300	Apr 5 1997
LOWEST DAILY MEAN	96	Oct 19	96	Oct 19	96	Oct 19 1997
ANNUAL SEVEN-DAY MINIMUM	103	Nov 2	103	Nov 2	103	Nov 2 1997
INSTANTANEOUS PEAK FLOW			8540	Mar 8	25300	Apr 5 1997
INSTANTANEOUS PEAK STAGE			14.20	Mar 8	28.25	Apr 5 1997
INSTANTANEOUS LOW FLOW			94	Oct 19,20	94	Oct 19,20 1997
ANNUAL RUNOFF (AC-FT)	1528000		1141000		1142000	
10 PERCENT EXCEEDS	5640		4360		5470	
50 PERCENT EXCEEDS	1370		969		1430	
90 PERCENT EXCEEDS	131		131		241	



WHITE RIVER BASIN

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.--Water-discharge records good except estimated discharges, which are fair. 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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9390	7980	5110	11300	16900	44600	56300	e40000	28100	22400	15000	18500
2	9360	8560	4560	11500	16300	44200	55800	e41000	27000	22400	17800	18000
3	8600	8470	4180	11200	15700	44000	55600	e43000	26400	22200	20400	17700
4	7840	7910	4050	10400	15200	43800	55600	e44000	26100	21500	21300	17300
5	7220	7220	4920	9520	14900	43600	55500	e44000	26900	19500	21700	16500
6	7710	7330	6310	9220	15400	43600	55700	e41000	27800	17400	21800	15900
7	9420	7180	7030	11400	16500	44100	56000	e38000	27700	15900	22200	15800
8	10500	6830	7270	16200	17300	46100	56400	e36000	27800	15300	23300	16000
9	10700	6560	7190	22600	16900	47700	56900	e34000	27300	14900	25000	15800
10	10600	6150	6760	27800	15900	48900	57100	e32000	26300	15700	26400	15200
11	10400	5740	6200	31400	15800	50100	56900	e31000	25500	16800	26500	14400
12	10300	5430	5720	34100	16700	51200	56600	e31000	25100	17400	26100	13500
13	9980	5260	5620	35600	19400	52400	56100	e32000	25000	17900	26000	12700
14	9780	5810	5870	35800	24800	53500	55900	33000	25000	18300	25900	12000
15	9910	7060	5960	35700	30500	54400	55500	33200	24800	18100	25100	12000
16	9750	7970	5940	35300	35100	55300	55200	33300	24200	17500	23700	12500
17	9160	8360	5860	34100	38400	55800	54400	33300	23800	17500	22600	12700
18	8750	8230	5690	32500	40600	56100	52700	32900	23500	17200	21400	13100
19	8830	7790	5610	30700	41700	56400	50700	32100	23500	16700	20000	13500
20	9340	7290	5470	28100	42600	57300	48300	31200	23700	16400	18500	13600
21	9820	6950	5230	25200	43500	58400	45700	30200	24200	16300	18300	14000
22	9310	7130	5190	23000	44200	59100	43200	30000	24300	16800	19000	14600
23	8350	7380	5170	22300	44600	59600	41400	29900	23700	17700	19500	14600
24	8330	7240	6100	22200	44900	60100	e41000	29700	22400	18800	19500	14100
25	8810	7100	7650	21500	45200	60400	e41000	29300	21000	19000	19300	13700
26	8700	6990	8480	20500	45600	60400	e43000	29500	20200	18000	19400	13400
27	8300	6530	8900	19200	45800	59800	e44000	30900	20300	16500	20100	12600
28	8010	5990	9180	17800	45300	59000	e43000	31400	20800	15200	20900	11800
29	8260	5750	9700	16800	---	58300	e41000	31300	21300	14000	21600	11700
30	7810	5550	10500	16400	---	57500	e40000	30900	21800	13200	21100	12500
31	7340	---	11000	16800	---	56900	---	29600	---	13300	19900	---
TOTAL	280580	209740	202420	696140	825700	1642600	1526500	1048700	735500	539800	669300	429700
MEAN	9051	6991	6530	22460	29490	52990	50880	33830	24520	17410	21590	14320
MAX	10700	8560	11000	35800	45800	60400	57100	44000	28100	22400	26500	18500
MIN	7220	5260	4050	9220	14900	43600	40000	29300	20200	13200	15000	11700
AC-FT	556500	416000	401500	1381000	1638000	3258000	3028000	2080000	1459000	1071000	1328000	852300

WHITE RIVER BASIN

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07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

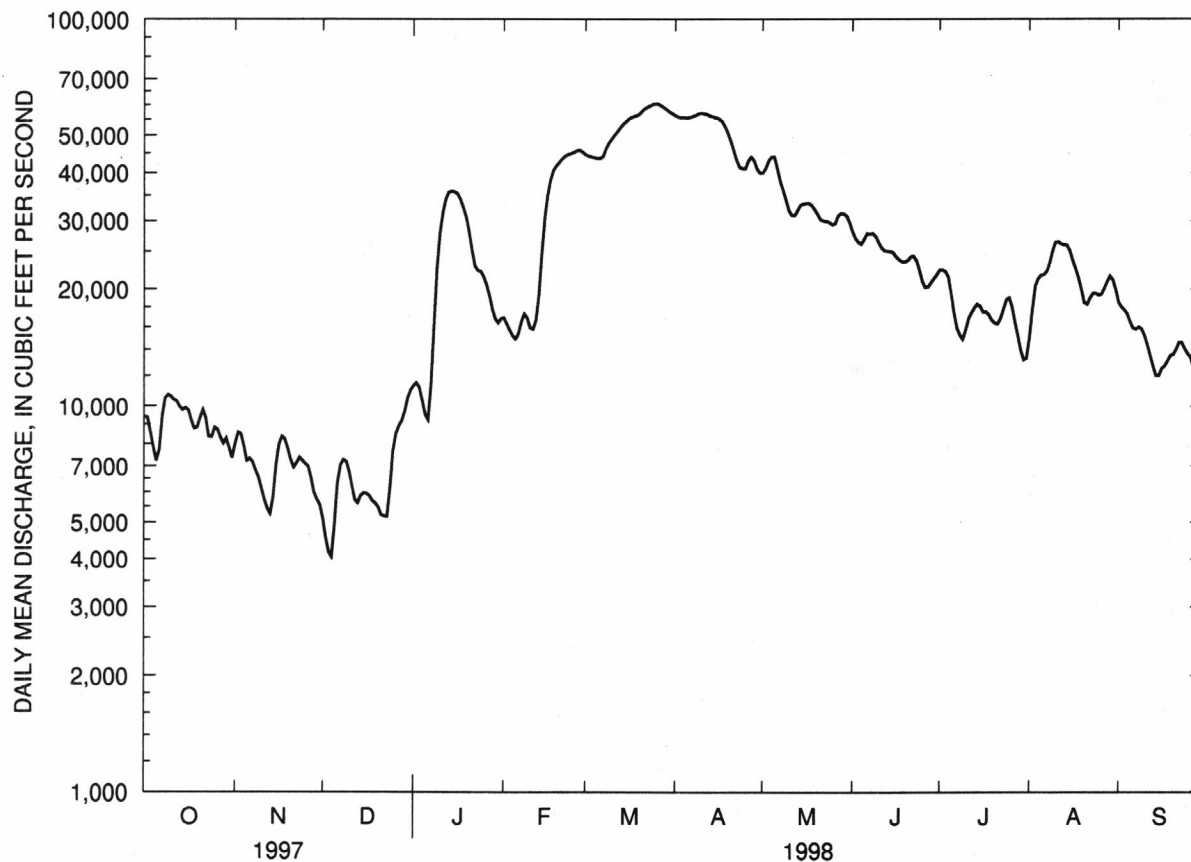
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1998, BY WATER YEAR (WY)

MEAN	12180	16620	24960	31850	37140	41400	43610	43130	26800	19870	16220	13000
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 1997 CALENDAR YEAR			FOR 1998 WATER YEAR			WATER YEARS 1950 - 1998	
ANNUAL TOTAL	10360620			8806680				
ANNUAL MEAN	28390			24130			27180	
HIGHEST ANNUAL MEAN							51270	
LOWEST ANNUAL MEAN							12230	
HIGHEST DAILY MEAN	94700	Apr	9	60400	Mar	25	154000	Jan 19 1950
LOWEST DAILY MEAN	4050	Dec	4	4050	Dec	4	3230	Sep 29 1954
ANNUAL SEVEN-DAY MINIMUM	4870	Nov	29	4870	Nov	29	3290	Sep 26 1954
INSTANTANEOUS PEAK FLOW				60900	Mar	26	154000	Jan 19 1950
INSTANTANEOUS PEAK STAGE				22.49	Mar	26	28.42	Jan 20 1950
INSTANTANEOUS LOW FLOW							3230	^a Sep 29 1954
ANNUAL RUNOFF (AC-FT)	20550000			17470000			19690000	
10 PERCENT EXCEEDS	67400			52500			55400	
50 PERCENT EXCEEDS	16400			19500			20100	
90 PERCENT EXCEEDS	7010			7080			8040	

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

^eEstimated



WHITE RIVER BASIN

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.

WATER-DISCHARGE RECORDS

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	62	61	267	202	575	670	3390	146	169	2830	203
2	45	128	208	197	167	313	561	3250	99	172	2840	189
3	33	93	203	144	124	208	689	3100	72	167	2790	196
4	24	51	221	111	127	156	1110	2920	58	211	2850	215
5	17	46	316	104	100	363	626	2620	399	551	2800	205
6	16	297	239	554	86	2500	287	1910	599	455	2730	192
7	13	585	138	2090	65	2960	185	1870	383	307	2780	172
8	13	471	93	2780	46	3480	143	2360	261	228	2980	138
9	7.9	261	76	2910	39	3680	152	2320	185	223	3020	124
10	5.7	154	75	2820	135	3620	161	3210	253	256	2890	114
11	4.6	103	81	2590	1320	3430	123	3510	305	320	3030	98
12	4.4	71	129	1870	1620	3040	97	3620	295	675	3190	112
13	15	245	124	934	1090	1620	70	3610	282	901	3200	128
14	50	1230	89	474	465	532	73	3510	179	679	3150	129
15	63	1330	67	904	231	269	406	3260	122	449	3040	150
16	55	833	54	1500	1150	203	1230	2300	112	338	2860	198
17	40	397	62	1290	2890	172	1970	889	213	296	2600	208
18	26	238	51	713	3340	632	1970	390	168	277	2260	184
19	15	153	41	402	3370	1830	1240	239	126	261	1960	143
20	10	97	35	348	3250	3230	407	143	110	231	1740	116
21	6.2	70	34	336	3050	3470	198	105	229	192	1540	96
22	3.2	64	63	326	2770	3510	138	96	601	172	1330	78
23	2.9	59	125	460	2180	3410	105	93	811	181	1110	66
24	4.7	50	828	456	1310	3280	76	86	791	314	958	60
25	9.5	44	1790	334	706	3130	56	77	606	669	845	53
26	185	37	1830	249	381	2940	46	102	315	1250	750	55
27	308	29	1440	223	556	2710	69	466	168	1600	635	60
28	282	27	790	188	862	2290	2090	445	149	1720	475	50
29	173	28	512	127	---	1590	3280	274	167	2080	376	40
30	94	27	500	101	---	987	3420	191	161	2270	305	34
31	57	---	374	99	---	683	---	246	---	2570	247	---
TOTAL	1647.1	7280	10649	25901	31632	60813	21648	50602	8365	20184	64111	3806
MEAN	53.1	243	344	836	1130	1962	722	1632	279	651	2068	127
MAX	308	1330	1830	2910	3370	3680	3420	3620	811	2570	3200	215
MIN	2.9	27	34	99	39	156	46	77	58	167	247	34
AC-FT	3270	14440	21120	51370	62740	120600	42940	100400	16590	40030	127200	7550
CFSM	.08	.35	.49	1.19	1.61	2.80	1.03	2.33	.40	.93	2.95	.18
IN.	.09	.39	.57	1.37	1.68	3.23	1.15	2.69	.44	1.07	3.40	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1998, BY WATER YEAR (WY)

MEAN	337	810	1314	1289	1269	1232	1283	1118	457	414	415	446
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

WHITE RIVER BASIN

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07077380 CACHE RIVER AT EGYPT--CONTINUED

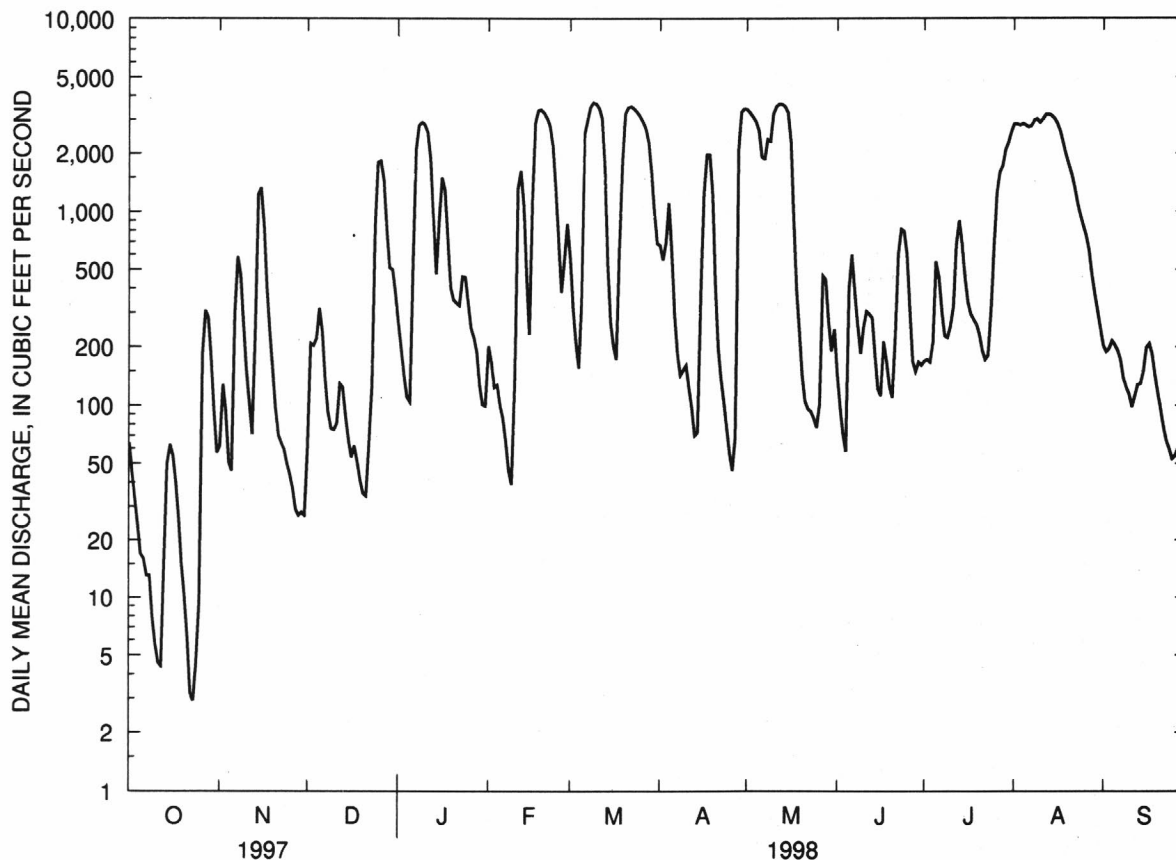
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1965 - 1998

ANNUAL TOTAL	303682.1		306638.1			
ANNUAL MEAN	832		840		863	
HIGHEST ANNUAL MEAN					1762	1973
LOWEST ANNUAL MEAN					299	1972
HIGHEST DAILY MEAN	5580	Mar 6	3680	Mar 9	7940	Apr 25 1973
LOWEST DAILY MEAN	2.9	Oct 23	2.9	Oct 23	.00	Nov 6 1982
ANNUAL SEVEN-DAY MINIMUM	7.4	Oct 19	7.4	Oct 19	.00	Oct 14 1991
INSTANTANEOUS PEAK FLOW			3710	Mar 9	8490	Jan 6 1966
INSTANTANEOUS PEAK STAGE			18.09	Mar 9	21.88	Jan 6 1966
INSTANTANEOUS LOW FLOW			2.3	Oct 13,23	.00	at times
ANNUAL RUNOFF (AC-FT)	602400		608200		625600	
ANNUAL RUNOFF (CFSM)	1.19		1.20		1.23	
ANNUAL RUNOFF (INCHES)	16.12		16.27		16.74	
10 PERCENT EXCEEDS	2990		2910		2720	
50 PERCENT EXCEEDS	243		256		294	
90 PERCENT EXCEEDS	31		48		40	



WHITE RIVER BASIN

07077380 CACHE RIVER AT EGYPT--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966, 1976-79, February 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY	AGENCY	DIS-		PH	BARO-			TRANS-	
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANALYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
16...	0820	1028	80020	56	335	8.0	--	14.1	24	--	7.8
NOV											
17...	1530	1028	80020	350	222	7.7	--	4.9	67	3.00	10.1
DEC											
16...	1515	1028	80020	51	260	7.7	--	4.7	46	3.00	11.8
JAN											
07...	1400	1028	80020	2220	130	7.4	--	13.4	280	3.00	7.1
13...	1615	1028	80020	803	150	7.5	--	5.8	160	3.00	10.4
JUL											
21...	1400	1028	80020	190	422	7.9	755	31.5	11	--	13.4
SEP											
01...	1100	1028	80020	202	390	7.8	752	27.0	14	3.90	6.2

[illegible]

WHITE RIVER BASIN

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07077380 CACHE RIVER AT EGYPT--CONTINUED

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 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)
OCT										
16...	108	16	25	.15	15	207	188	.28	31.3	<.010
NOV										
17...	58	12	18	.11	14	135	124	.18	128	<.010
DEC										
16...	77	12	20	.17	13	143	142	.19	19.7	<.010
JAN										
07...	38	6.0	7.3	.12	9.5	78	72	.11	468	<.010
13...	53	4.7	7.9	<.10	12	108	88	.15	234	<.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- 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										
16...	<.050	.015	.02	.75	.61	.77	.63	--	--	.220
NOV										
17...	.300	.209	.27	.80	.47	1.0	.68	1.3	.98	.213
DEC										
16...	.132	<.020	--	--	--	.97	.63	1.1	.77	.214
JAN										
07...	.150	<.020	--	--	--	1.5	.52	1.7	.68	.382
13...	.144	<.020	--	--	--	1.3	.54	1.4	.69	.294

DATE	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS ORTHOR- THO, DIS- SOLVED (MG/L) AS P) (00671)	PHOS- PHATE, ORTHOR- THO, DIS- SOLVED (MG/L) AS PO4) (00660)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L) AS C) (00689)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
16...	.132	.117	.36	8.7	1.3	33	8.7	75	11	95
NOV										
17...	.092	.095	.29	8.4	2.2	56	14	116	110	95
DEC										
16...	.086	.088	.27	9.3	2.1	47	21	78	11	95
JAN										
07...	.059	.065	.20	6.8	6.2	52	5.5	691	4140	68
13...	.033	.038	.12	8.0	2.3	81	5.6	238	516	95

WHITE RIVER BASIN

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.

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535	319	43	1850	560	1760	2920	1330	378	407	1960	969
2	470	331	30	1420	464	1330	2430	2640	369	327	2240	810
3	391	310	22	1110	377	1180	1950	3420	331	273	2390	669
4	320	254	18	918	331	1150	1550	3720	293	239	2580	548
5	247	194	18	759	318	1120	1300	3770	282	235	2790	444
6	167	187	53	699	317	1170	1180	3710	300	306	3210	369
7	107	253	134	960	306	1460	1200	3530	316	348	3620	321
8	65	288	196	1510	283	2100	1230	3320	310	355	4080	291
9	39	281	258	1890	261	3480	1110	3110	318	386	4430	269
10	24	310	296	2270	247	4400	940	2860	382	426	4410	258
11	16	391	297	2860	276	4560	775	2630	431	470	4140	247
12	10	477	269	3310	362	4410	642	2600	403	619	3980	230
13	11	530	217	3480	434	4240	537	2800	349	920	3830	213
14	13	611	169	3440	668	4120	453	3180	307	1240	3870	199
15	17	722	133	3390	1220	3940	385	3470	286	1450	3930	198
16	23	775	118	3020	2050	3640	328	3600	277	1700	3900	195
17	24	813	117	2350	2840	2910	279	3620	267	1720	3790	201
18	30	959	117	1820	3210	2070	317	3580	244	1450	3690	218
19	46	1190	105	1680	3150	1540	581	3400	208	1110	3600	238
20	56	1270	85	1780	3510	1600	1060	2860	165	856	3480	257
21	54	1160	68	1750	3810	1950	1640	2020	141	672	3310	274
22	42	930	58	1520	3880	2270	1840	1290	130	551	3080	276
23	29	702	50	1240	3870	2770	1580	905	123	465	2830	256
24	19	508	144	1090	3770	3160	1140	665	116	408	2560	223
25	13	361	437	970	3620	3360	834	504	135	373	2300	185
26	9.5	268	672	889	3440	3430	619	470	225	373	2060	152
27	9.3	179	796	847	3010	3440	481	623	353	440	1830	128
28	20	120	993	817	2360	3450	379	580	471	554	1620	107
29	45	81	1450	767	---	3440	315	438	531	765	1400	90
30	142	59	1980	692	---	3360	482	346	499	1100	1260	77
31	259	---	2110	617	---	3240	---	346	---	1530	1120	---
TOTAL	3252.8	14833	11453	51715	48944	86050	30477	71337	8940	22068	93290	8912
MEAN	105	494	369	1668	1748	2776	1016	2301	298	712	3009	297
MAX	535	1270	2110	3480	3880	4560	2920	3770	531	1720	4430	969
MIN	9.3	59	18	617	247	1120	279	346	116	235	1120	77
AC-FT	6450	29420	22720	102600	97080	170700	60450	141500	17730	43770	185000	17680

WHITE RIVER BASIN

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07077500 CACHE RIVER AT PATTERSON--CONTINUED

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

MEAN	371	755	1505	2000	2221	2299	2083	1637	896	474	439	417
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

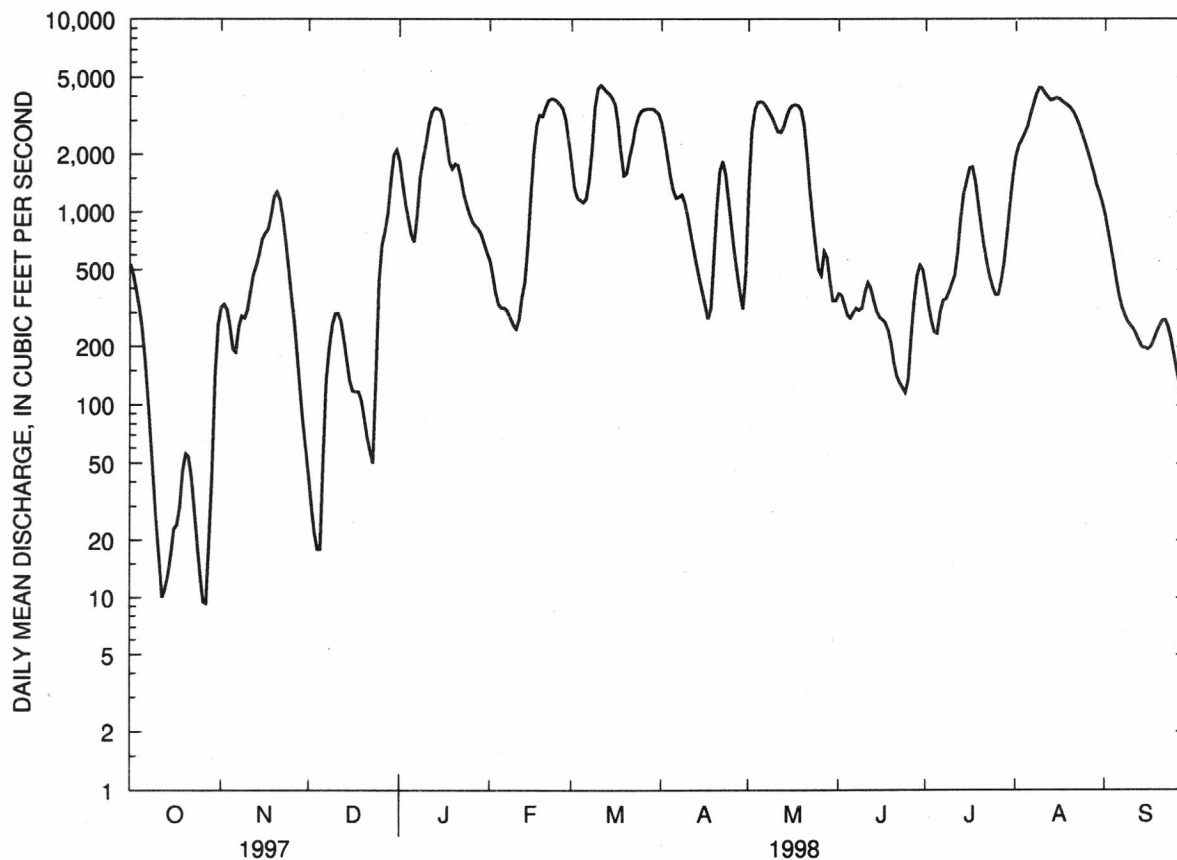
SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1928-31, 1937-77, 1998

ANNUAL TOTAL	451271.8		
ANNUAL MEAN	1236		1261
HIGHEST ANNUAL MEAN			2984
LOWEST ANNUAL MEAN			308
HIGHEST DAILY MEAN	4560	Mar 11	12100
LOWEST DAILY MEAN	9.3	Oct 27	.00
ANNUAL SEVEN-DAY MINIMUM	16	Oct 10	.00
INSTANTANEOUS PEAK FLOW	4570	Mar 11	13200
INSTANTANEOUS PEAK STAGE	10.27	Mar 11	^a 13.21
INSTANTANEOUS LOW FLOW	7.9	Oct 13,27	.00
ANNUAL RUNOFF (AC-FT)	895100		913400
10 PERCENT EXCEEDS	3470		3730
50 PERCENT EXCEEDS	617		431
90 PERCENT EXCEEDS	99		67

^aAt present datum



WHITE RIVER BASIN

07077500 CACHE RIVER AT PATTERSON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1952 to May 1955, October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV												
24...	1045	80513	81213	532	207	7.2	767	6.0	6.2	49	K15	100
JAN												
28...	1045	80513	81213	859	162	7.1	770	5.6	9.8	77	<3	K32
MAR												
03...	1040	80513	81213	1230	110	7.1	760	8.4	9.9	85	--	96
APR												
27...	1150	80513	81213	502	95	7.5	757	18.5	6.0	64	140	120
MAY												
27...	0945	80513	81213	649	112	7.3	756	22.0	5.4	62	650	K2400
AUG												
20...	0955	80513	81213	3490	177	7.1	760	26.0	6.1	75	83	490

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	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)
NOV												
24...	63	15	6.1	13	28	.7	7.3	56	14	15	.10	14
JAN												
28...	54	13	5.1	10	27	.6	5.1	57	6.1	8.3	.12	12
MAR												
03...	36	8.9	3.4	6.1	25	.4	3.6	36	5.7	4.0	.11	8.0
APR												
27...	33	8.1	3.0	5.8	26	.4	3.2	32	8.6	3.6	.12	8.4
MAY												
27...	130	31	12	18	23	.7	5.7	36	26	23	.25	13
AUG												
20...	67	17	5.9	6.9	18	.4	3.1	68	3.9	4.0	.15	12

DATE	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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)
NOV												
24...	134	119	.18	192	--	--	<.010	--	.130	.028	.04	.58
JAN												
28...	110	95	.15	255	--	--	<.010	--	.110	.064	.08	.41
MAR												
03...	78	62	.11	259	--	--	<.010	--	.140	.045	.06	.41
APR												
27...	88	63	.12	119	.487	2.2	.013	.04	.500	.054	.07	.31
MAY												
27...	226	156	.31	396	.780	3.5	.100	.33	.880	.540	.70	.76
AUG												
20...	110	95	.15	1040	--	--	<.010	--	.140	.012	.02	.54

WHITE RIVER BASIN

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07077500 CACHE RIVER AT PATTERSON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	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)
NOV												
24...	.61	.74	.070	.21	28	60	<.50	<.50	<1.0	<1.0	<1.0	30
JAN												
28...	.47	.58	.040	.12	25	50	<.50	<.50	<1.0	<1.0	2.2	40
MAR												
03...	.45	.59	.040	.12	23	40	<.50	<.50	<1.0	<1.0	<1.0	50
APR												
27...	.36	.86	.050	.15	24	46	<.50	<.50	<1.0	<1.0	<1.0	230
MAY												
27...	1.3	2.2	.150	.46	33	78	<.50	<.50	<1.0	<1.0	5.2	20
AUG												
20...	.55	.69	.080	.25	36	63	<.50	<.50	<1.0	<1.0	<1.0	55

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	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- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV												
24...	<1.0	<4	11	<2.0	<1.0	<1.0	77	<1	<1.0	115	165	96
JAN												
28...	<1.0	<4	6.3	<2.0	1.3	<1.0	68	<1	2.1	106	246	97
MAR												
03...	<1.0	<4	4.9	<2.0	1.1	<1.0	48	<1	<1.0	111	369	99
APR												
27...	<1.0	<4	13	<2.0	1.0	<1.0	45	2	4.0	261	354	99
MAY												
27...	<1.0	<4	150	6.8	<1.0	<1.0	140	2	10	234	410	98
AUG												
20...	<1.0	<4	29	<2.0	1.5	<1.0	91	1	3.0	29	273	88

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
15...	1557	80513	80513	100	1.50	3.00	555
15...	1559	80513	80513	100	2.00	4.00	565
15...	1601	80513	80513	100	3.50	7.00	575
15...	1603	80513	80513	100	5.00	10.0	585
15...	1605	80513	80513	100	4.00	8.00	595
15...	1607	80513	80513	100	3.50	7.00	605
15...	1608	80513	80513	100	3.00	6.00	615
15...	1609	80513	80513	100	2.50	5.00	625
15...	1610	80513	80513	100	1.50	3.00	635
15...	1611	80513	80513	100	.50	1.00	645

WHITE RIVER BASIN

07077500 CACHE RIVER AT PATTERSON - - CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
15...	198	431	7.6	24.6	5.7	69	754
15...	--	429	7.6	24.6	5.4	66	754
15...	--	429	7.6	24.6	5.9	72	754
15...	--	430	7.6	24.6	5.7	70	754
15...	--	431	7.6	24.6	5.9	71	754
15...	--	431	7.6	24.6	5.8	71	754
15...	--	431	7.6	24.6	5.3	64	754
15...	--	430	7.6	24.6	5.6	68	754
15...	--	431	7.6	24.6	5.4	65	754
15...	--	431	7.6	24.6	5.4	65	754

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.

WATER-DISCHARGE RECORDS

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.--Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	141	201	1030	1190	3440	3470	749	915	341	611	2020
2	583	195	143	1210	1050	3300	3450	635	711	381	760	1860
3	558	241	123	1350	938	3060	3390	737	560	382	977	1680
4	520	270	116	1420	824	2770	3260	1080	459	346	1190	1490
5	469	303	104	1450	701	2590	3040	1490	428	291	1370	1320
6	401	359	93	1440	583	2480	2780	1880	419	244	1550	1120
7	318	339	88	1470	495	2430	2560	2220	382	219	1690	915
8	234	306	106	1510	429	2470	2370	2470	351	228	1860	729
9	167	286	154	1500	408	2530	2200	2640	336	259	2020	558
10	128	286	197	1520	443	2660	2050	2740	334	288	2180	412
11	109	289	230	1580	571	2900	1930	2780	335	332	2400	319
12	87	292	262	1680	631	3270	1800	2780	353	403	2870	274
13	93	339	281	1850	628	3530	1650	2750	383	493	3320	264
14	125	428	279	2040	598	3700	1530	2710	392	564	3490	255
15	99	499	257	2260	586	3830	1370	2710	372	624	3570	273
16	82	553	222	2470	760	3920	1210	2750	329	695	3600	290
17	76	592	187	2620	1150	3960	1060	2830	295	818	3610	261
18	74	626	163	2710	1510	3930	891	2940	274	970	3600	229
19	73	653	153	2680	1810	3840	721	3040	259	1110	3580	214
20	75	688	147	2570	2070	3680	595	3110	232	1190	3560	212
21	81	751	144	2440	2320	3460	603	3140	205	1210	3520	218
22	86	839	145	2370	2540	3230	723	3080	170	1170	3470	229
23	87	927	138	2300	2750	3050	920	2880	140	1080	3400	238
24	90	966	243	2210	2980	2960	1150	2630	123	937	3310	242
25	84	939	383	2090	3170	2970	1290	2360	115	794	3190	236
26	79	868	481	1980	3330	3060	1330	2140	112	673	3020	217
27	69	770	547	1860	3440	3160	1310	1980	123	554	2830	187
28	60	628	622	1750	3490	3250	1230	1790	170	459	2660	154
29	53	462	704	1620	---	3330	1090	1590	229	417	2540	127
30	57	311	769	1500	---	3380	922	1380	289	442	2370	108
31	83	---	868	1340	---	3440	---	1160	---	504	2190	---
TOTAL	5691	15146	8550	57820	41395	99580	51895	69171	9795	18418	80308	16651
MEAN	184	505	276	1865	1478	3212	1730	2231	327	594	2591	555
MAX	591	966	868	2710	3490	3960	3470	3140	915	1210	3610	2020
MIN	53	141	88	1030	408	2430	595	635	112	219	611	108
AC-FT	11290	30040	16960	114700	82110	197500	102900	137200	19430	36530	159300	33030
CFSM	.16	.43	.24	1.59	1.26	2.74	1.48	1.90	.28	.51	2.21	.47
IN.	.18	.48	.27	1.84	1.31	3.16	1.65	2.20	.31	.58	2.55	.53

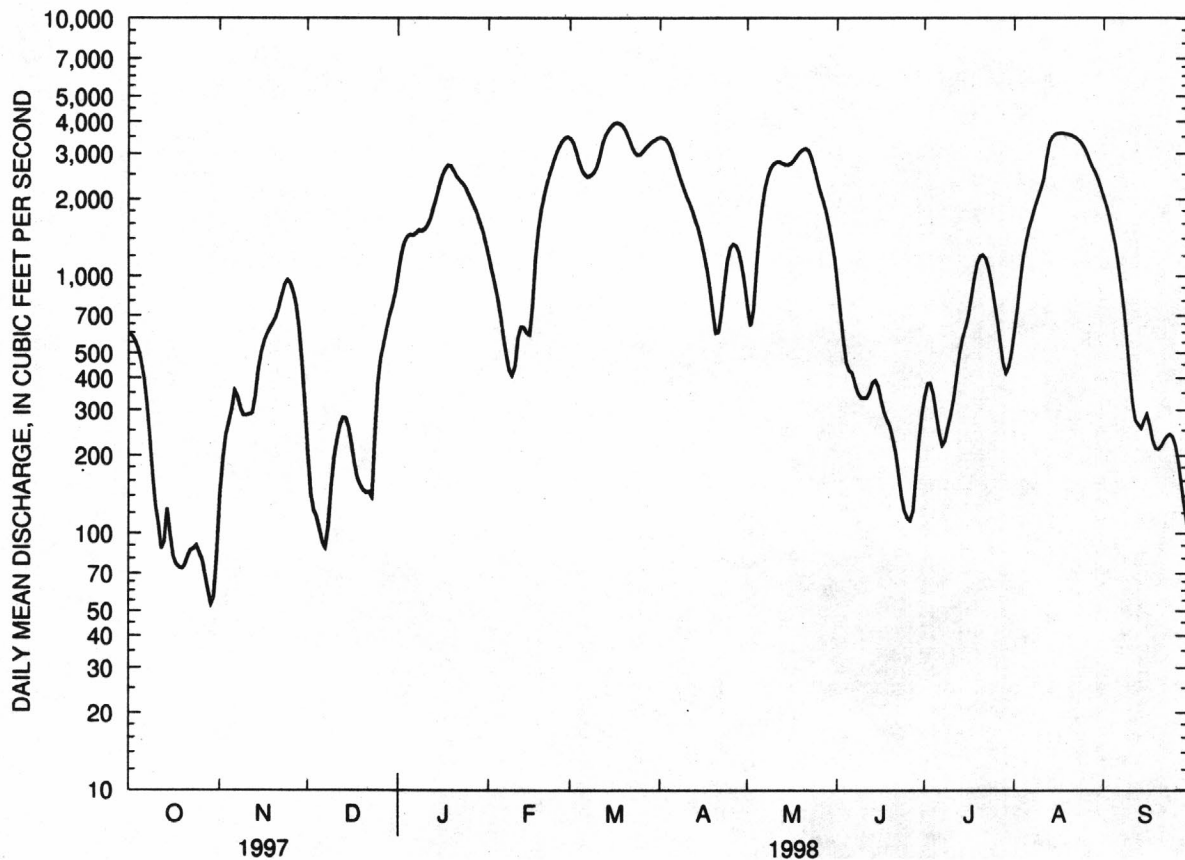
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1998, BY WATER YEAR (WY)

MEAN	544	1210	2379	2467	2516	2502	1925	1335	662	674	743	479
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

WHITE RIVER BASIN

07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1987 - 1998	
ANNUAL TOTAL	559049		474420			
ANNUAL MEAN	1532		1300		1464	
HIGHEST ANNUAL MEAN					2356	1989
LOWEST ANNUAL MEAN					560	1996
HIGHEST DAILY MEAN	9230	Mar 7	3960	Mar 17	9770	Dec 28 1987
LOWEST DAILY MEAN	53	Oct 29	53	Oct 29	25	Oct 22 1987
ANNUAL SEVEN-DAY MINIMUM	69	Oct 25	69	Oct 25	26	Oct 19 1987
INSTANTANEOUS PEAK FLOW			3980	Mar 17	9950	Dec 28 1987
INSTANTANEOUS PEAK STAGE			17.75	Mar 17	^a 20.22	Dec 28 1987
INSTANTANEOUS LOW FLOW			53	Oct 29	25	Oct 22 1987
ANNUAL RUNOFF (AC-FT)	1109000		941000		1061000	
ANNUAL RUNOFF (CFSM)	1.31		1.11		1.25	
ANNUAL RUNOFF (INCHES)	17.74		15.06		16.97	
10 PERCENT EXCEEDS	3970		3210		3540	
50 PERCENT EXCEEDS	724		818		775	
90 PERCENT EXCEEDS	155		141		147	

^aFrom floodmark

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WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

	OXYGEN, DIS- SOLVED	HARD- NESS (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L AS CA)	CALCIUM DIS- SOLVED (MG/L AS MG)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
DATE	(00300)	(00301)	(00900)	(00904)	(00915)	(00925)	(00930)	(00932)	(00931)	(00935)

[illegible]

WHITE RIVER BASIN

07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

DATE	ALKA- LINTY 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)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
OCT											
17...	128	12	13	.14	18	188	182	.26	38.6	.066	.29
21...	125	9.1	12	.16	20	176	180	.24	38.0	.089	.39
23...	125	10	12	<.10	21	202	183	.27	47.4	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
28...	120	11	12	.11	20	192	177	.26	31.6	--	--
30...	129	9.0	12	.10	21	196	184	.27	30.7	--	--
NOV											
17...	61	16	19	.11	13	161	130	.22	256	--	--
DEC											
16...	83	12	15	.16	15	164	139	.22	99.6	--	--
JAN											
13...	36	5.5	6.4	<.10	9.3	89	67	.12	442	--	--
16...	42	7.0	6.9	<.10	10	90	74	.12	600	--	--
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											
17...	.018	.06	.084	.041	.05	.49	.18	.53	.22	.62	.31
21...	.013	.04	.102	.027	.03	.54	.18	.57	.21	.67	.31
23...	<.010	--	.106	<.020	--	--	--	.48	.20	.59	.31
23...	--	--	--	--	--	--	--	--	--	--	--
28...	<.010	--	.116	.030	.04	.48	.32	.51	.35	.62	.47
30...	<.010	--	.111	.041	.05	.47	.26	.51	.30	.62	.41
NOV											
17...	<.010	--	.077	.177	.23	.69	.35	.87	.53	.94	.61
DEC											
16...	<.010	--	.057	<.020	--	--	--	.68	.45	.74	.51
JAN											
13...	<.010	--	.093	<.020	--	--	--	.87	.45	.96	.54
16...	<.010	--	.088	<.020	--	--	--	1.0	.42	1.1	.51

WHITE RIVER BASIN

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07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

DATE	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 P) (00660)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- 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											
17...	.151	.036	.052	.16	4.9	1.1	6.6	265	94	19	94
21...	.158	.047	.055	.17	4.2	1.4	9.8	259	82	18	97
23...	.167	.051	.051	.16	4.3	1.8	7.0	222	77	18	93
23...	--	--	--	--	--	--	--	--	--	--	--
28...	.159	.060	.053	.16	4.6	1.4	13	311	83	14	99
30...	.153	.063	.043	.13	4.1	1.1	8.5	386	78	12	93
NOV											
17...	.137	.056	.053	.16	8.4	1.4	43	24	68	108	94
DEC											
16...	.166	.049	.054	.17	7.1	1.3	35	87	60	36	94
JAN											
13...	.184	.043	.045	.14	7.8	--	83	12	92	457	93
16...	.224	.037	.042	.13	7.8	1.6	76	12	108	720	93

WHITE RIVER BASIN

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	40	4.5	266	195	669	273	783	100	.00	666	83
2	39	36	6.6	189	157	511	244	856	74	.00	547	59
3	16	30	21	125	132	363	217	867	45	.00	383	41
4	7.3	21	34	76	86	254	273	788	21	.00	372	36
5	3.2	34	43	79	59	245	418	630	27	.00	468	44
6	.74	425	61	380	49	771	364	446	83	.00	497	48
7	.00	472	47	997	38	1120	280	335	89	.00	670	48
8	.00	371	33	1410	31	1580	215	459	70	.00	922	54
9	.00	243	30	1650	24	1850	169	598	49	.00	1100	58
10	.04	159	29	1690	30	1950	141	579	58	.33	1170	60
11	.63	103	27	1650	251	1920	103	638	68	67	1170	59
12	.01	57	23	1470	698	1860	76	764	48	489	1090	62
13	7.7	130	20	1060	857	1770	58	865	30	738	1040	78
14	81	538	17	681	909	1670	46	911	13	928	873	84
15	103	700	12	612	729	1510	36	867	4.8	1040	668	92
16	88	675	6.9	676	833	1180	33	699	.30	927	504	106
17	48	460	4.6	667	1390	808	278	465	.00	610	383	126
18	24	269	3.1	523	1750	560	546	315	.00	352	295	125
19	11	162	1.8	407	1890	510	492	223	.00	213	243	122
20	5.1	87	2.3	354	1890	954	323	145	.00	120	219	114
21	1.3	45	1.8	358	1840	1260	221	86	.00	55	208	81
22	.00	22	2.5	429	1770	1410	232	47	.00	19	215	53
23	.00	10	4.3	529	1680	1440	234	32	.00	10	200	34
24	.00	4.9	438	536	1550	1400	168	20	.00	8.2	175	24
25	.00	3.7	864	509	1310	1290	108	11	.00	49	154	20
26	44	2.9	1030	433	1030	1070	78	31	.00	262	134	16
27	152	2.6	1000	342	857	778	60	216	.00	350	116	13
28	168	2.0	768	276	758	526	112	386	.00	372	111	9.5
29	111	1.7	559	266	---	443	496	313	.00	430	114	7.0
30	50	2.7	433	267	---	389	666	225	.00	587	116	5.2
31	28	---	358	238	---	330	---	160	---	678	111	---
TOTAL	1073.02	5109.5	5885.4	19145	22793	32391	6960	13760	780.10	8304.53	14934	1761.7
MEAN	34.6	170	190	618	814	1045	232	444	26.0	268	482	58.7
MAX	168	700	1030	1690	1890	1950	666	911	100	1040	1170	126
MIN	.00	1.7	1.8	76	24	245	33	11	.00	.00	111	5.2
AC-FT	2130	10130	11670	37970	45210	64250	13810	27290	1550	16470	29620	3490
CFSM	.08	.40	.45	1.47	1.93	2.48	.55	1.05	.06	.64	1.14	.14
IN.	.09	.45	.52	1.69	2.01	2.86	.61	1.22	.07	.73	1.32	.16

WHITE RIVER BASIN

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07077700 BAYOU DEVIEW NEAR MORTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

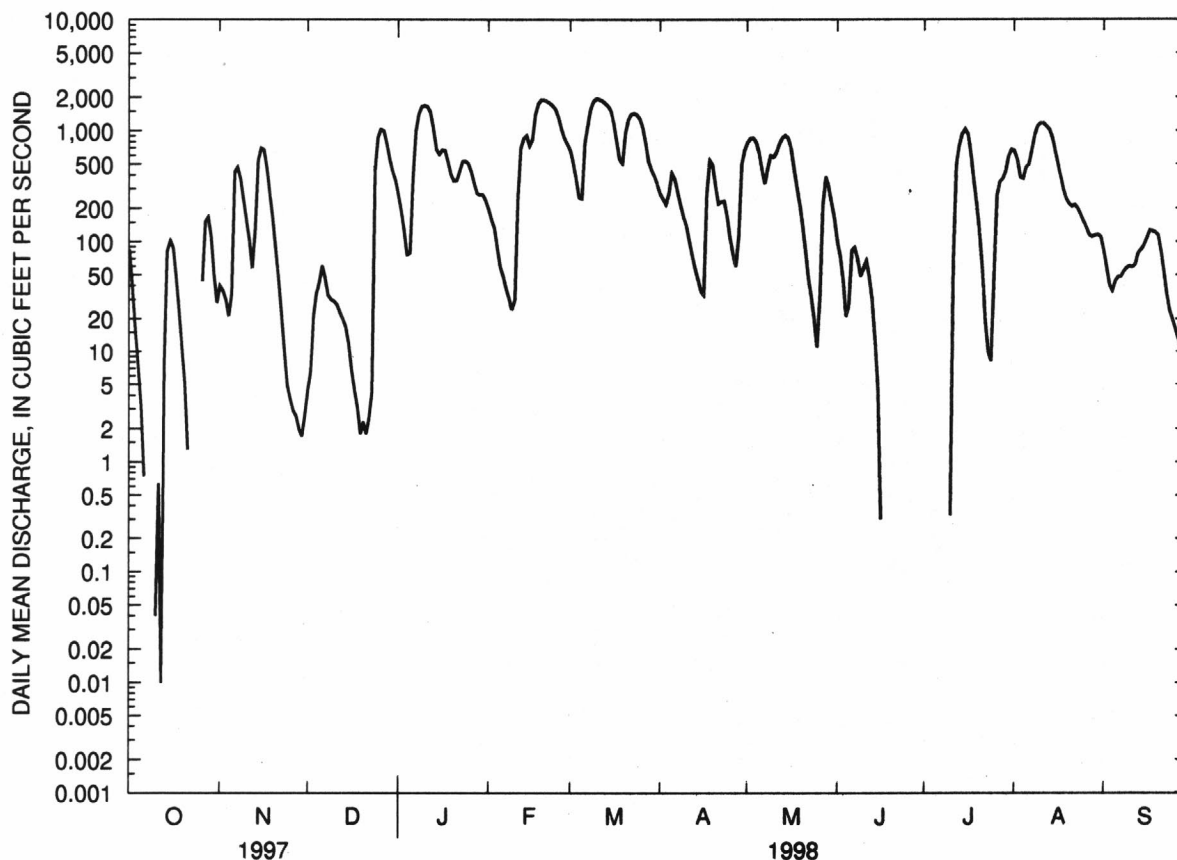
MEAN	124	372	609	899	1032	1014	813	567	308	159	204	216
MAX	1798	2811	2271	3917	3837	2658	1981	2389	2173	682	1020	1073
(WY)	1950	1958	1952	1950	1956	1945	1957	1958	1945	1967	1966	1965
MIN	.000	.000	.000	12.8	2.96	44.2	24.2	5.55	4.47	.000	.065	.000
(WY)	1957	1954	1963	1964	1963	1941	1963	1948	1941	1954	1947	1943

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1939 - 1998

ANNUAL TOTAL	132897.25		
ANNUAL MEAN	364		511
HIGHEST ANNUAL MEAN			1312 1950
LOWEST ANNUAL MEAN			141 1941
HIGHEST DAILY MEAN	1950 Mar 10	6640	Nov 23 1957
LOWEST DAILY MEAN	.00 Oct 7	.00	Aug 7 1943
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 17	.00	Aug 7 1943
INSTANTANEOUS PEAK FLOW	1960 Mar 10	6700	Nov 23 1957
INSTANTANEOUS PEAK STAGE	17.74 Mar 10	18.75	May 2 1973
INSTANTANEOUS LOW FLOW	.00 at times	.00	at times
ANNUAL RUNOFF (AC-FT)	263600	370400	
ANNUAL RUNOFF (CFSM)	.86	1.21	
ANNUAL RUNOFF (INCHES)	11.74	16.50	
10 PERCENT EXCEEDS	1040	1830	
50 PERCENT EXCEEDS	145	114	
90 PERCENT EXCEEDS	1.1	.00	



WHITE RIVER BASIN
07077700 BAYOU DEVUEW AT MORTON--CONTINUED
WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY	AGENCY	DIS-	SPE-	PH	BARO-	TEMPER-	OXYGEN,	OXYGEN,	COLI-	STREP-	
		COL-	ANA-	CHARGE,	CIFIC	WATER	METRIC				DIS-	FORM,	TOCOC
		LECTING	LYZING	INST.	CON-	WHOLE	PRES-				SOLVED	FECAL,	CCI
		SAMPLE	SAMPLE	CUBIC	DUCT-	(STAND-	SURE	ATURE	DIS-	(PER-	UM-MF	(COLS.	
		(CODE	(CODE	FEET	ANCE	ARD	(MM	OF	WATER	SOLVED	SATUR-	PER	
		NUMBER)	NUMBER)	SECOND	(US/CM)	UNITS)	HG)	(DEG C)	(MG/L)	(MG/L)	ATION)	100 ML)	100 ML)
		(00027)	(00028)	(00061)	(00095)	(00400)	(00025)	(00010)	(00300)	(00301)	(31625)	(31673)	
NOV													
24...	1335	80513	81213	6.2	217	6.9	765	6.0	7.2	58	K12	K35	
JAN													
28...	1150	80513	81213	265	194	7.2	770	5.8	9.4	74	<3	190	
MAR													
03...	1205	80513	81213	367	144	7.0	760	9.7	7.7	67	--	K50	
APR													
27...	1245	80513	81213	37	150	7.3	756	19.0	5.1	55	K270	110	
MAY													
27...	1115	80513	81213	172	195	7.0	757	23.0	4.0	47	70	220	
AUG													
20...	0830	80513	81213	210	342	7.4	760	26.5	5.0	62	120	570	
		</											

WHITE RIVER BASIN

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07077700 BAYOU DEVIEU AT MORTON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	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)
NOV												
24...	.55	.67	.080	.25	25	49	<.50	<.50	<1.0	<1.0	<1.0	40
JAN												
28...	.61	.69	.080	.25	24	49	<.50	<.50	<1.0	<1.0	2.1	410
MAR												
03...	.90	1.0	.070	.21	22	42	<.50	<.50	<1.0	<1.0	<1.0	140
APR												
27...	.58	1.1	.040	.12	33	45	<.50	<.50	<1.0	<1.0	<1.0	30
MAY												
27...	1.2	1.5	.050	.15	25	64	<.50	<.50	<1.0	<1.0	1.9	120
AUG												
20...	.73	.95	.060	.18	38	88	<.50	<.50	<1.0	<1.0	<1.0	8.5

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	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)
NOV												
24...	<1.0	<4	100	<2.0	<1.0	<1.0	71	<1	<1.0	100	1.7	94
JAN												
28...	<1.0	<4	180	<2.0	1.8	<1.0	77	<1	3.2	87	62	99
MAR												
03...	<1.0	<4	86	<2.0	<1.0	<1.0	56	<1	1.3	94	93	99
APR												
27...	<1.0	<4	130	<2.0	1.6	<1.0	54	1	1.1	246	25	99
MAY												
27...	<1.0	<4	670	<2.0	1.7	<1.0	77	2	14	79	37	98
AUG												
20...	<1.0	<4	230	<2.0	<1.0	<1.0	150	3	1.1	110	62	100

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
15...	1635	80513	80513	200	1.50	3.00	234
15...	1637	80513	80513	200	1.50	3.00	222
15...	1639	80513	80513	200	2.00	4.00	210
15...	1640	80513	80513	200	2.50	5.00	198
15...	1642	80513	80513	200	2.00	4.00	186
15...	1643	80513	80513	200	2.00	4.00	174
15...	1644	80513	80513	200	2.00	4.00	162
15...	1645	80513	80513	200	2.50	5.00	150
15...	1647	80513	80513	200	2.50	5.00	138
15...	1648	80513	80513	200	1.90	4.00	126

WHITE RIVER BASIN

07077700 BAYOU DEVIEU AT MORTON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
15...	94	515	7.8	24.4	6.5	79	754
15...	--	519	7.8	24.3	6.1	73	754
15...	--	519	7.8	24.4	6.0	73	754
15...	--	522	7.8	24.3	6.6	80	754
15...	--	521	7.8	24.3	6.6	80	754
15...	--	521	7.8	24.3	6.5	79	754
15...	--	521	7.8	24.3	6.4	77	754
15...	--	522	7.8	24.2	5.8	70	754
15...	--	522	7.7	24.0	4.9	60	754
15. .	--	521	7.7	24.0	5.0	60	754

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 1,020.00 ft above sea level.

REMARKS.--Water discharge records good, except estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	21	43	128	159	311	604	110	44	18	7.3	e10
2	11	20	39	116	149	254	407	102	39	20	7.3	e9.0
3	10	18	97	111	133	212	330	96	35	17	7.2	e9.0
4	10	18	113	4860	120	185	273	89	33	16	8.1	e8.0
5	10	26	78	4140	110	382	239	94	31	14	12	e7.0
6	10	30	60	2150	103	441	214	103	29	13	10	e7.0
7	10	32	53	1760	95	1010	306	107	28	12	8.7	e8.0
8	15	31	336	2750	89	1610	265	100	30	17	7.8	e8.0
9	50	30	260	1300	84	656	217	88	34	19	8.9	e9.0
10	33	33	173	930	86	428	192	85	28	14	11	e9.0
11	25	40	130	635	856	334	174	77	28	13	10	e8.0
12	22	43	106	466	429	270	163	70	27	67	10	e8.0
13	471	99	89	376	291	242	152	64	25	42	11	e40
14	118	232	77	327	231	216	141	60	24	27	10	e130
15	59	149	68	294	197	267	138	56	22	21	14	e90
16	43	102	61	260	210	1130	156	53	21	18	11	e80
17	34	80	56	231	230	1090	142	49	20	16	8.7	e60
18	29	65	55	211	205	724	130	46	21	15	7.7	e50
19	25	49	52	191	171	2330	122	44	20	14	10	e40
20	23	44	50	176	155	1210	115	42	19	13	29	e30
21	22	39	338	163	137	666	109	41	19	12	13	e40
22	21	36	423	153	125	484	106	39	25	11	9.1	e60
23	20	33	252	137	116	388	100	38	20	11	8.0	e50
24	23	30	1280	117	108	324	96	36	18	11	7.2	e40
25	29	28	600	111	110	280	92	91	16	10	e7.0	e30
26	44	27	366	414	993	243	88	206	15	9.8	e6.0	21
27	37	25	271	370	791	284	315	165	15	9.1	e6.0	17
28	30	26	224	261	428	383	204	93	15	8.6	e6.0	14
29	27	35	207	212	---	276	142	75	14	9.0	e5.0	11
30	25	48	178	179	---	243	120	61	14	8.3	e5.0	10
31	23	---	148	158	---	1960	---	52	---	7.6	e5.0	---
TOTAL	1321	1489	6283	23687	6911	18833	5852	2432	729	513.4	287.0	913.0
MEAN	42.6	49.6	203	764	247	608	195	78.5	24.3	16.6	9.26	30.4
MAX	471	232	1280	4860	993	2330	604	206	44	67	29	130
MIN	10	18	39	111	84	185	88	36	14	7.6	5.0	7.0
AC-FT	2620	2950	12460	46980	13710	37360	11610	4820	1450	1020	569	1810
CFSM	.26	.30	1.21	4.58	1.48	3.64	1.17	.47	.15	.10	.06	.18
IN.	.29	.33	1.40	5.28	1.54	4.20	1.30	.54	.16	.11	.06	.20

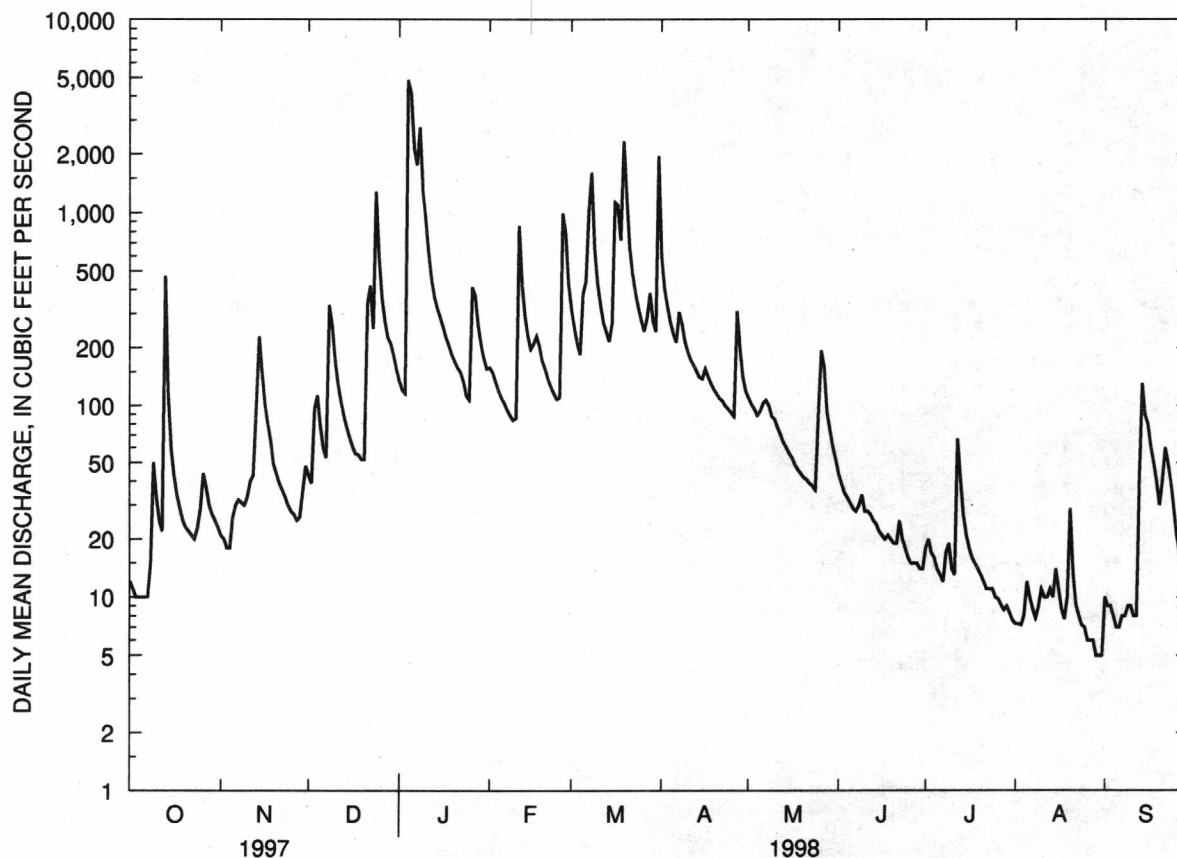
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1998, BY WATER YEAR (WY)

MEAN	43.4	251	121	176	160	215	241	142	89.9	25.8	27.9	83.6
MAX	93.2	960	349	764	435	608	533	274	175	65.2	62.3	332
(WY)	1986	1997	1986	1998	1997	1998	1986	1996	1981	1981	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

ARKANSAS RIVER BASIN

07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1980-81, 1986, 1996-98	
ANNUAL TOTAL	44985.9		69250.4			
ANNUAL MEAN	123		190		135	
HIGHEST ANNUAL MEAN					222	
LOWEST ANNUAL MEAN					33.7	
HIGHEST DAILY MEAN	4300	Feb 21	4860	Jan 4	7510	Oct 1 1986
LOWEST DAILY MEAN	9.2	Sep 5	5.0	Aug 29	1.8	Aug 10 1980
ANNUAL SEVEN-DAY MINIMUM	9.6	Sep 2	5.7	Aug 25	1.9	Aug 22 1980
INSTANTANEOUS PEAK FLOW			^a 10900	Jan 4	^a 10900	Jan 4 1998
INSTANTANEOUS PEAK STAGE			18.32	Jan 4	18.42	Nov 19 1985
INSTANTANEOUS LOW FLOW					1.6	Aug 11 1980
ANNUAL RUNOFF (AC-FT)	89230		137400		98080	
ANNUAL RUNOFF (CFSM)	.74		1.14		.81	
ANNUAL RUNOFF (INCHES)	10.02		15.43		11.01	
10 PERCENT EXCEEDS	296		382		277	
50 PERCENT EXCEEDS	39		53		29	
90 PERCENT EXCEEDS	12		9.9		8.4	

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

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 1997 TO SEPTEMBER 1998

		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 15...	1030	80513	81213	60	196	7.5	742	14.5	5.7	57
DEC 16...	1100	80513	81213	61	292	8.3	732	5.0	12.1	99
FEB 04...	1100	80513	81213	124	252	7.8	735	7.4	10.3	88
APR 09...	1130	80513	81213	203	202	8.3	433	12.9	9.2	155
JUN 10...	1000	80513	81213	27	290	8.1	735	22.0	6.3	75
AUG 26...	1000	80513	81213	6.3	280	7.6	735	25.5	8.0	102
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 15...	1900	1100	1700	79	28	2.2	3.8	9	.2	3.3
DEC 16...	K140	K87	K75	110	41	3.0	5.3	9	.2	2.4
FEB 04...	110	68	54	94	34	2.3	5.5	11	.2	2.0
APR 09...	250	250	110	86	31	2.2	4.5	10	.2	2.1
JUN 10...	310	400	220	120	45	2.3	6.8	11	.3	2.8
AUG 26...	750	270	470	130	47	2.3	7.0	10	.3	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)
OCT 15...	12	5.5	132	--	--	<.010	--	1.20	.028	.04
DEC 16...	17	7.9	164	--	--	<.010	--	2.00	.026	.03
FEB 04...	13	6.9	138	--	--	<.010	--	2.40	<.010	--
APR 09...	10	5.2	122	1.39	6.1	.012	.04	1.40	.083	.11
JUN 10...	7.6	8.3	174	2.29	10	.014	.05	2.30	<.010	--
AUG 26...	5.2	10	168	--	--	<.010	--	.630	.022	.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- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 15...	.57	.60	1.8	.130	.090	.080	.25	50	8.1	94
DEC 16...	--	<.20	--	.130	.040	<.010	--	34	5.6	98
FEB 04...	--	.60	3.0	.040	.030	<.010	--	45	15	99
APR 09...	.22	.30	1.7	.030	<.020	<.010	--	33	18	100
JUN 10...	--	<.20	--	.050	.020	.020	.06	60	4.3	100
AUG 26...	.26	.28	.91	.060	.040	.030	.09	76	1.3	90

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, on the downstream side of culvert at Township Street.

DRAINAGE AREA.--1.22 mi².

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

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.00	.00	e.00	.67	.89	4.5	.20	.50	.38	.00	.00
2	.08	.00	.44	e.00	.13	.28	3.2	.35	.27	.00	.00	.00
3	.00	.00	.86	e.50	.00	.00	2.6	.01	.06	.00	.00	.00
4	.00	.00	.00	e80	.00	.00	2.0	.00	.91	.00	2.2	.00
5	.00	.81	.00	e30	.00	4.7	1.6	1.4	.23	.00	.09	.00
6	.00	.00	.00	e12	.00	2.0	1.6	.90	.00	.00	.00	.00
7	.00	.00	.93	16	.00	17	3.9	.57	.00	.00	.00	.00
8	7.7	.00	7.4	25	.00	9.3	1.7	.10	2.9	.10	.00	.00
9	.71	.00	1.6	7.6	.00	3.3	1.4	3.0	.14	.00	.11	.00
10	.00	1.4	.77	4.6	3.4	1.9	1.1	.70	.00	.00	.00	.00
11	.00	.17	.41	3.3	12	1.1	.90	.36	.60	.38	.00	.00
12	7.3	.67	e.16	2.5	3.5	.66	.89	.38	.00	1.4	.00	.01
13	2.4	3.3	e.00	1.7	1.9	.66	.97	.59	.00	.00	.09	5.1
14	.08	.84	e.00	1.6	1.3	.49	.95	.40	.00	.00	2.8	8.6
15	.00	.00	e.00	1.1	1.2	3.3	1.1	.19	.00	.00	.04	.71
16	.00	.00	e.00	.68	3.7	14	1.2	.00	.00	.00	.00	3.5
17	.00	.00	e.00	.31	2.8	21	1.1	.00	.00	.00	.00	.55
18	.00	.00	e.00	.15	1.6	7.2	.97	.02	.00	.00	.00	.04
19	.00	.00	e.00	.00	1.2	37	.80	.00	.00	.00	.66	.00
20	.00	.00	e.40	.00	.88	13	.82	.00	.00	.00	.00	.00
21	.02	.00	e5.0	.00	.73	8.2	1.2	.00	1.4	.00	.00	12
22	.00	.00	e1.2	.00	.46	6.0	.17	.00	.00	.00	.00	1.6
23	.44	.00	e3.5	.00	.37	4.9	.09	.00	.00	.00	.00	.15
24	1.0	.00	e4.8	.00	.23	4.3	.12	3.4	.00	.00	.00	.00
25	1.3	.00	e.70	1.5	5.7	4.0	.08	7.4	.00	.00	.00	.00
26	.09	.00	e.15	7.3	13	3.7	.89	6.3	.00	.00	.00	.00
27	.00	.00	e.00	3.0	4.6	7.0	8.3	1.4	.00	.00	.00	.00
28	.00	.00	e.00	1.6	1.9	5.3	.84	.85	.00	.00	.00	.00
29	.16	.02	e.00	.94	---	4.4	.45	6.8	.00	.00	.00	.00
30	.00	.00	e.00	.57	---	18	.41	1.5	.00	.00	.00	.18
31	.00	---	e.00	.42	---	14	---	.81	---	.00	.00	---
TOTAL	21.41	7.21	28.32	202.37	61.27	217.58	45.85	37.63	7.01	2.26	5.99	32.44
MEAN	.69	.24	.91	6.53	2.19	7.02	1.53	1.21	.23	.073	.19	1.08
MAX	7.7	3.3	7.4	80	13	37	8.3	7.4	2.9	1.4	2.8	12
MIN	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00
AC-FT	42	14	56	401	122	432	91	75	14	4.5	12	64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	.56	2.58	.51	3.42	2.94	5.58	2.28	1.00	.92	.14	.40	.96
MAX	.69	4.92	.91	6.53	3.68	7.02	3.03	1.21	1.62	.21	.61	1.08
(WY)	1998	1997	1998	1998	1997	1998	1997	1998	1997	1997	1997	1998
MIN	.43	.24	.11	.31	2.19	4.13	1.53	.78	.23	.073	.19	.83
(WY)	1997	1998	1997	1997	1998	1997	1998	1997	1998	1998	1998	1997

ARKANSAS RIVER BASIN

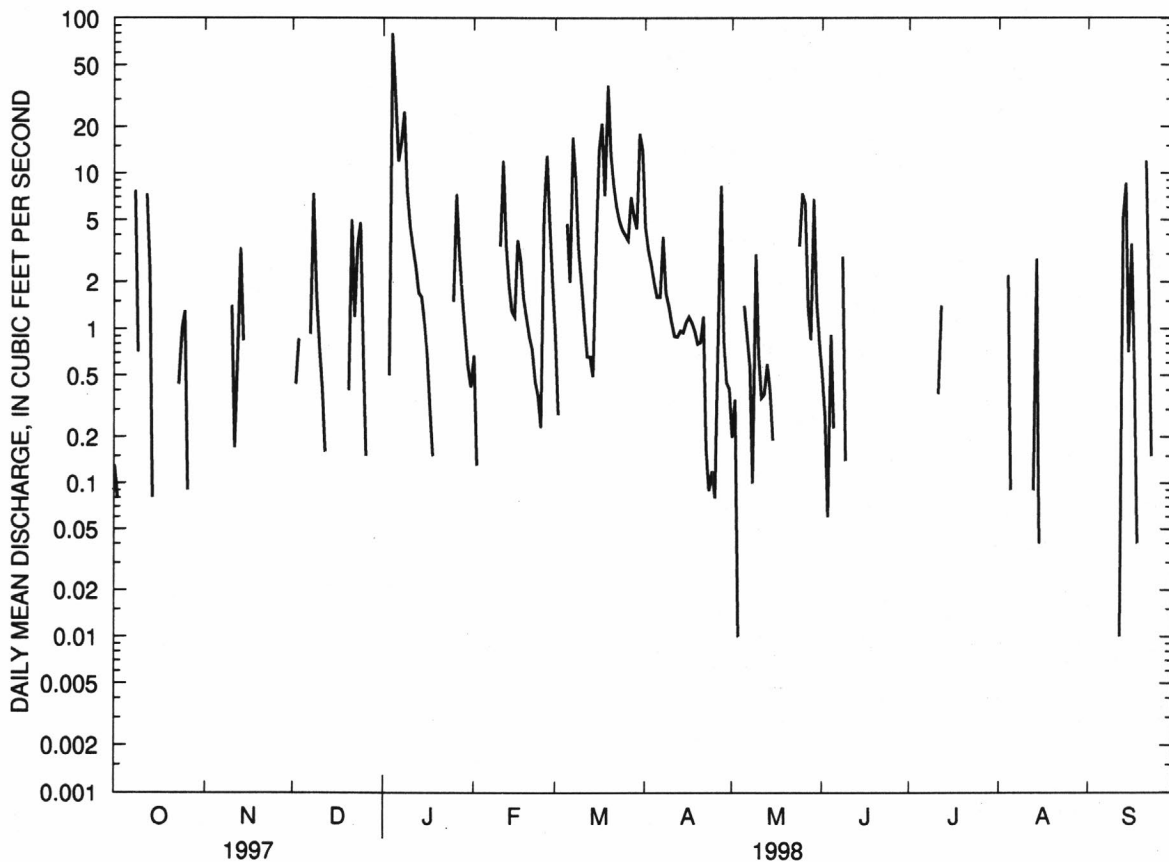
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07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1996 - 1998	
ANNUAL TOTAL	511.67		669.34			
ANNUAL MEAN	1.40		1.83		1.76	
HIGHEST ANNUAL MEAN					1.83	
LOWEST ANNUAL MEAN					1.70	
HIGHEST DAILY MEAN	34	Feb 20	80	Jan 4	80	Jan 4 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 3	.00	Sep 19 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Nov 15	.00	Sep 28 1996
INSTANTANEOUS PEAK FLOW			UNK		^a 478	
INSTANTANEOUS PEAK STAGE			UNK		3.44	
INSTANTANEOUS LOW FLOW			.00 at times		.00	
ANNUAL RUNOFF (AC-FT)	1010		1330		1280	
10 PERCENT EXCEEDS	3.5		4.7		4.2	
50 PERCENT EXCEEDS	.24		.08		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

^aFrom rating 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.--(WATER YEARS)--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.--Water-discharge records good. Low flow slightly regulated by operation of small lake at Cave Springs, and northwest Arkansas sewage treatment plant.

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	69	56	83	136	171	189	336	132	123	89	64	53
2	68	53	83	132	170	183	288	123	129	97	51	51
3	63	56	123	e120	165	175	271	114	120	100	62	50
4	57	59	103	e2200	159	171	246	116	114	88	76	49
5	50	70	92	e1800	155	187	226	165	111	77	108	42
6	52	64	82	e900	152	184	224	133	101	85	82	38
7	57	60	77	523	143	248	234	137	92	89	75	40
8	82	53	278	1010	136	565	219	124	112	94	65	46
9	110	46	197	640	138	319	208	180	112	97	66	49
10	83	68	162	468	145	266	198	183	100	95	75	47
11	67	68	144	394	350	238	186	142	99	86	87	48
12	69	66	129	354	222	220	178	136	95	93	91	43
13	394	132	116	317	189	210	180	124	87	90	106	58
14	144	156	107	295	172	196	180	117	83	87	81	288
15	113	105	106	275	164	197	190	114	107	83	68	132
16	99	86	105	256	206	565	200	103	110	80	55	99
17	89	84	99	241	208	691	180	94	101	76	61	88
18	77	82	96	228	182	499	165	96	102	70	64	74
19	68	77	91	215	171	1910	160	98	101	59	72	59
20	69	76	87	210	170	926	158	97	91	62	64	51
21	72	71	143	201	163	573	160	93	100	70	63	65
22	67	62	164	191	156	452	150	87	98	80	58	77
23	65	58	136	183	151	408	150	81	90	83	49	69
24	77	60	540	172	149	363	148	77	86	81	51	61
25	71	62	297	167	154	333	141	198	83	71	56	56
26	85	59	223	323	430	313	137	425	81	57	58	49
27	70	54	194	229	265	327	256	291	78	62	58	43
28	69	52	180	205	214	311	170	175	71	65	57	48
29	65	100	170	193	---	266	150	183	74	66	51	53
30	65	90	168	184	---	265	137	167	82	63	41	53
31	65	---	154	175	---	603	---	132	---	64	47	---
TOTAL	2651	2185	4729	12937	5250	12353	5826	4437	2933	2459	2062	1979
MEAN	85.5	72.8	153	417	188	398	194	143	97.8	79.3	66.5	66.0
MAX	394	156	540	2200	430	1910	336	425	129	100	108	288
MIN	50	46	77	120	136	171	137	77	71	57	41	38
AC-FT	5260	4330	9380	25660	10410	24500	11560	8800	5820	4880	4090	3930
CFSM	.66	.56	1.17	3.21	1.44	3.07	1.49	1.10	.75	.61	.51	.51
IN.	.76	.63	1.35	3.70	1.50	3.53	1.67	1.27	.84	.70	.59	.57

ARKANSAS RIVER BASIN

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07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1998, BY WATER YEAR (WY)

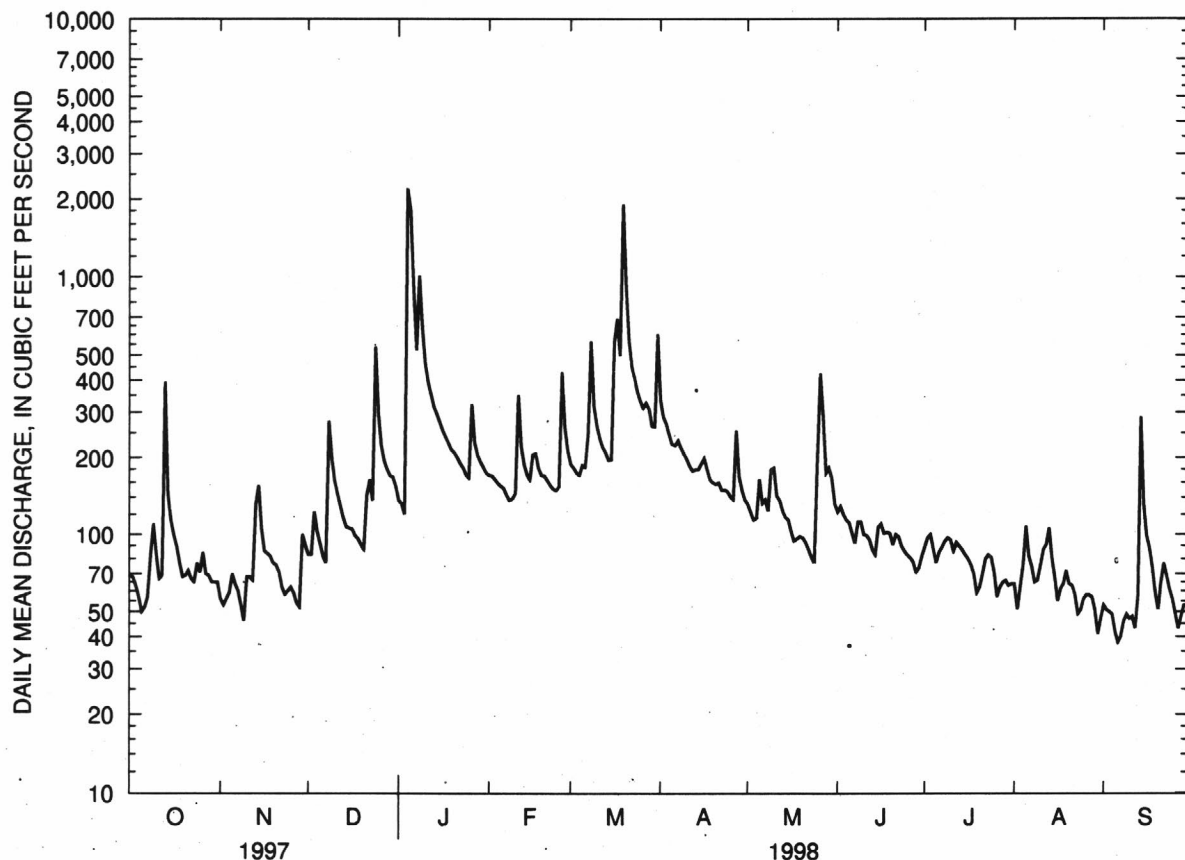
MEAN	73.8	123	99.9	105	132	163	164	189	146	96.6	66.8	64.3
MAX	310	474	390	417	457	538	533	972	694	281	244	214
(WY)	1971	1974	1974	1998	1951	1975	1957	1961	1974	1968	1961	1975
MIN	13.2	23.3	20.9	20.4	23.8	24.5	20.8	40.2	25.0	14.2	11.3	12.4
(WY)	1957	1956	1956	1956	1964	1956	1956	1964	1954	1954	1954	1956

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1951-75, 1996-1998	
ANNUAL TOTAL	47184		59801			
ANNUAL MEAN	129		164		118	
HIGHEST ANNUAL MEAN					236	1974
LOWEST ANNUAL MEAN					29.1	1956
HIGHEST DAILY MEAN	2530	Feb 21	2200	Jan 4	6540	May 19 1961
LOWEST DAILY MEAN	38	Aug 10	38	Sep 6	5.3	Sep 5 1954
ANNUAL SEVEN-DAY MINIMUM	45	Aug 4	44	Sep 5	6.1	Aug 31 1954
INSTANTANEOUS PEAK FLOW			4600	Jan 5	^a 22500	May 19 1961
INSTANTANEOUS PEAK STAGE			^b 9.80	Jan 5	16.66	May 19 1961
INSTANTANEOUS LOW FLOW			32	Sep 6	4.7	Sep 4 1954
ANNUAL RUNOFF (AC-FT)	93590		118600		85760	
ANNUAL RUNOFF (CFSM)	.99		1.26		.91	
ANNUAL RUNOFF (INCHES)	13.50		17.11		12.37	
10 PERCENT EXCEEDS	223		289		211	
50 PERCENT EXCEEDS	90		105		70	
90 PERCENT EXCEEDS	56		57		26	

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

^bFrom floodmark

^eEstimated



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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY	AGENCY	DIS-		PH	BARO-	TEMPER-	OXYGEN,	OXYGEN,
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	METRIC PRES- SURE (MM OF HG) (00025)			
OCT 15...	1300	80513	81213	107	348	8.1	742	15.3	8.1	83
DEC 15...	1500	80513	81213	104	395	8.5	735	9.1	9.5	85
FEB 03...	1430	80513	81213	157	376	8.3	734	10.8	12.2	114
APR 08...	1430	80513	81213	214	302	8.7	726	16.4	12.7	137
JUN 09...	1330	80513	81213	113	345	8.8	733	20.5	9.4	109
AUG 25...	1530	80513	81213	58	415	7.6	731	27.5	8.7	116
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 15...	450	260	350	120	45	1.8	20	26	.8	5.5
DEC 15...	K23	K10	K26	130	49	2.0	20	24	.8	4.9
FEB 03...	K42	K16	46	120	47	1.8	18	23	.7	3.8
APR 08...	K28	K12	K17	110	42	1.6	13	20	.5	3.4
JUN 09...	540	420	290	120	44	1.6	18	24	.7	4.3
AUG 25...	170	K190	140	120	47	1.6	37	38	1	7.2
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 15...	17	21	208	--	--	<.010	--	2.60	<.010	--
DEC 15...	17	21	224	--	--	<.010	--	4.40	.026	.03
FEB 03...	12	17	190	4.16	18	.036	.12	4.20	.058	.07
APR 08...	9.5	14	176	3.68	16	.018	.06	3.70	.098	.13
JUN 09...	14	18	264	3.58	16	.020	.07	3.60	.024	.03
AUG 25...	27	40	270	2.89	13	.010	.03	2.90	<.010	--

ARKANSAS RIVER BASIN

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07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

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 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 (70331)
OCT 15...	--	.33	2.9	.440	.400	.400	1.2	44	13	98
DEC 15...	--	<.20	--	.260	.250	.270	.83	36	10	98
FEB 03...	.26	.32	4.5	.240	.200	.140	.43	72	31	97
APR 08...	--	<.20	--	.150	.130	.130	.40	41	24	99
JUN 09...	.18	.20	3.8	.620	.580	.560	1.7	68	21	99
AUG 25...	--	.31	3.2	1.30	1.30	1.10	3.4	72	11	90

ARKANSAS RIVER BASIN

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.

REMARKS.--No estimated daily discharges. 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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	134	312	496	562	890	1800	445	459	186	109	103
2	143	117	278	450	544	761	1250	421	412	198	105	104
3	134	109	308	427	514	676	1070	398	378	195	101	101
4	124	109	433	4280	479	611	942	377	344	177	117	99
5	113	119	358	19000	451	581	851	388	326	160	188	95
6	103	144	306	6490	432	1020	791	500	315	150	191	87
7	102	139	272	4600	417	840	828	441	287	153	150	86
8	114	135	615	7870	395	3980	840	432	282	160	137	93
9	273	123	1020	4880	379	1930	739	430	350	168	134	95
10	287	133	704	2970	378	1280	683	620	307	160	148	96
11	199	175	571	2090	1280	1050	638	482	291	150	158	97
12	167	175	488	1580	1140	896	595	431	282	218	177	97
13	961	208	424	1320	785	809	561	392	256	283	168	107
14	710	567	377	1140	670	744	538	362	237	210	250	273
15	403	509	340	1030	597	724	519	345	217	179	187	554
16	297	370	315	933	582	1980	609	321	214	162	170	327
17	243	304	289	853	682	3530	558	299	213	152	147	283
18	207	272	267	786	629	2850	510	279	209	148	142	233
19	178	241	251	725	563	5440	474	272	215	137	146	195
20	157	217	238	678	524	7230	451	264	203	127	224	169
21	152	201	326	639	496	2790	433	257	188	125	175	154
22	148	183	1040	603	461	1900	422	251	219	123	150	460
23	141	162	708	574	436	1530	405	239	210	128	140	519
24	149	149	2320	532	423	1290	391	234	189	136	131	298
25	180	145	2160	507	419	1130	378	478	176	130	127	220
26	215	152	1220	770	1470	1010	360	1130	166	119	122	185
27	208	137	940	1050	2000	945	651	1370	164	111	126	165
28	175	132	787	781	1160	1160	748	882	158	116	122	150
29	157	364	707	688	---	954	550	713	150	121	121	147
30	148	373	635	623	---	858	477	719	162	116	111	145
31	143	---	563	581	---	3380	---	547	---	111	102	---
TOTAL	6885	6298	19572	69946	18868	54769	20062	14719	7579	4809	4576	5737
MEAN	222	210	631	2256	674	1767	669	475	253	155	148	191
MAX	961	567	2320	19000	2000	7230	1800	1370	459	283	250	554
MIN	102	109	238	427	378	581	360	234	150	111	101	86
AC-FT	13660	12490	38820	138700	37420	108600	39790	29200	15030	9540	9080	11380

ARKANSAS RIVER BASIN

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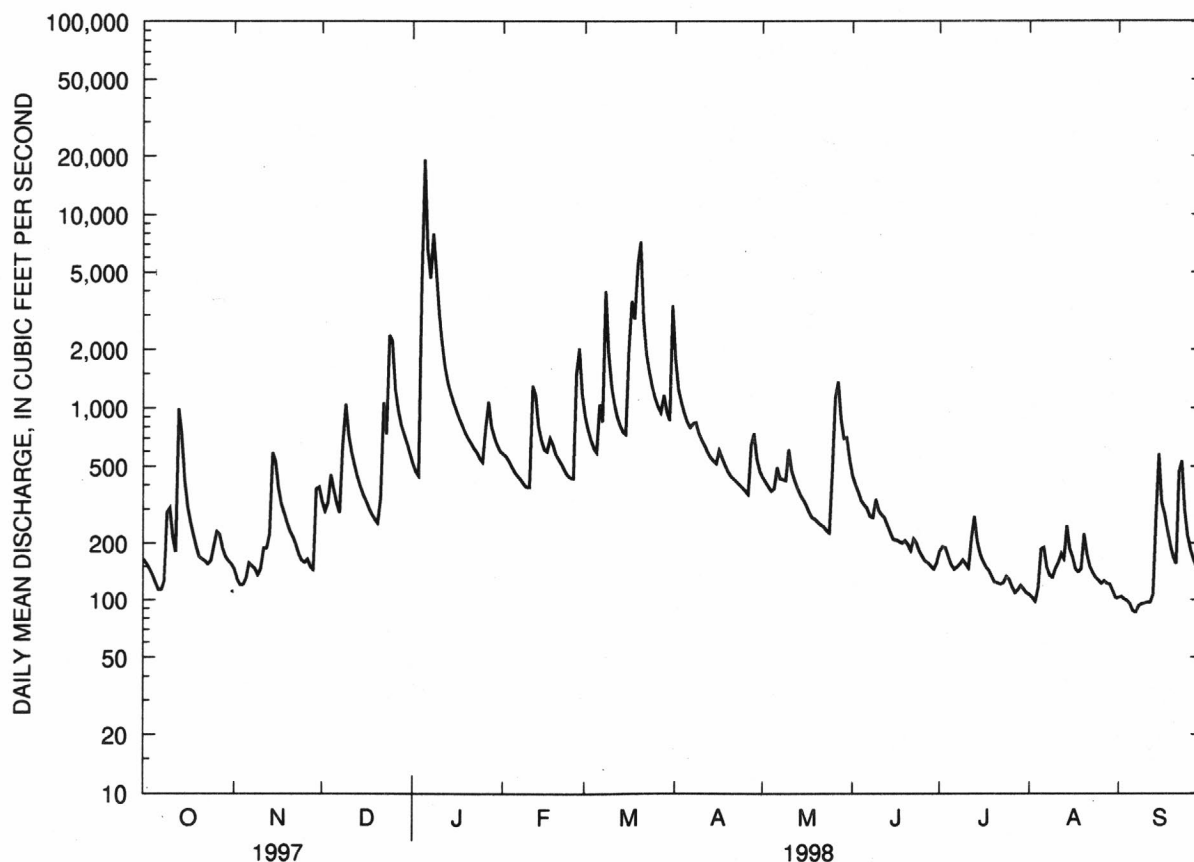
07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1998, BY WATER YEAR (WY)

MEAN	223	1072	569	1043	780	1035	756	512	327	173	183	361
MAX	274	2839	824	2256	1442	1767	916	750	503	211	248	887
(WY)	1997	1997	1997	1998	1997	1998	1996	1996	1997	1997	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 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1995 - 1998

ANNUAL TOTAL	181544		233820									
ANNUAL MEAN	497		641							588		
HIGHEST ANNUAL MEAN										734		1997
LOWEST ANNUAL MEAN										391		1996
HIGHEST DAILY MEAN	15400	Feb 21	19000	Jan 5	19000	Jan 5	19000	Jan 5	19000	Jan 5	1998	
LOWEST DAILY MEAN	102	Oct 7	86	Sep 7	86	Sep 7	86	Sep 7	86	Sep 7	1998	
ANNUAL SEVEN-DAY MINIMUM	119	Oct 2	93	Sep 5	93	Sep 5	93	Sep 5	93	Sep 5	1998	
INSTANTANEOUS PEAK FLOW			32300	Jan 5	32300	Jan 5	32300	Jan 5	32300	Jan 5	1998	
INSTANTANEOUS PEAK STAGE			19.24	Jan 5	19.24	Jan 5	19.24	Jan 5	19.24	Jan 5	1998	
INSTANTANEOUS LOW FLOW			82	Sep 7	78	Sep 11	78	Sep 11	78	Sep 11	1996	
ANNUAL RUNOFF (AC-FT)	360100		463800		426200		426200		426200			
10 PERCENT EXCEEDS	988		1130		1010		1010		1010			
50 PERCENT EXCEEDS	287		315		262		262		262			
90 PERCENT EXCEEDS	139		123		134		134		134			



ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

		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											
16...	1200	80513	81213	317	282	7.9	745	16.8	9.5	100	
DEC											
16...	1330	80513	81213	338	338	8.4	736	7.2	13.8	118	
FEB											
04...	1330	80513	81213	497	309	8.1	738	8.2	11.4	100	
APR											
13...	1330	80513	81213	584	248	8.7	730	17.3	12.7	138	
JUN											
09...	1100	80513	81213	353	295	8.1	736	20.0	8.6	98	
AUG											
25...	1130	80513	81213	125	328	7.8	737	29.0	10.1	137	
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											
16...	210	150	170	110	40	1.9	10	16	.4	3.9	
DEC											
16...	K30	K24	K27	120	45	2.1	8.7	13	.3	3.1	
FEB											
04...	K40	K32	K30	100	38	1.8	9.3	16	.4	2.5	
APR											
13...	24	K21	K10	100	37	1.8	7.8	14	.3	2.5	
JUN											
09...	140	120	130	120	44	1.8	11	16	.4	3.3	
AUG											
25...	74	62	48	120	46	1.9	19	24	.7	4.3	
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											
16...	12	12	176	--	--	<.010	--	1.70	.016	.02	
DEC											
16...	13	12	182	--	--	<.010	--	3.00	.023	.03	
FEB											
04...	11	10	160	--	--	<.010	--	3.40	<.010	--	
APR											
13...	9.0	8.7	158	2.38	11	.020	.07	2.40	.074	.10	
JUN											
09...	11	12	180	--	--	<.010	--	2.40	.012	.02	
AUG											
25...	15	20	200	1.19	5.3	.012	.04	1.20	.032	.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- CHARGE, SUS- PENDED (MG/L) (80154)	SED. SUSP. CHARGE, DIS- SOLVED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
16...	.30	.32	2.0	.200	.150	.170	.52	30	26	98	
DEC											
16...	--	<.20	--	.120	.110	.090	.28	27	25	100	
FEB											
04...	--	.28	3.7	.080	.070	.060	.18	42	56	96	
APR											
13...	.24	.31	2.7	.060	.030	.040	.12	40	63	97	
JUN											
09...	--	<.20	--	.150	.130	.140	.43	60	57	100	
AUG											
25...	.18	.21	1.4	.190	.170	.160	.49	78	26	92	

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

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	5.4	6.3	18	14	13	13	22	11	13	6.7	4.3	4.1
2	5.3	6.4	15	13	12	13	20	11	12	6.2	4.4	4.2
3	5.2	6.7	17	12	12	13	20	11	11	5.9	4.8	4.1
4	5.3	6.3	15	224	12	12	19	10	9.8	5.5	5.0	4.0
5	5.0	9.3	14	146	11	12	18	10	9.2	5.4	5.5	3.8
6	5.0	8.2	13	179	11	12	17	10	8.8	5.3	4.9	4.0
7	5.2	7.7	12	107	11	18	18	11	8.3	5.3	4.6	3.4
8	6.4	7.4	29	249	10	35	17	10	8.3	5.7	4.6	2.6
9	8.2	7.2	27	112	11	32	16	11	8.6	5.4	5.4	3.7
10	6.8	8.4	22	72	11	27	15	12	7.8	5.1	5.6	3.8
11	6.4	8.2	18	54	13	23	15	11	8.1	5.3	5.4	3.9
12	9.1	8.2	16	44	13	20	15	9.9	7.7	6.0	5.6	3.9
13	23	11	15	37	13	19	14	9.5	7.1	5.8	6.3	5.0
14	13	14	13	31	13	18	14	9.3	7.0	5.3	5.7	13
15	10	13	12	27	13	19	14	9.1	6.8	5.1	5.1	6.9
16	9.4	12	12	24	13	47	14	8.7	6.8	5.0	4.8	6.0
17	8.5	11	11	22	13	57	13	8.2	6.5	4.8	4.7	5.7
18	8.0	10	10	19	12	52	13	8.0	6.5	4.6	4.4	5.1
19	7.4	9.5	9.6	17	12	224	12	8.0	6.5	4.5	4.3	4.7
20	6.9	8.9	9.4	16	12	137	12	8.0	6.2	e4	4.4	4.5
21	6.8	8.5	12	15	11	80	12	7.9	6.4	e4	4.2	4.5
22	6.6	8.1	14	14	11	59	12	7.7	6.4	e4	4.2	5.2
23	6.6	7.6	14	13	11	47	11	7.7	6.0	e5	4.1	4.8
24	6.8	7.4	42	12	11	40	11	7.8	5.6	5.1	3.9	4.8
25	6.7	7.3	36	12	11	34	11	28	5.7	5.1	3.9	4.6
26	7.1	7.4	29	16	16	30	11	53	5.5	4.7	3.8	4.5
27	6.7	7.4	25	15	15	29	13	35	5.4	4.6	5.7	4.5
28	6.7	8.4	22	15	14	26	12	25	5.4	4.6	4.5	4.5
29	6.6	35	19	14	---	23	11	19	5.3	5.4	4.5	4.4
30	6.3	22	17	14	---	22	11	16	6.4	5.1	4.2	4.4
31	6.4	---	15	13	---	25	---	14	---	4.7	4.1	---
TOTAL	232.8	298.8	553.0	1572	341	1218	433	417.8	224.1	159.2	146.9	142.6
MEAN	7.51	9.96	17.8	50.7	12.2	39.3	14.4	13.5	7.47	5.14	4.74	4.75
MAX	23	35	42	249	16	224	22	53	13	6.7	6.3	13
MIN	5.0	6.3	9.4	12	10	12	11	7.7	5.3	4.0	3.8	2.6
AC-FT	462	593	1100	3120	676	2420	859	829	445	316	291	283
CFSM	.53	.70	1.26	3.57	.86	2.77	1.02	.95	.53	.36	.33	.33
IN.	.61	.78	1.45	4.12	.89	3.19	1.13	1.09	.59	.42	.38	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1998, BY WATER YEAR (WY)

MEAN	10.9	19.0	18.7	14.8	15.5	21.5	21.9	18.2	17.5	8.88	7.78	9.10
MAX	51.8	83.7	63.0	50.7	45.3	57.7	60.5	107	121	40.9	61.5	38.3
(WY)	1987	1974	1988	1998	1997	1973	1965	1990	1974	1961	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 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1961 - 1998

ANNUAL TOTAL	4999.6		5739.2			
ANNUAL MEAN	13.7		15.7		15.1	
HIGHEST ANNUAL MEAN					34.4	1974
LOWEST ANNUAL MEAN					3.80	1967
HIGHEST DAILY MEAN	408	Feb 21	249	Jan 8	1730	Jun 8 1974
LOWEST DAILY MEAN	4.4	Aug 5	2.6	Sep 8	.00	Aug 3 1980
ANNUAL SEVEN-DAY MINIMUM	4.5	Aug 2	3.6	Sep 5	.33	Aug 3 1980
INSTANTANEOUS PEAK FLOW			468	Mar 19	^a 14600	Jun 8 1974
INSTANTANEOUS PEAK STAGE			6.12	Mar 19	^b 17.51	Jun 8 1974
INSTANTANEOUS LOW FLOW			^c .00	Sep 7,8	^d .00	Aug 3 1980
ANNUAL RUNOFF (AC-FT)	9920		11380		10930	
ANNUAL RUNOFF (CFSM)	.96		1.11		1.06	
ANNUAL RUNOFF (INCHES)	13.10		15.04		14.43	
10 PERCENT EXCEEDS	22		26		29	
50 PERCENT EXCEEDS	8.9		9.9		8.3	
90 PERCENT EXCEEDS	5.3		4.5		3.2	

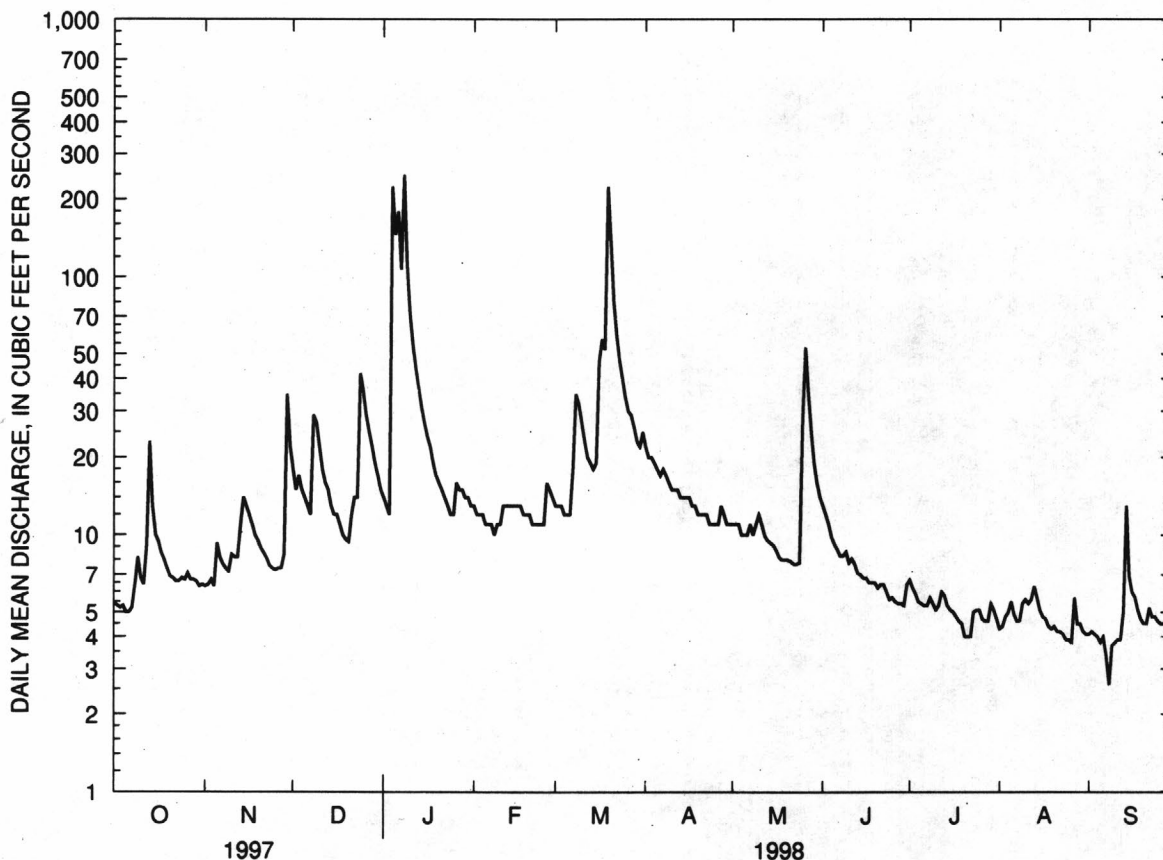
^aFrom rating curve extended above 770 ft³/s on basis of contracted opening and flow-over-road measurement of peak flow

^bFrom floodmark

^cNo flow for part of each day result of pumpage for irrigation upstream from gage

^dResult of pumpage for irrigation upstream from gage

^eEstimated



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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	12	52	42	50	40	81	37	69	19	5.6	2.0
2	6.3	12	42	42	48	38	79	35	52	17	5.6	2.1
3	6.1	12	43	39	46	36	76	35	44	12	5.6	2.1
4	5.9	12	38	290	44	34	73	34	40	12	5.6	2.1
5	6.1	15	35	353	42	33	68	34	38	12	5.4	2.1
6	6.1	18	32	296	40	33	66	35	34	12	4.4	2.0
7	6.5	18	30	248	39	44	69	37	31	11	3.8	2.0
8	8.0	16	54	382	39	112	67	36	31	11	4.3	1.8
9	13	15	68	293	37	105	66	40	32	13	5.3	1.8
10	13	17	63	203	36	89	61	42	28	10	8.6	1.6
11	11	18	53	163	41	79	58	39	29	8.7	6.4	1.7
12	11	18	45	140	41	70	56	38	26	15	6.1	1.9
13	37	21	40	121	41	64	57	36	23	10	5.7	3.0
14	32	28	36	107	40	60	54	35	22	8.3	6.7	42
15	22	29	33	96	39	57	53	32	19	5.7	6.2	31
16	18	28	31	86	40	115	52	29	19	5.5	5.1	18
17	16	28	29	80	42	185	48	28	18	5.3	4.9	13
18	14	28	28	74	46	169	48	28	18	5.0	3.0	9.3
19	13	27	25	67	46	269	46	26	18	5.9	1.7	6.7
20	11	24	25	62	43	324	46	26	18	5.9	1.3	5.5
21	11	22	31	57	35	209	45	26	17	5.4	1.2	4.9
22	11	20	37	55	33	170	44	26	18	5.0	1.1	5.6
23	9.8	20	38	52	32	148	44	26	17	4.2	1.1	6.3
24	11	18	78	48	29	130	44	26	16	7.0	1.1	5.7
25	12	19	105	48	30	118	43	91	14	7.8	1.0	4.8
26	12	20	88	58	47	109	45	160	12	7.4	1.1	3.9
27	12	19	74	57	44	106	56	181	11	6.3	2.0	3.5
28	12	18	65	54	42	102	49	142	11	7.3	2.1	3.5
29	12	67	59	54	---	93	47	116	11	8.8	2.2	3.5
30	12	67	52	52	---	86	44	99	14	6.7	2.1	3.5
31	12	---	46	49	---	90	---	84	---	6.1	2.0	---
TOTAL	388.9	686	1475	3768	1132	3317	1685	1659	750	276.3	118.3	196.9
MEAN	12.5	22.9	47.6	122	40.4	107	56.2	53.5	25.0	8.91	3.82	6.56
MAX	37	67	105	382	50	324	81	181	69	19	8.6	42
MIN	5.9	12	25	39	29	33	43	26	11	4.2	1.0	1.6
AC-FT	771	1360	2930	7470	2250	6580	3340	3290	1490	548	235	391

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1998, BY WATER YEAR (WY)

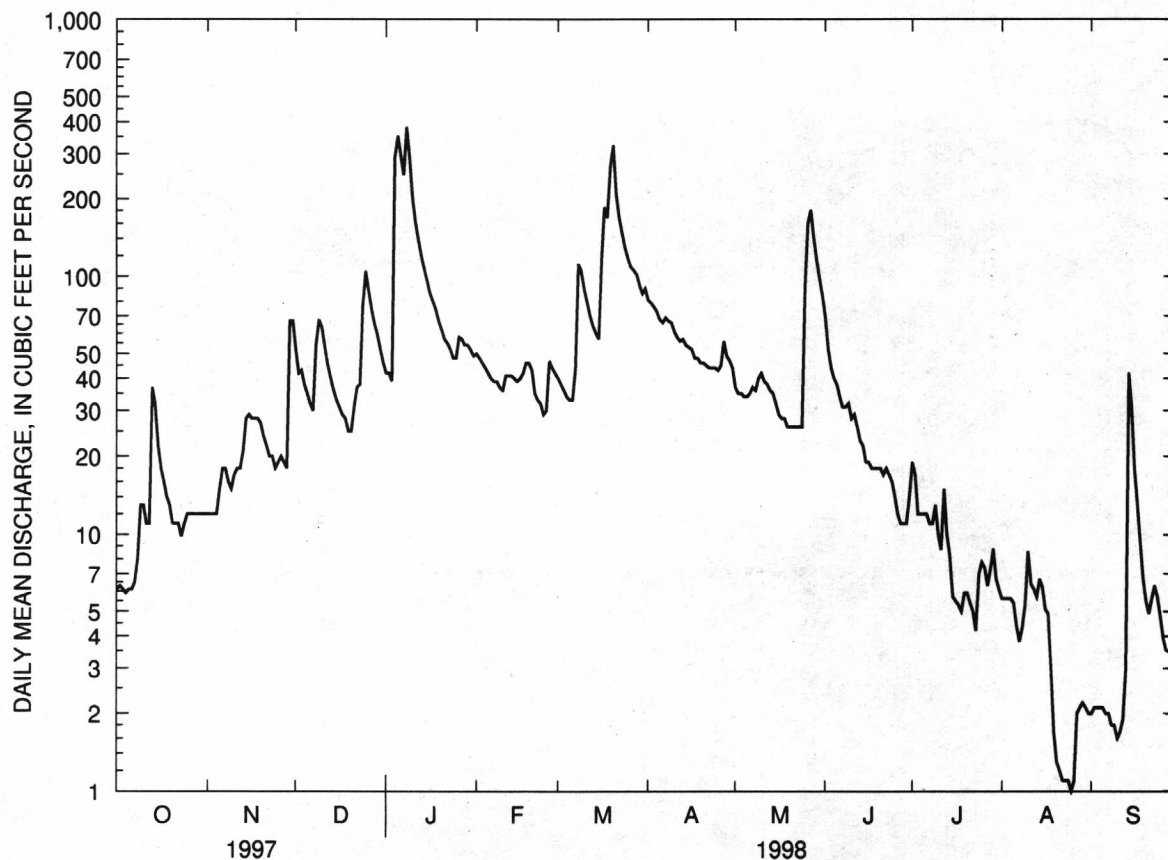
MEAN	31.2	56.3	70.7	53.5	54.9	76.7	69.9	66.6	50.6	20.9	16.1	21.9
MAX	199	149	219	123	120	176	143	251	169	55.0	35.6	132
(WY)	1987	1994	1993	1985	1989	1985	1985	1990	1995	1995	1986	1986
MIN	3.48	3.86	6.62	3.88	4.37	7.04	7.43	20.9	9.72	2.79	.77	1.80
(WY)	1981	1981	1980	1980	1981	1981	1981	1981	1981	1980	1980	1980

ARKANSAS RIVER BASIN

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

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1980 - 1998	
ANNUAL TOTAL	13600.5		15452.4			
ANNUAL MEAN	37.3		42.3		49.1	
HIGHEST ANNUAL MEAN					97.9	
LOWEST ANNUAL MEAN					10.7	
HIGHEST DAILY MEAN	1280	Feb 21	382	Jan 8	2560	Sep 30 1986
LOWEST DAILY MEAN	2.9	Jul 28	1.0	Aug 25	.40	Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 22	1.1	Aug 20	.56	Aug 5 1980
INSTANTANEOUS PEAK FLOW			610	Jan 4	^a 6650	May 3 1990
INSTANTANEOUS PEAK STAGE			6.42	Jan 4	12.67	May 3 1990
ANNUAL RUNOFF (AC-FT)	26980		30650		35540	
10 PERCENT EXCEEDS	73		89		105	
50 PERCENT EXCEEDS	27		30		27	
90 PERCENT EXCEEDS	6.1		4.6		6.7	

^aFrom rating curve extended above 3,300ft³/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.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

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	.46	3.3	24	31	44	70	151	37	5.6	3.1	.11	.15
2	.45	2.9	20	29	40	62	113	34	4.7	3.4	.26	.08
3	.28	2.6	55	28	36	55	98	32	3.9	2.3	.39	.05
4	.32	2.8	38	3820	34	52	86	29	3.4	1.7	.53	.04
5	.34	3.7	28	953	33	97	80	34	3.7	1.4	.42	.00
6	.52	4.6	23	565	31	90	75	38	3.9	1.1	.21	.01
7	.89	3.7	21	454	29	404	98	51	3.4	.84	.08	.00
8	4.9	3.6	103	606	28	354	81	36	5.6	2.5	.07	.00
9	31	3.6	55	219	27	133	70	30	13	3.5	.40	.00
10	11	7.3	40	136	30	95	64	29	6.8	2.0	.57	.00
11	4.7	9.4	32	106	205	81	59	26	7.8	1.5	.80	.00
12	23	8.2	27	88	81	71	55	23	8.5	6.1	.74	.00
13	174	31	24	75	61	67	52	20	4.7	6.6	.65	.82
14	28	47	21	67	51	63	50	18	3.3	3.4	1.0	14
15	16	33	19	61	48	97	47	17	2.5	2.3	1.3	18
16	11	25	18	55	51	311	48	15	2.1	1.6	.82	10
17	8.0	20	16	50	52	234	44	13	1.8	1.3	.75	9.8
18	6.1	17	14	47	48	152	41	11	1.8	1.0	.59	6.5
19	4.9	14	13	43	44	682	39	10	2.0	.77	.36	4.6
20	4.2	12	14	41	42	237	37	9.0	1.7	.60	.40	3.7
21	3.8	11	284	38	40	146	35	8.6	1.6	.34	.68	3.1
22	3.6	9.7	98	37	38	117	34	7.9	1.7	.21	.64	88
23	3.4	8.6	61	35	37	101	31	7.3	1.3	.22	.49	25
24	7.9	7.9	463	33	35	89	30	6.7	.97	.24	.40	15
25	7.4	7.4	114	32	36	82	28	16	.81	.24	.28	9.1
26	8.0	6.7	67	98	275	75	27	31	.56	.22	.27	6.6
27	6.2	6.4	52	67	153	107	140	24	.45	.19	.45	5.0
28	4.9	6.9	46	54	88	107	62	15	.36	.15	.28	4.0
29	4.3	47	44	47	---	85	46	12	.30	.17	.25	3.6
30	4.1	32	39	42	---	236	40	9.0	.68	.07	.24	3.2
31	3.6	---	34	39	---	478	---	7.1	---	.04	.21	---
TOTAL	387.26	398.3	1907	7996	1717	5030	1861	656.6	98.93	49.10	14.64	230.35
MEAN	12.5	13.3	61.5	258	61.3	162	62.0	21.2	3.30	1.58	.47	7.68
MAX	174	47	463	3820	275	682	151	51	13	6.6	1.3	88
MIN	.28	2.6	13	28	27	52	27	6.7	.30	.04	.07	.00
AC-FT	768	790	3780	15860	3410	9980	3690	1300	196	97	29	457
CFSM	.31	.33	1.52	6.35	1.51	4.00	1.53	.52	.08	.04	.01	.19
IN.	.35	.36	1.75	7.33	1.57	4.61	1.71	.60	.09	.04	.01	.21

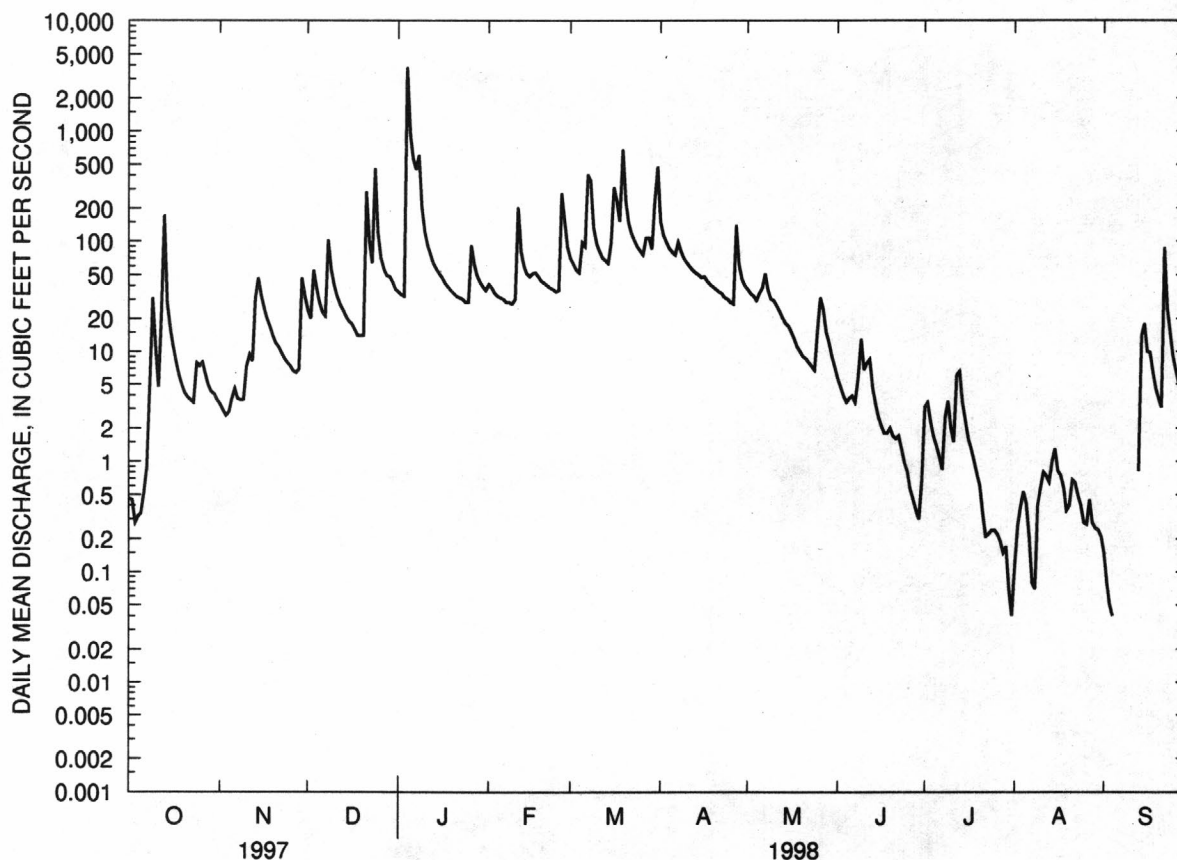
ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1998, BY WATER YEAR (WY)

MEAN	25.8	59.5	53.9	50.0	56.3	79.0	79.5	68.9	33.8	17.2	7.43	19.7
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1958 - 1998	
ANNUAL TOTAL	13111.04		20346.18			
ANNUAL MEAN	35.9		55.7		45.4	
HIGHEST ANNUAL MEAN					104	1993
LOWEST ANNUAL MEAN					3.99	1963
HIGHEST DAILY MEAN	1530	Feb 20	3820	Jan 4	4300	Nov 24 1973
LOWEST DAILY MEAN	.28	Oct 3	.00	Sep 5	.00	Jul 23 1963
ANNUAL SEVEN-DAY MINIMUM	.43	Sep 30	.00	Sep 5	.00	Sep 20 1963
INSTANTANEOUS PEAK FLOW			^a 17500	Jan 4	^a 20900	Nov 18 1985
INSTANTANEOUS PEAK STAGE			13.85	Jan 4	14.81	Nov 18 1985
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	26010		40360		32900	
ANNUAL RUNOFF (CFSM)	.88		1.37		1.12	
ANNUAL RUNOFF (INCHES)	12.01		18.64		15.20	
10 PERCENT EXCEEDS	63		98		87	
50 PERCENT EXCEEDS	15		15		12	
90 PERCENT EXCEEDS	1.4		.33		.87	

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

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 1997 TO SEPTEMBER 1998

		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 16...	1400	80513	81213	10	332	8.2	740	16.6	10.1	107	
DEC 17...	1200	80513	81213	16	340	8.4	736	5.1	10.5	85	
FEB 10...	1100	80513	81213	27	270	8.8	730	9.9	10.2	94	
APR 07...	1500	80513	81213	103	224	8.7	730	17.5	13.8	151	
JUN 10...	1330	80513	81213	7.6	292	8.0	735	23.0	5.6	68	
AUG 26...	1300	80513	81213	.29	272	7.7	743	30.5	7.2	99	
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 SORP- TION RATIO PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT 16...	400	220	160	150	55	3.5	5.1	7	.2	3.6	
DEC 17...	42	K27	44	140	51	3.4	4.2	6	.2	2.5	
FEB 10...	90	82	42	130	46	2.9	5.5	8	.2	2.1	
APR 07...	800	400	180	100	36	2.6	4.2	8	.2	2.1	
JUN 10...	380	380	100	140	50	2.9	6.3	9	.2	3.2	
AUG 26...	960	120	220	140	50	2.6	5.5	8	.2	2.6	
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 16...	20	8.5	186	--	--	<.010	--	2.50	.021	.03	
DEC 17...	19	8.3	190	--	--	<.010	--	2.70	.030	.04	
FEB 10...	15	6.6	158	--	--	<.010	--	2.70	<.010	--	
APR 07...	12	5.0	150	1.58	7.0	.021	.07	1.60	.110	.14	
JUN 10...	14	7.6	186	1.46	6.5	.040	.13	1.50	.049	.06	
AUG 26...	8.9	7.7	174	.080	.35	.010	.03	.090	.086	.11	
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- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 16...	.26	.28	2.8	.070	.060	.070	.21	41	1.1	97	
DEC 17...	--	<.20	--	.270	.020	<.010	--	36	1.5	97	
FEB 10...	--	.25	3.0	.060	<.020	<.010	--	52	3.8	98	
APR 07...	.18	.29	1.9	.030	<.020	<.010	--	37	10	96	
JUN 10...	.22	.27	1.8	.050	<.020	<.010	--	56	1.1	100	
AUG 26...	.25	.34	.43	.050	<.020	<.010	--	70	.05	88	

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. Satellite data collection platform installed September 13, 1991.

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.

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	42	108	273	213	438	740	35	158	1.7	1.4	3.1
2	3.0	38	77	234	184	344	452	28	105	1.9	1.3	2.9
3	2.8	17	653	214	158	286	331	49	71	1.8	1.9	3.2
4	2.7	11	336	388	136	244	260	55	49	1.7	2.6	3.4
5	2.9	8.4	188	10000	119	357	218	39	37	1.5	2.7	3.5
6	3.1	7.5	126	2860	104	315	184	57	26	1.4	2.7	3.9
7	5.1	17	110	2720	92	837	177	62	18	1.2	2.4	4.2
8	10	13	924	3450	82	1390	146	60	14	1.0	2.3	4.6
9	46	9.1	584	1790	75	903	114	52	11	.91	2.0	4.9
10	264	10	332	1350	646	593	91	205	11	.96	1.8	22
11	53	81	221	1170	5110	442	73	137	15	1.3	1.9	44
12	17	60	175	1070	1450	354	63	94	16	1.8	2.2	52
13	158	358	138	886	1080	312	51	68	16	2.9	2.4	70
14	127	494	113	675	788	271	43	52	31	3.6	2.3	64
15	37	237	93	583	560	348	37	43	15	2.4	2.2	77
16	16	132	77	457	631	1680	44	34	7.6	1.7	2.3	95
17	10	85	64	367	1640	1810	62	26	5.7	1.4	2.4	92
18	7.4	60	53	303	1250	1100	43	21	4.8	1.2	2.3	81
19	6.3	45	45	253	855	2750	33	17	5.5	1.2	2.3	78
20	5.1	34	116	212	647	1600	27	14	16	1.3	2.1	79
21	4.7	26	1280	184	482	1040	23	12	9.7	1.2	1.8	82
22	4.7	23	856	271	497	804	21	11	5.9	1.1	1.6	91
23	4.7	19	890	292	475	611	17	9.6	4.3	1.2	1.5	96
24	6.5	15	5440	209	347	473	15	8.8	3.5	1.8	1.6	79
25	34	12	1520	175	288	380	13	7.7	3.1	2.5	1.8	75
26	151	11	1140	708	1360	310	11	28	2.6	2.1	1.8	75
27	87	9.5	978	800	949	277	197	403	2.3	1.7	1.8	73
28	33	9.3	715	505	625	378	125	626	2.0	1.8	1.7	71
29	17	192	572	375	---	257	67	566	1.7	2.1	2.0	70
30	12	186	431	300	---	220	47	548	1.6	1.8	2.5	71
31	11	---	337	248	---	1270	---	255	---	1.5	3.1	---
TOTAL	1145.0	2261.8	18692	33322	20843	22394	3725	3623.1	669.3	51.67	64.7	1570.7
MEAN	36.9	75.4	603	1075	744	722	124	117	22.3	1.67	2.09	52.4
MAX	264	494	5440	10000	5110	2750	740	626	158	3.6	3.1	96
MIN	2.7	7.5	45	175	75	220	11	7.7	1.6	.91	1.3	2.9
AC-FT	2270	4490	37080	66090	41340	44420	7390	7190	1330	102	128	3120

ARKANSAS RIVER BASIN

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07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1998, BY WATER YEAR (WY)

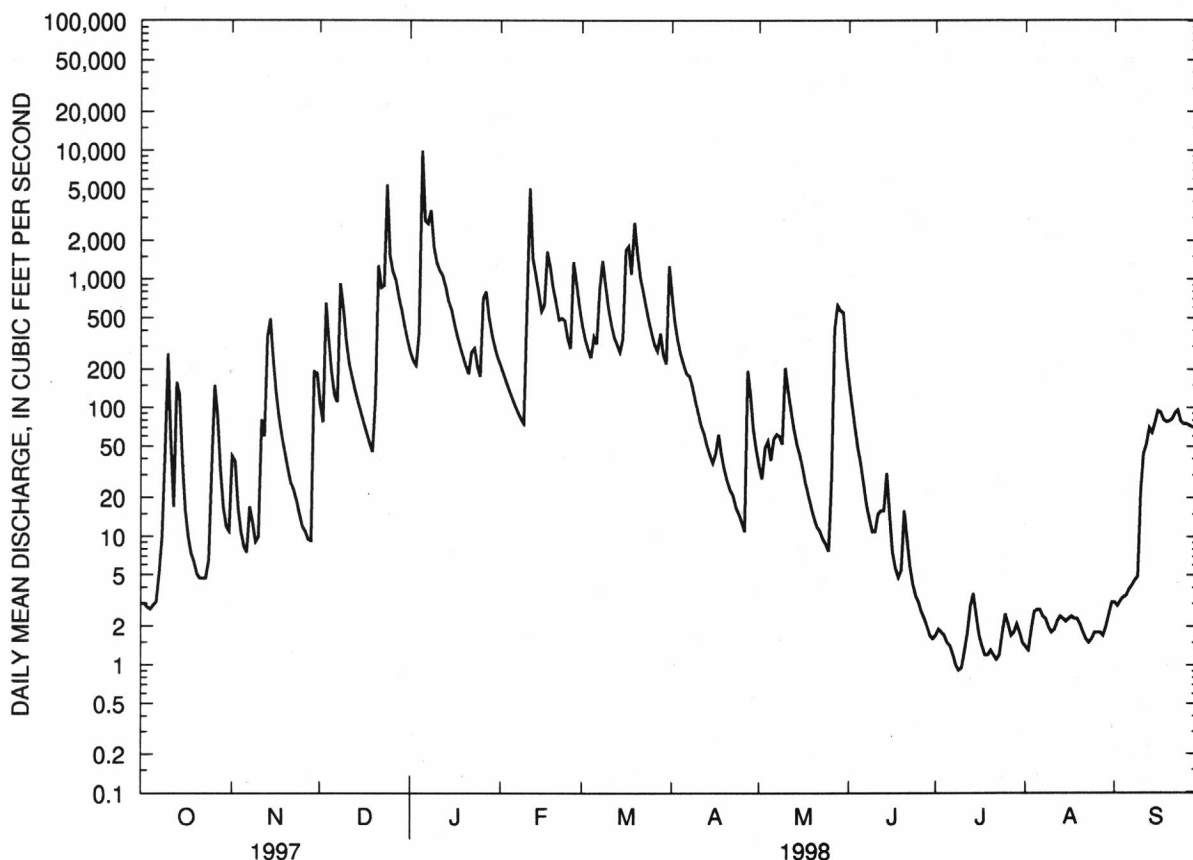
MEAN	107	305	365	308	386	426	345	470	214	57.9	21.3	24.3
MAX	1423	1900	1078	1075	1246	849	1092	2080	846	314	93.7	166
(WY)	1985	1997	1983	1998	1989	1975	1991	1990	1986	1981	1996	1996
MIN	.015	2.09	2.02	14.1	35.6	59.9	42.5	13.6	2.36	.41	.81	.19
(WY)	1979	1996	1990	1981	1996	1986	1976	1977	1988	1980	1976	1980

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1975 - 1998	
ANNUAL TOTAL	90161.0		108362.27			
ANNUAL MEAN	247		297		^a 252	
HIGHEST ANNUAL MEAN					432	
LOWEST ANNUAL MEAN					48.7	
HIGHEST DAILY MEAN	5960	Feb 21	10000	Jan 5	16900	May 3 1990
LOWEST DAILY MEAN	1.9	Sep 30	.91	Jul 9	.00	Aug 30 1976
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 27	1.2	Jul 5	.00	Oct 7 1978
INSTANTANEOUS PEAK FLOW			12900	Jan 5	^b 24000	May 3 1990
INSTANTANEOUS PEAK STAGE			19.51	Jan 5	^c 22.17	May 3 1990
INSTANTANEOUS LOW FLOW			.84	Jul 9,10	.00	at times
ANNUAL RUNOFF (AC-FT)	178800		214900		182500	
10 PERCENT EXCEEDS	618		802		612	
50 PERCENT EXCEEDS	48		57		51	
90 PERCENT EXCEEDS	4.3		1.8		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 September 30, 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

		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 09...	1030	80513	81213	19	238	7.3	750	21.9	5.9	69	
DEC 11...	1130	80513	81213	234	186	7.6	751	6.2	8.9	73	
JAN 05...	1230	80513	81213	12100	33	7.4	747	13.9	10.6	104	
APR 06...	1130	80513	81213	187	54	7.7	743	14.8	8.5	86	
JUN 03...	1100	80513	81213	75	67	7.2	742	27.0	5.3	69	
AUG 19...	1000	80513	81213	2.5	72	7.5	750	28.0	5.3	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT 09...	1100	680	K3900	25	3.6	3.9	33	68	3	6.4	
DEC 11...	470	450	650	15	2.6	2.1	5.8	42	.6	1.9	
JAN 05...	K10000	K10000	E11000	8	1.7	1.0	<.10	--	--	2.1	
APR 06...	170	140	K49	12	2.0	1.6	5.0	45	.6	1.3	
JUN 03...	78	86	84	15	2.8	1.9	6.1	43	.7	2.4	
AUG 19...	62	K26	K12	25	3.7	3.8	20	59	2	4.6	
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 09...	17	30	128	--	--	<.010	--	<.020	<.010	--	
DEC 11...	8.5	5.5	56	--	--	<.010	--	.390	.025	.03	
JAN 05...	3.1	1.8	34	--	--	<.010	--	.110	.040	.05	
APR 06...	6.5	3.5	46	--	--	<.010	--	<.020	.038	.05	
JUN 03...	6.8	4.1	46	.093	.41	.017	.06	.110	.110	.14	
AUG 19...	12	17	100	--	--	<.010	--	<.020	<.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- PEN- DED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PEN- DED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 09...	--	.77	--	.080	<.020	<.010	--	59	3.0	93	
DEC 11...	.31	.34	.73	.150	.170	.080	.25	18	11	97	
JAN 05...	1.1	1.1	1.2	.300	.110	.130	.40	199	6500	83	
APR 06...	.24	.28	--	.100	.060	.070	.21	40	20	35	
JUN 03...	.21	.32	.43	.130	.070	.030	.09	32	6.5	94	
AUG 19...	--	.51	--	.060	.020	.010	.03	59	.39	88	

ARKANSAS RIVER BASIN

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07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM WIDTH (FT)	SAM- PLING DEPTH (FEET)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK)
		(00027)	(00028)	(00004)	(00003)	(81903)	(72103)
SEP							
17...	1018	80513	80513	130	.50	1.00	16.0
17...	1021	80513	80513	130	1.00	2.00	78.0
17...	1023	80513	80513	130	1.00	2.00	90.0
17...	1024	80513	80513	130	1.50	3.00	102.0
17...	1025	80513	80513	130	1.00	2.00	114.0
17...	1026	80513	80513	130	1.50	3.00	126.0
17...	1028	80513	80513	130	2.00	4.00	138.0
17...	1030	80513	80513	130	2.00	4.00	150.0
17...	1031	80513	80513	130	1.50	3.00	162.0
17...	1032	80513	80513	130	1.00	2.00	174.0

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	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)
SEP						
17...	89	5.9	21.5	5.0	57	750
17...	89	5.9	21.4	5.0	58	750
17...	89	5.9	21.4	5.1	59	750
17...	89	5.9	21.4	5.2	59	750
17...	89	5.9	21.4	5.2	60	750
17...	89	5.9	21.4	4.7	54	750
17...	89	5.9	21.4	4.8	55	750
17...	89	5.9	21.4	5.4	62	750
17...	89	5.9	21.4	4.8	55	750
17...	89	5.9	21.5	4.6	53	750

ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT

LOCATION.--Lat 35°09'45", long 94°24'25", in NW1/4NW1/4 sec.34, T.6 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, near left bank on downstream side of bridge on State Highway 45, 1.7 mi south of Hackett, 2.0 mi downstream from Elder Branch, 2.0 mi upstream from small tributary, and 3.6 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--147 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 except those days of indefinite stage-discharge relation, Aug. 25 to Sept. 30, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	17	44	174	160	265	352	29	14	13	12	e4.0
2	5.3	15	42	163	143	224	224	27	12	14	7.3	e4.0
3	5.7	12	324	152	125	186	188	28	11	13	10	e3.7
4	5.8	12	145	1410	115	162	152	48	12	12	13	e3.5
5	5.8	14	73	8660	100	871	126	36	12	11	13	e3.7
6	5.8	16	48	2520	87	444	108	52	13	e10	12	e3.7
7	5.5	16	55	2370	79	796	177	172	15	10	11	e3.6
8	6.0	16	420	3200	73	1350	142	76	16	11	9.6	e3.5
9	8.8	16	214	1080	68	510	95	42	97	10	8.6	e3.7
10	15	27	130	598	382	316	77	230	13	10	7.9	e3.7
11	15	32	85	446	2800	249	68	111	7.1	10	7.7	e3.6
12	20	29	64	365	576	205	61	63	5.1	11	7.2	e3.7
13	53	124	50	294	351	186	58	47	4.2	11	7.5	e5.7
14	30	132	43	242	262	168	51	35	7.2	12	7.7	e13
15	16	67	36	212	237	407	44	30	9.3	12	7.4	e22
16	12	42	31	183	424	1670	63	28	9.4	11	7.0	e25
17	10	33	27	159	1610	2110	51	27	10	11	6.7	e27
18	10	30	24	143	733	980	42	22	11	10	6.3	e26
19	9.6	25	21	123	398	1880	38	20	16	10	6.2	e24
20	9.7	22	131	112	307	1050	34	20	13	6.2	6.4	e23
21	11	e22	887	103	e266	514	32	19	11	2.5	6.1	e22
22	10	e21	375	168	e240	358	30	18	11	5.5	6.1	e21
23	13	e20	808	184	e218	277	27	17	11	7.7	6.0	e21
24	16	e19	3390	130	197	225	24	17	11	8.1	4.2	e20
25	16	16	691	111	240	188	21	16	11	7.7	e3.7	e20
26	22	16	498	645	1410	164	21	24	11	7.6	e3.3	e19
27	19	16	440	578	730	160	53	22	11	7.5	e3.1	e17
28	15	19	329	316	370	249	68	20	11	7.2	e3.0	e17
29	12	38	296	233	---	160	43	24	11	7.4	e3.8	e16
30	10	68	239	185	---	157	32	23	10	8.2	e4.0	e16
31	15	---	196	158	---	889	---	17	---	12	e4.1	---
TOTAL	413.6	952	10156	25417	12701	17370	2502	1360	416.3	299.6	221.9	399.1
MEAN	13.3	31.7	328	820	454	560	83.4	43.9	13.9	9.66	7.16	13.3
MAX	53	132	3390	8660	2800	2110	352	230	97	14	13	27
MIN	5.3	12	21	103	68	157	21	16	4.2	2.5	3.0	3.5
AC-FT	820	1890	20140	50410	25190	34450	4960	2700	826	594	440	792
CFSM	.09	.22	2.23	5.58	3.09	3.81	.57	.30	.09	.07	.05	.09
IN.	.10	.24	2.57	6.43	3.21	4.40	.63	.34	.11	.08	.06	.10

ARKANSAS RIVER BASIN

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07249400 JAMES FORK NEAR HACKETT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1998, BY WATER YEAR (WY)

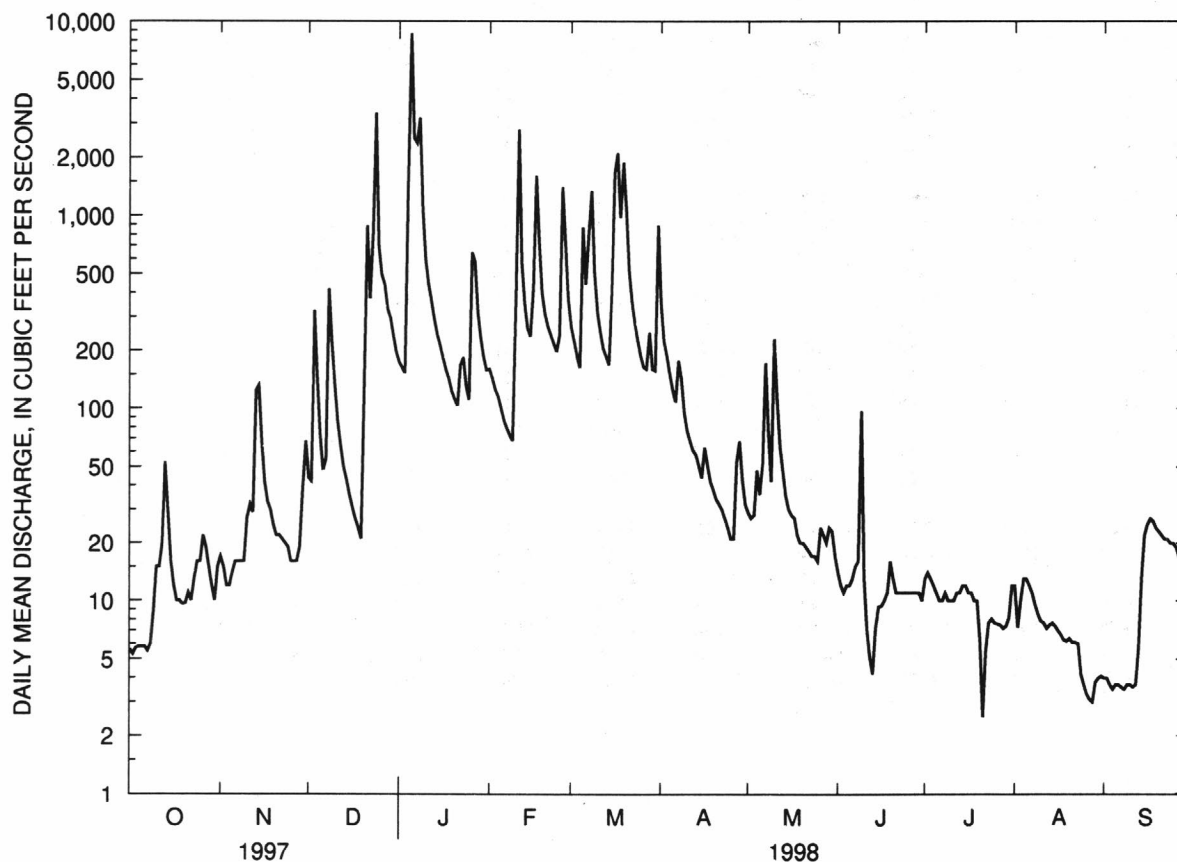
MEAN	73.9	166	207	165	211	272	235	282	91.7	37.2	11.3	20.6
MAX	867	915	760	820	678	915	1047	1203	342	430	81.7	159
(WY)	1985	1997	1972	1998	1989	1973	1973	1990	1989	1961	1981	1996
MIN	.000	.000	.40	.50	1.08	.92	31.4	21.9	3.14	1.69	.015	.000
(WY)	1964	1964	1967	1964	1967	1967	1982	1962	1966	1964	1980	1963

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1958 - 1998	
ANNUAL TOTAL	53277.9		72208.5			
ANNUAL MEAN	146		198		146	
HIGHEST ANNUAL MEAN					308	1973
LOWEST ANNUAL MEAN					29.5	1976
HIGHEST DAILY MEAN	4000	Feb 21	8660	Jan 5	17100	May 14 1968
LOWEST DAILY MEAN	3.2	Sep 21	2.5	Jul 21	.00	Aug 17 1963
ANNUAL SEVEN-DAY MINIMUM	3.9	Sep 2	3.6	Aug 25	.00	Aug 17 1963
INSTANTANEOUS PEAK FLOW			12400	Jan 5	^a 30000	May 14 1968
INSTANTANEOUS PEAK STAGE			23.73	Jan 5	^b 25.00	May 14 1968
INSTANTANEOUS LOW FLOW					.00	Jan 1 1958
ANNUAL RUNOFF (AC-FT)	105700		143200		105800	
ANNUAL RUNOFF (CFSM)	.99		1.35		.99	
ANNUAL RUNOFF (INCHES)	13.48		18.27		13.50	
10 PERCENT EXCEEDS	343		412		278	
50 PERCENT EXCEEDS	27		24		31	
90 PERCENT EXCEEDS	5.2		6.2		1.5	

^aFrom rating curve extended above 20,000 ft³/s

^bAt present datum

^eEstimated



ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 09...	1345	80513	81213	8.5	360	7.9	753	20.5	4.7	53
DEC 11...	1500	80513	81213	85	146	7.3	752	6.2	11.3	92
FEB 09...	1400	80513	81213	66	204	8.0	746	8.7	9.4	83
APR 06...	1500	80513	81213	109	148	7.9	743	15.7	10.0	104
JUN 03...	1330	80513	81213	12	297	7.8	745	27.5	5.3	69
AUG 19...	1300	80513	81213	6.3	368	7.8	751	27.5	3.1	40

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)
OCT 09...	K4200	K3900	K2200	120	17	18	31	36	1
DEC 11...	3200	2100	1400	51	8.3	7.3	10	29	.6
FEB 09...	54	48	52	63	10	9.3	12	29	.7
APR 06...	130	130	K40	49	8.0	7.0	9.5	29	.6
JUN 03...	270	84	47	99	15	15	18	28	.8
AUG 19...	46	K39	48	110	15	17	34	40	1

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)
OCT 09...	3.1	71	8.4	238	<.010	.020	<.010	--	--
DEC 11...	2.4	34	11	104	<.010	.250	.038	.05	.40
FEB 09...	1.5	46	5.1	114	<.010	.040	<.010	--	--
APR 06...	1.4	32	3.6	90	<.010	<.020	.021	.03	--
JUN 03...	2.3	62	5.3	180	<.010	.100	.014	.02	--
AUG 19...	2.6	60	7.6	230	<.010	<.020	.044	.06	.38

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, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 09...	.51	.53	.040	<.020	<.010	--	49	1.1	97
DEC 11...	.44	.69	.150	.930	<.010	--	37	8.5	93
FEB 09...	<.20	--	<.020	<.020	<.010	--	31	5.5	95
APR 06...	<.20	--	.040	<.020	.020	.06	31	9.1	100
JUN 03...	<.20	--	<.020	<.020	<.010	--	59	1.8	100
AUG 19...	.42	--	.020	<.020	<.010	--	113	1.9	94

ARKANSAS RIVER BASIN

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07249400 JAMES FORK NEAR HACKETT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
17...	1204	80513	80513	30.0	.50	1.00	207
17...	1205	80513	80513	30.0	.50	1.00	210
17...	1206	80513	80513	30.0	.50	1.00	213
17...	1207	80513	80513	30.0	.50	1.00	216
17...	1208	80513	80513	30.0	.02	.20	219
17...	1209	80513	80513	30.0	.30	.30	222
17...	1210	80513	80513	30.0	.20	.20	225
17...	1211	80513	80513	30.0	.20	.20	228
17...	1212	80513	80513	30.0	.20	.20	231
17...	1213	80513	80513	30.0	.20	.20	234

DATE	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)
SEP						
17...	238	6.5	23.8	2.2	26	750
17...	238	6.5	24.0	2.2	26	750
17...	238	6.5	23.8	2.2	26	750
17...	238	6.5	23.8	2.2	26	750
17...	239	6.5	23.8	2.2	26	750
17...	238	6.5	23.8	2.2	27	750
17...	239	6.6	23.9	2.6	31	750
17...	239	6.6	23.9	2.3	28	750
17...	238	6.6	24.0	3.5	42	750
17...	238	6.6	24.0	2.7	33	750

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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	76	740	544	951	1220	3240	336	50	15	1.2	.68
2	3.1	62	537	479	891	995	2200	283	44	20	1.1	.53
3	2.4	53	1220	435	762	835	1730	249	38	22	.94	.38
4	3.8	48	1110	13000	667	725	1360	220	36	21	.82	.23
5	3.9	78	764	21300	594	659	1120	235	42	17	.42	.05
6	3.0	81	564	8060	529	607	953	492	34	14	.00	.00
7	2.8	75	471	5960	469	838	1070	1520	31	12	.01	.00
8	4.8	79	2230	8050	421	3680	1010	1020	28	13	.22	.00
9	183	75	2040	4630	380	2460	813	663	547	11	.45	.00
10	235	125	1250	3100	363	1690	687	516	240	11	.49	.00
11	168	142	865	2310	1810	1320	585	394	191	9.2	5.2	.00
12	128	176	656	1830	1880	1080	508	304	211	10	14	.00
13	2670	364	529	1450	1310	932	445	235	153	13	323	1.2
14	897	890	440	1190	1050	825	391	187	121	16	57	1270
15	407	740	371	1020	895	1400	341	158	91	49	23	1770
16	255	501	319	873	862	5350	306	136	71	36	14	639
17	186	367	283	750	1030	e6000	279	120	57	27	9.5	280
18	141	291	255	647	1040	e4500	252	104	50	21	7.2	164
19	111	247	230	562	923	7000	225	91	48	17	5.8	118
20	90	214	232	494	852	5000	204	79	40	14	4.7	88
21	75	188	2770	440	759	e3000	185	70	34	11	4.1	67
22	63	166	3350	428	708	e2000	168	62	30	9.3	3.5	251
23	59	147	2030	406	657	1700	153	56	26	7.6	3.1	166
24	72	131	5770	364	580	1390	139	51	22	6.5	2.6	141
25	112	117	3690	336	527	1190	126	49	19	5.7	2.2	110
26	142	106	2170	1930	1490	1000	116	67	17	4.7	1.9	88
27	99	96	1500	2360	2280	e900	940	69	14	3.6	2.7	72
28	87	96	1150	1630	1590	e800	990	85	13	2.7	1.8	58
29	80	1980	968	1270	---	e700	582	87	11	2.2	1.4	49
30	72	1280	792	1030	---	e1200	422	71	10	2.0	1.1	43
31	86	---	652	877	---	6000	---	59	---	1.4	.89	---
TOTAL	6446.4	8991	39948	87755	26270	66996	21540	8068	2319	424.9	494.34	5377.07
MEAN	208	300	1289	2831	938	2161	718	260	77.3	13.7	15.9	179
MAX	2670	1980	5770	21300	2280	7000	3240	1520	547	49	323	1770
MIN	2.4	48	230	336	363	607	116	49	10	1.4	.00	.00
AC-FT	12790	17830	79240	174100	52110	132900	42720	16000	4600	843	981	10670
CFSM	.50	.71	3.07	6.74	2.23	5.15	1.71	.62	.18	.03	.04	.43
IN.	.57	.80	3.54	7.77	2.33	5.93	1.91	.71	.21	.04	.04	.48

ARKANSAS RIVER BASIN

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07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

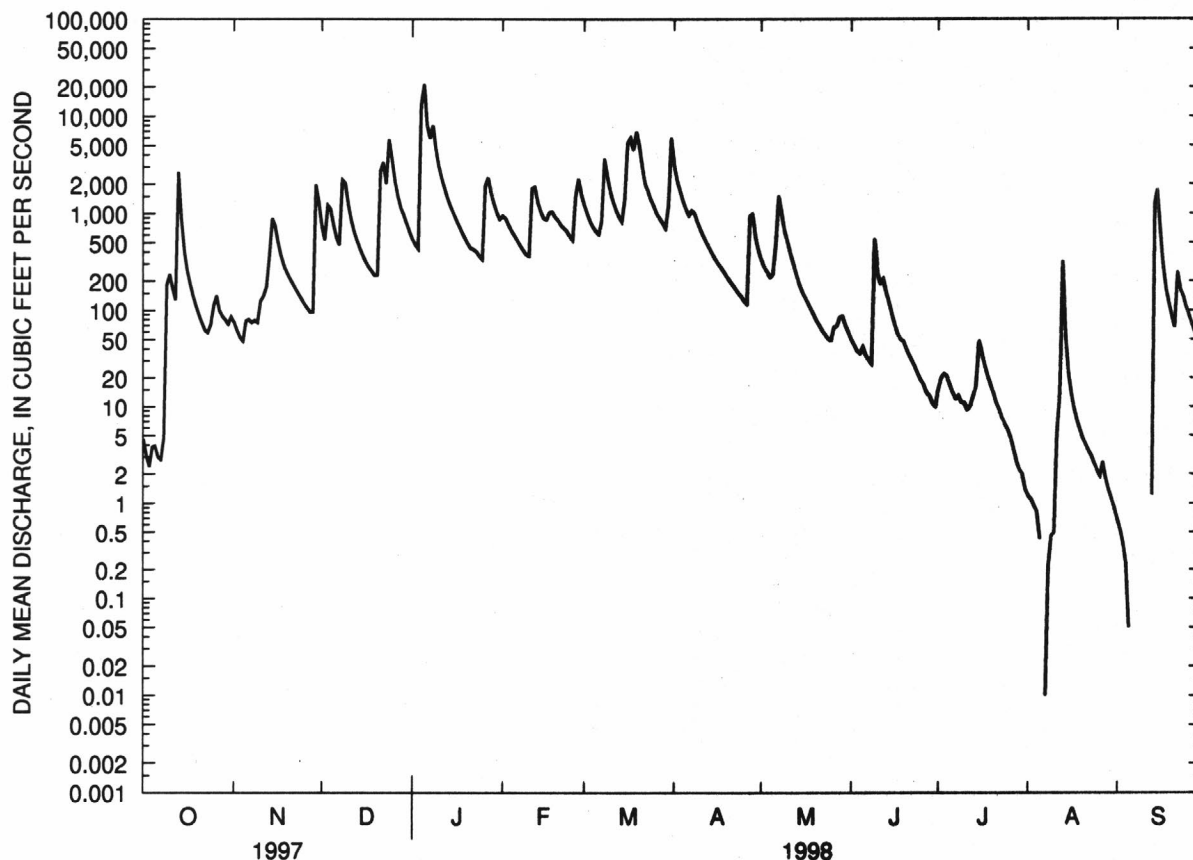
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1998, BY WATER YEAR (WY)

MEAN	236	557	566	574	735	1067	1078	928	416	120	47.8	138
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1931 - 1998	
ANNUAL TOTAL	206271.0		274629.71			
ANNUAL MEAN	565		752		537	
HIGHEST ANNUAL MEAN					1090	1935
LOWEST ANNUAL MEAN					92.5	1954
HIGHEST DAILY MEAN	23800	Feb 21	21300	Jan 5	40000	Nov 24 1973
LOWEST DAILY MEAN	2.4	Sep 12	.00	Aug 6	.00	Sep 8 1932
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 1	.00	Sep 6	.00	Sep 8 1932
INSTANTANEOUS PEAK FLOW			35700	Jan 4	80600	May 6 1960
INSTANTANEOUS PEAK STAGE			18.77	Jan 4	^a 30.30	May 6 1960
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	409100		544700		389100	
ANNUAL RUNOFF (CFSM)	1.35		1.79		1.28	
ANNUAL RUNOFF (INCHES)	18.27		24.32		17.38	
10 PERCENT EXCEEDS	1450		1790		1220	
50 PERCENT EXCEEDS	142		191		132	
90 PERCENT EXCEEDS	5.2		2.8		2.3	

^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 1997 TO SEPTEMBER 1998

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)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 08...	1000	80513	81213	2.2	98	7.9	748	22.9	5.1	60
DEC 12...	1230	80513	81213	723	78	7.5	758	6.7	13.0	107
FEB 09...	1000	80513	81213	461	74	8.3	749	9.0	10.9	96
APR 16...	1300	80513	81213	300	77	8.4	745	18.5	7.9	86
JUN 02...	1100	80513	81213	47	105	7.7	744	29.0	5.6	75
AUG 18...	1030	80513	81213	7.3	72	7.7	754	28.5	4.3	56

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 PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT 08...	K15	21	100	33	10	2.0	3.8	19	.3	1.4
DEC 12...	52	42	77	31	10	1.4	2.7	16	.2	.80
FEB 09...	K12	K6	K31	28	9.2	1.2	3.1	19	.3	.70
APR 16...	K19	K22	34	33	11	1.3	3.0	16	.2	1.0
JUN 02...	K18	K14	K8	39	13	1.6	3.6	16	.3	1.2
AUG 18...	100	89	35	21	5.6	1.6	2.2	17	.2	1.9

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)
OCT 08...	3.9	5.1	66	--	--	<.010	--	.020	<.010	--
DEC 12...	5.4	2.8	52	--	--	<.010	--	.180	.023	.03
FEB 09...	5.2	2.5	40	--	--	<.010	--	.060	.013	.02
APR 16...	4.7	2.2	46	--	--	<.010	--	.020	.028	.04
JUN 02...	4.4	3.6	60	--	--	<.010	--	.050	.056	.07
AUG 18...	4.3	2.9	50	.256	1.1	.014	.05	.270	.046	.06

ARKANSAS RIVER BASIN

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07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 08...	--	.28	.30	.030	<.020	<.010	2.80	18	.11	84
DEC 12...	--	<.20	--	.300	.240	<.010	.200	22	43	100
FEB 09...	--	<.20	--	.060	<.020	<.010	.600	20	25	77
APR 16...	--	<.20	--	<.020	<.020	<.010	<.100	15	12	85
JUN 02...	--	<.20	--	<.020	<.020	<.010	1.21	23	2.9	98
AUG 18...	.37	.42	.69	.060	.030	<.010	8.62	51	1.0	84

ARKANSAS RIVER BASIN

07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN

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

DRAINAGE AREA.--432 mi².

WATER-DISCHARGE RECORDS

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

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

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

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	.00	.00	587	426	735	891	2700	271	13	.00	.00	.00
2	.00	.00	455	413	521	761	1680	242	40	.00	.00	.00
3	.00	.00	860	347	669	646	1280	202	.00	.00	.00	.00
4	.00	119	846	10700	565	557	981	172	.00	.00	.00	.00
5	.00	114	597	23900	483	686	821	200	.00	.00	.00	.00
6	.00	90	440	8750	247	430	713	343	.00	.00	.00	.00
7	.00	83	383	5610	201	505	779	985	.00	.00	.00	.00
8	.00	.00	1570	8780	172	2460	731	768	.00	.00	.00	.00
9	.00	.00	1590	4130	428	1840	593	481	284	.00	.00	.00
10	.00	.00	977	2380	351	1220	512	357	174	.00	.00	.00
11	.00	.00	672	1680	982	946	451	276	117	.00	.00	.00
12	.00	9.6	514	1310	1440	690	392	294	114	.00	.00	.00
13	1080	211	395	975	965	782	351	101	76	.00	16	.00
14	807	862	341	859	799	735	312	120	51	.00	.00	e500
15	372	575	326	740	737	787	280	102	30	.00	.00	1300
16	234	396	284	654	735	4510	239	79	19	.00	.00	478
17	157	314	239	587	735	5280	218	67	15	.00	.00	203
18	115	278	254	556	735	3680	209	60	18	.00	.00	112
19	87	215	216	506	735	5640	183	46	22	.00	.00	81
20	71	203	122	454	735	4810	162	42	13	.00	.00	56
21	64	186	2020	428	664	2440	135	30	5.0	.00	.00	36
22	49	22	2800	340	510	1690	114	27	.80	.00	.00	176
23	55	85	1550	339	477	1300	110	21	.00	.00	.00	127
24	174	212	5090	309	417	1050	95	17	.00	.00	.00	112
25	3.5	82	3220	335	213	889	91	22	.00	.00	.00	80
26	93	79	1710	1410	791	773	88	66	.00	.00	.00	61
27	148	.00	1160	1860	1650	732	541	45	.00	.00	.00	50
28	115	11	893	1230	1160	863	769	37	.00	.00	.00	38
29	122	1320	753	965	---	812	457	46	.00	.00	.00	29
30	118	1030	621	796	---	744	343	40	.00	.00	.00	23
31	106	---	517	736	---	4890	---	26	---	.00	.00	---
TOTAL	3970.50	6496.60	32002	82505	18852	54039	16330	5585	991.80	0.00	16.00	3462.00
MEAN	128	217	1032	2661	673	1743	544	180	33.1	.000	.52	115
MAX	1080	1320	5090	23900	1650	5640	2700	985	284	.00	16	1300
MIN	.00	.00	122	309	172	430	88	17	.00	.00	.00	.00
AC-FT	7880	12890	63480	163600	37390	107200	32390	11080	1970	.00	32	6870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998
MEAN	118	1227	824	1017	784	1011
MAX	454	3274	1666	2661	1961	1743
(WY)	1994	1997	1993	1998	1997	1998
MIN	.000	23.3	207	105	94.0	199
(WY)	1993	1996	1996	1997	1996	1996

ARKANSAS RIVER BASIN

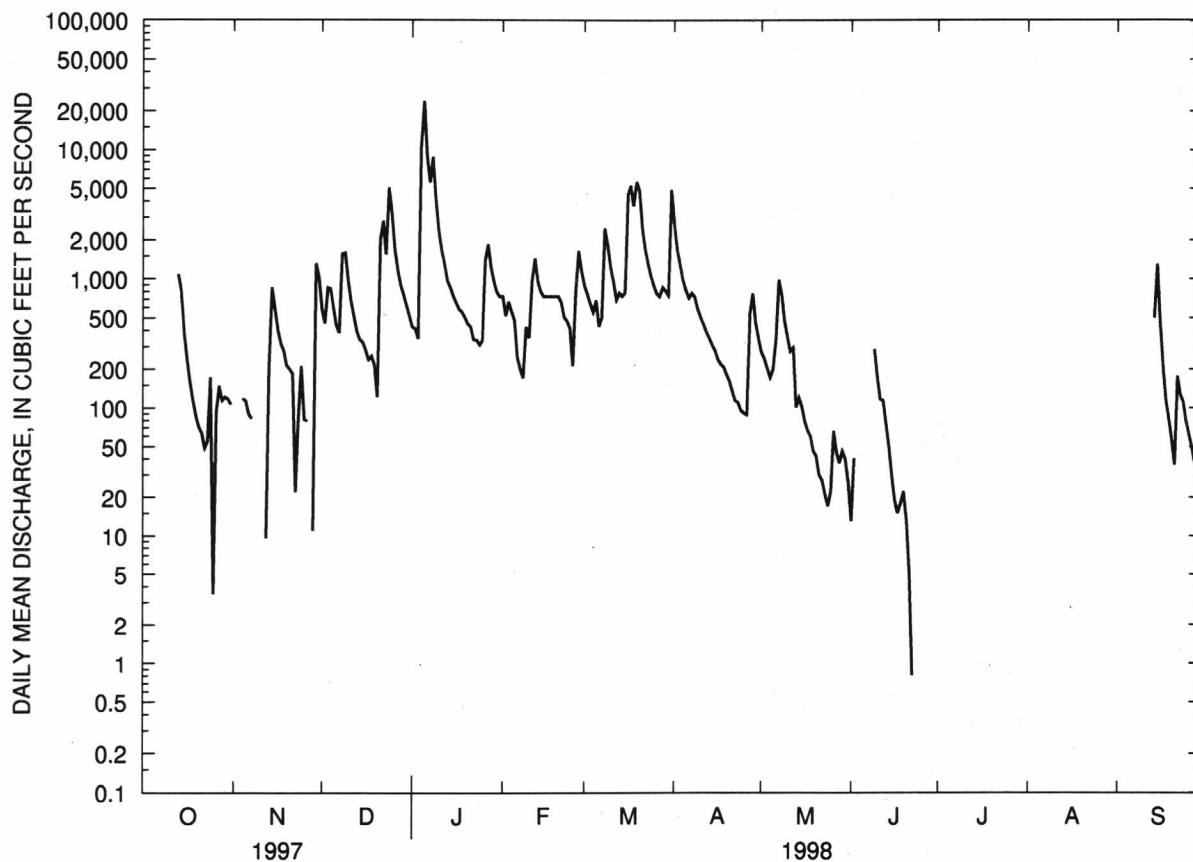
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07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1993 - 1998	
ANNUAL TOTAL	165122.90		224249.90			
ANNUAL MEAN	452		614		610	
HIGHEST ANNUAL MEAN					833	
LOWEST ANNUAL MEAN					315	
HIGHEST DAILY MEAN	24800	Feb 21	23900	Jan 5	24800	Feb 21 1997
LOWEST DAILY MEAN	.00	May 9	.00	Oct 1	.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 17	.00	Oct 1	.00	Oct 1 1992
INSTANTANEOUS PEAK FLOW			^a 34700	Jan 5	^a 42100	Feb 21 1997
INSTANTANEOUS PEAK STAGE			24.45	Jan 5	25.01	Feb 21 1997
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	327500		444800		442000	
10 PERCENT EXCEEDS	1090		1290		1400	
50 PERCENT EXCEEDS	93		135		148	
90 PERCENT EXCEEDS	.00		.00		.00	

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

^eEstimated



ARKANSAS RIVER BASIN

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

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, Hydrologic Unit 11110104, in metal shelter on dam and at mile 308.9.

DRAINAGE AREA.--150,547 mi², of which 22,241 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren. Gage-height records collected from 1879 to December 1955 at Fort Smith, 16.3 mi upstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1211: 1934-36. WSP 1561: 1554. WRD Ark. 1970: Drainage area.

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, and Oct. 1, 1934, to Dec. 20, 1969, recording gage at site 7.9 mi upstream at datum 372.36 ft higher.

REMARKS.--Water-discharge records good, except for discharges below 10,000 ft³/s, which are fair. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct. 19, 1988, the Arkansas Electric Cooperative Corporation hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1833, that of Apr. 16, 1945, and maximum discharge since at least 1833, that of May 12, 1943. Flood in June 1833 reached a stage of 38.0 ft on Fort Smith gage, from records collected by National Weather Service. Flood of Apr. 16, 1927, reached a stage of 35.0 ft, former site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33900	17600	24900	98400	57700	37100	134000	120000	38500	13100	7190	3650
2	17200	5460	20900	91200	61400	30600	126000	112000	35800	22700	19300	1940
3	23200	12100	38400	90400	57200	29100	132000	109000	20200	24900	15300	5630
4	19100	8010	27000	107000	54100	27800	132000	108000	21000	20400	13800	5170
5	12800	7740	24300	194000	54700	33000	124000	108000	20600	20000	11100	4200
6	2910	12200	12100	188000	59700	34100	123000	104000	7690	12200	10600	3990
7	9490	6670	11700	164000	55300	28200	118000	109000	2050	15100	10100	2050
8	9770	5880	21300	180000	51100	75700	119000	107000	10700	15200	4820	2640
9	34300	8550	42200	180000	49600	84900	133000	91800	25400	10300	10500	1940
10	23600	19600	40300	150000	43600	61200	133000	84000	23900	13300	14700	45
11	13200	6580	38000	142000	57300	65200	131000	77000	24300	13300	14800	2790
12	19800	7980	e37900	154000	48300	70000	125000	73300	23100	15900	8480	76
13	48500	22100	e30900	153000	39700	68600	123000	69200	23100	23300	12100	467
14	38500	22900	e22800	146000	36600	53700	122000	66900	22600	21600	11600	55700
15	31700	25500	e23100	143000	34300	52900	117000	48800	4290	20000	7160	34100
16	21200	7500	e17800	145000	36300	91200	102000	46500	5720	22900	4490	4160
17	35800	4000	e29000	144000	41600	131000	62100	29200	7890	20200	15000	24400
18	20100	20400	e16000	141000	49300	136000	60000	31500	9200	6900	11400	17600
19	27000	16900	e11400	138000	44500	123000	60100	37000	12500	6890	9910	9500
20	20500	14100	e11900	133000	38600	158000	51900	37200	12800	17200	9320	9830
21	18800	9740	e21600	127000	36400	159000	54300	19400	17800	12200	7660	8170
22	18100	6980	e57300	125000	33300	138000	48100	28800	13400	12200	9430	13500
23	20500	2030	e36900	112000	27900	129000	43600	29500	10300	16400	8300	19200
24	17300	3180	e96200	91400	22100	128000	40500	29900	13300	12800	12900	14000
25	16700	2780	118000	82800	35200	128000	35100	21200	13700	8100	12800	11300
26	22300	92	98300	97500	37600	130000	28500	28600	14200	7160	11500	9980
27	10200	1390	87600	114000	46700	133000	47600	31100	3510	13800	10600	10000
28	19500	5210	93800	95200	41800	132000	84600	27600	3610	14100	9590	14600
29	10700	42400	92100	82500	---	132000	113000	31200	11900	13900	2020	12500
30	4600	35900	90600	73200	---	136000	115000	38900	11400	13200	2330	13800
31	16800	---	94300	55700	---	139000	---	39200	---	8320	12200	---
TOTAL	638070	361472	1388600	3938300	1251900	2875300	2838400	1894800	464460	467570	321000	316928
MEAN	20580	12050	44790	127000	44710	92750	94610	61120	15480	15080	10350	10560
MAX	48500	42400	118000	194000	61400	159000	134000	120000	38500	24900	19300	55700
MIN	2910	92	11400	55700	22100	27800	28500	19400	2050	6890	2020	45
AC-FT	1266000	717000	2754000	7812000	2483000	5703000	5630000	3758000	921300	927400	636700	628600

ARKANSAS RIVER BASIN

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

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

MEAN	24380	27260	25780	25580	28470	40910	52660	64650	55310	31620	16140	17330
MAX	224500	161200	139700	127000	111700	147200	219200	302100	231000	176000	97360	71400
(WY)	1987	1975	1993	1998	1949	1987	1945	1943	1935	1951	1950	1961
MIN	492	1262	1421	696	2328	2401	2910	7446	4688	1585	818	742
(WY)	1957	1957	1940	1981	1940	1940	1981	1932	1988	1934	1934	1956

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1970 - 1998	
ANNUAL TOTAL	13976162		16756800		^a 39880	
ANNUAL MEAN	38290		45910		87670	
HIGHEST ANNUAL MEAN					7737	
LOWEST ANNUAL MEAN					397000	
HIGHEST DAILY MEAN	155000	Feb 28	194000	Jan 5	397000	May 5 1990
LOWEST DAILY MEAN	92	Nov 26	45	Sep 10	^b .00	^c Nov 2 1975
ANNUAL SEVEN-DAY MINIMUM	3090	Nov 22	1430	Sep 7	364	Jan 14 1981
INSTANTANEOUS PEAK FLOW			209000	Jan 5	^d 401000	^e May 5 1990
INSTANTANEOUS PEAK STAGE			394.03	Jan 5	^f 401.75	May 5 1990
ANNUAL RUNOFF (AC-FT)	27720000		33240000		28890000	
10 PERCENT EXCEEDS	88300		127000		109000	
50 PERCENT EXCEEDS	30500		24900		23500	
90 PERCENT EXCEEDS	10400		6800		3270	

^aPrior to regulation, water years 1928-69, 30,200 ft³/s

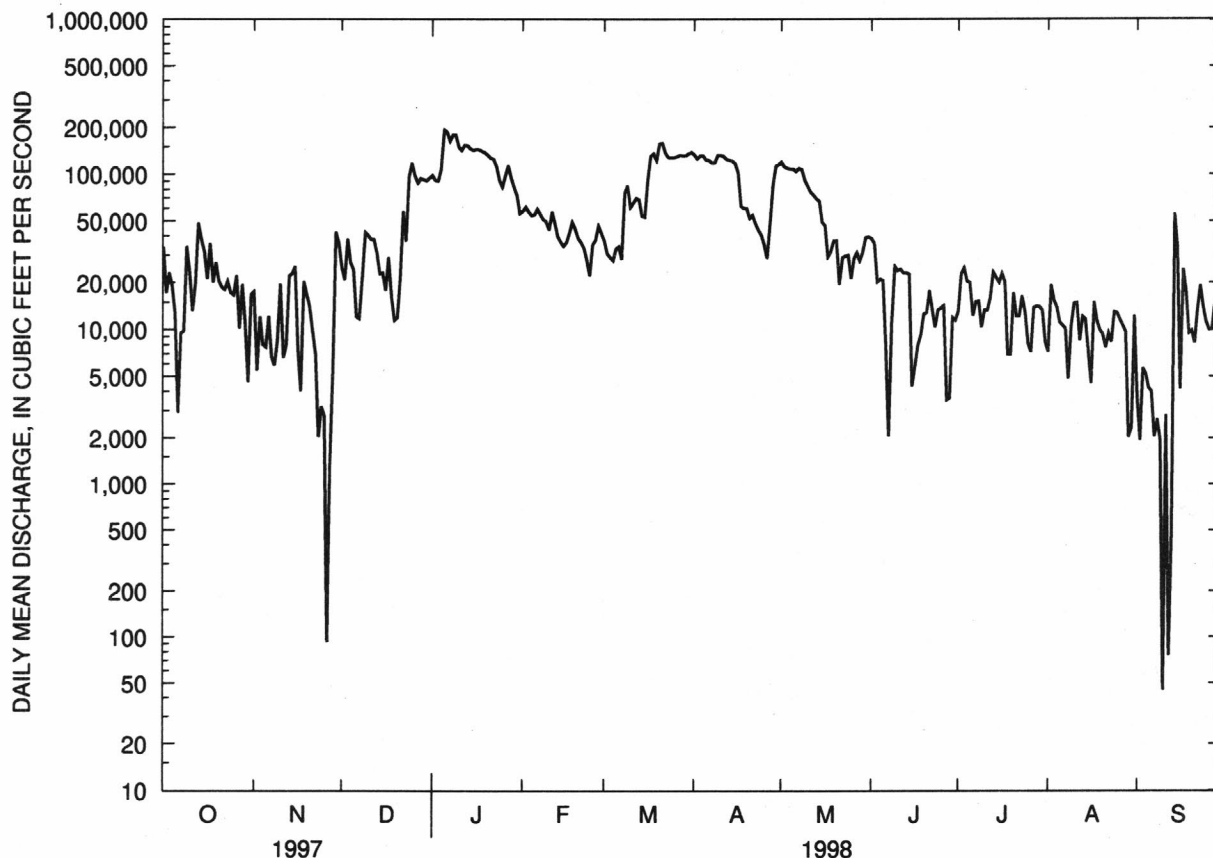
^bAlso minimum daily discharge for period of record

^cAlso Feb. 1, 1981; Oct. 17, 1987; Dec. 9, 1989; Nov. 11-12, 1993; and Jan. 9, 13, 1994

^dMaximum discharge for period of record, 850,000 ft³/s May 12, 1943

^eEstimated

^fMaximum gage height for period of record, 38.10 ft, Apr. 16, 1945, at former site and datum



ARKANSAS RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren. 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 1997 TO SEPTEMBER 1998

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, FECA, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 08...	1330	80513	81213	20000	980	8.1	748	23.4	7.2	87	21
DEC 12...	1030	80513	81213	35500	680	8.4	758	6.1	10.7	87	320
JAN 06...	1300	80513	81213	180000	390	8.3	753	12.1	9.8	93	2000
APR 07...	1130	80513	81213	120000	492	8.6	742	14.3	9.3	93	73
JUN 02...	1400	80513	81213	36200	568	8.3	743	28.0	6.9	91	26
AUG 18...	1500	80513	81213	16900	902	8.4	753	30.5	7.8	106	K16

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 08...	K17	K23	--	<.020	<.010	120	--	--	4.6	85
DEC 12...	170	210	130	36	10	79	56	3	3.9	63
JAN 06...	1800	E1900	80	22	6.1	34	47	2	2.7	42
APR 07...	77	70	130	37	9.8	41	39	2	3.3	58
JUN 02...	K15	K5	140	39	9.9	40	38	1	3.1	65
AUG 18...	K13	K5	200	53	17	110	54	3	4.3	120

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 08...	190	572	--	--	<.010	--	.350	<.010	--	--
DEC 12...	120	402	--	--	<.010	--	.210	.100	.13	.37
JAN 06...	58	230	--	--	<.010	--	.390	.019	.02	.65
APR 07...	54	276	.656	2.9	.034	.11	.690	.036	.05	.49
JUN 02...	60	344	.558	2.5	.012	.04	.570	.020	.03	.40
AUG 18...	160	564	--	--	<.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-PHORUS 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 08...	.55	.90	.070	.040	.040	.12	6.70	110	5940	99
DEC 12...	.47	.68	1.50	.440	<.010	--	3.70	95	9110	99
JAN 06...	.67	1.1	.120	.060	.040	.12	.100	216	105000	84
APR 07...	.53	1.2	.090	<.020	<.010	--	<.100	101	32700	97
JUN 02...	.42	.99	.080	.030	.020	.06	7.53	83	8110	96
AUG 18...	.76	--	.090	.050	.030	.09	8.30	167	7620	96

ARKANSAS RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)
SEP							
16...	1432	80513	80513	400	2.50	5.00	20.0
16...	1435	80513	80513	400	3.00	6.00	60.0
16...	1437	80513	80513	400	3.00	6.00	100.0
16...	1440	80513	80513	400	4.50	9.00	140.0
16...	1443	80513	80513	400	2.80	14.0	180.0
16...	1445	80513	80513	400	11.2	14.0	180.0
16...	1448	80513	80513	400	3.60	18.0	220.0
16...	1450	80513	80513	400	14.4	18.0	220.0
16...	1452	80513	80513	400	4.00	20.0	260.0
16...	1454	80513	80513	400	16.0	20.0	260.0
16...	1456	80513	80513	400	4.00	20.0	300.0
16...	1458	80513	80513	400	16.0	20.0	300.0
16...	1500	80513	80513	400	3.60	18.0	340.0
16...	1502	80513	80513	400	14.0	18.0	340.0
16...	1505	80513	80513	400	3.60	18.0	380.0
16...	1507	80513	80513	400	14.4	18.0	380.0

DATE	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)
SEP						
16...	541	7.3	25.1	7.1	86	759
16...	541	7.3	25.1	7.1	86	759
16...	542	7.3	25.1	7.3	89	759
16...	543	7.3	25.1	7.3	89	759
16...	543	7.7	25.1	7.3	89	759
16...	543	7.3	25.1	7.3	89	759
16...	543	7.3	25.1	7.3	89	759
16...	547	7.3	25.1	6.9	84	759
16...	549	7.3	25.1	6.8	83	759
16...	549	7.3	25.1	6.8	83	759
16...	549	7.3	25.1	6.8	83	759
16...	551	7.3	25.1	6.8	83	759
16...	551	7.3	25.1	6.8	83	759
16...	551	7.3	25.1	6.8	83	759
16...	549	7.3	25.1	6.8	83	759
16...	550	7.3	25.1	6.8	83	759

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 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.--No estimated daily discharges. Records good. Flow regulated since March 1947 by Blue Mountain Lake, 25.6 mi upstream, capacity, 257,900 acre-ft. As of July 1986, flow from 51.6 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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	25	163	3240	3130	1920	2000	388	869	31	.89	5.0
2	.47	20	304	3170	3050	1790	2150	306	349	36	3.2	5.3
3	.51	18	418	3220	3230	2190	2370	251	258	52	5.3	6.0
4	.55	14	513	3270	3440	2210	2320	234	196	41	5.1	5.6
5	.59	19	740	6780	3630	2430	2220	210	117	29	5.0	5.8
6	.62	31	718	11600	3690	2020	2180	222	90	23	6.6	6.7
7	.69	32	682	6190	3610	2350	2390	254	82	20	6.0	6.7
8	13	31	850	5360	3450	3710	2390	291	77	20	5.8	6.2
9	24	36	1050	4510	3270	2880	2310	648	131	21	5.0	5.1
10	25	39	941	2980	3250	986	2240	796	123	18	4.9	3.0
11	18	51	1040	2430	6100	1470	2340	814	390	17	6.2	.85
12	7.8	50	982	2940	6630	2180	2340	865	425	59	6.8	.62
13	41	100	444	3390	2560	2210	2270	491	142	51	6.6	4.2
14	36	325	332	3610	632	2100	2170	403	70	28	5.9	13
15	20	230	310	3720	716	2040	2100	176	65	41	5.7	14
16	6.1	157	218	3700	1220	2360	2070	123	62	65	5.6	11
17	16	121	164	3560	1600	4140	1970	113	49	65	5.9	12
18	15	148	155	3440	2590	2740	1890	106	32	63	7.4	62
19	7.3	166	146	3320	2580	2620	1820	100	20	61	5.7	95
20	1.7	150	139	3220	2960	3980	1750	98	16	57	5.4	91
21	1.6	165	149	3320	2950	2100	1660	63	15	51	5.6	88
22	1.6	171	311	3510	2850	1930	1250	30	12	49	6.2	102
23	6.1	164	1070	3340	2790	2290	1030	24	12	47	4.9	101
24	10	158	3850	3400	2690	2260	436	22	10	47	4.4	100
25	7.7	105	5030	3550	2590	2280	170	20	8.7	46	3.8	98
26	17	39	1830	3870	2870	2400	135	36	8.0	28	2.0	97
27	18	31	888	4460	2350	2420	996	39	8.2	5.8	1.6	98
28	12	33	508	3480	2010	2500	833	252	18	2.3	1.5	97
29	7.5	82	510	2710	---	2400	859	1250	23	1.4	4.7	98
30	9.5	193	2350	3040	---	2300	786	1080	23	.94	5.1	96
31	21	---	3170	3200	---	2640	---	980	---	.63	4.8	---
TOTAL	346.76	2904	29975	121530	82438	73846	51445	10685	3700.9	1077.07	153.59	1334.07
MEAN	11.2	96.8	967	3920	2944	2382	1715	345	123	34.7	4.95	44.5
MAX	41	325	5030	11600	6630	4140	2390	1250	869	65	7.4	102
MIN	.43	14	139	2430	632	986	135	20	8.0	.63	.89	.62
AC-FT	688	5760	59460	241100	163500	146500	102000	21190	7340	2140	305	2650

ARKANSAS RIVER BASIN

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07260500 PETIT JEAN RIVER AT DANVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1998, BY WATER YEAR (WY)

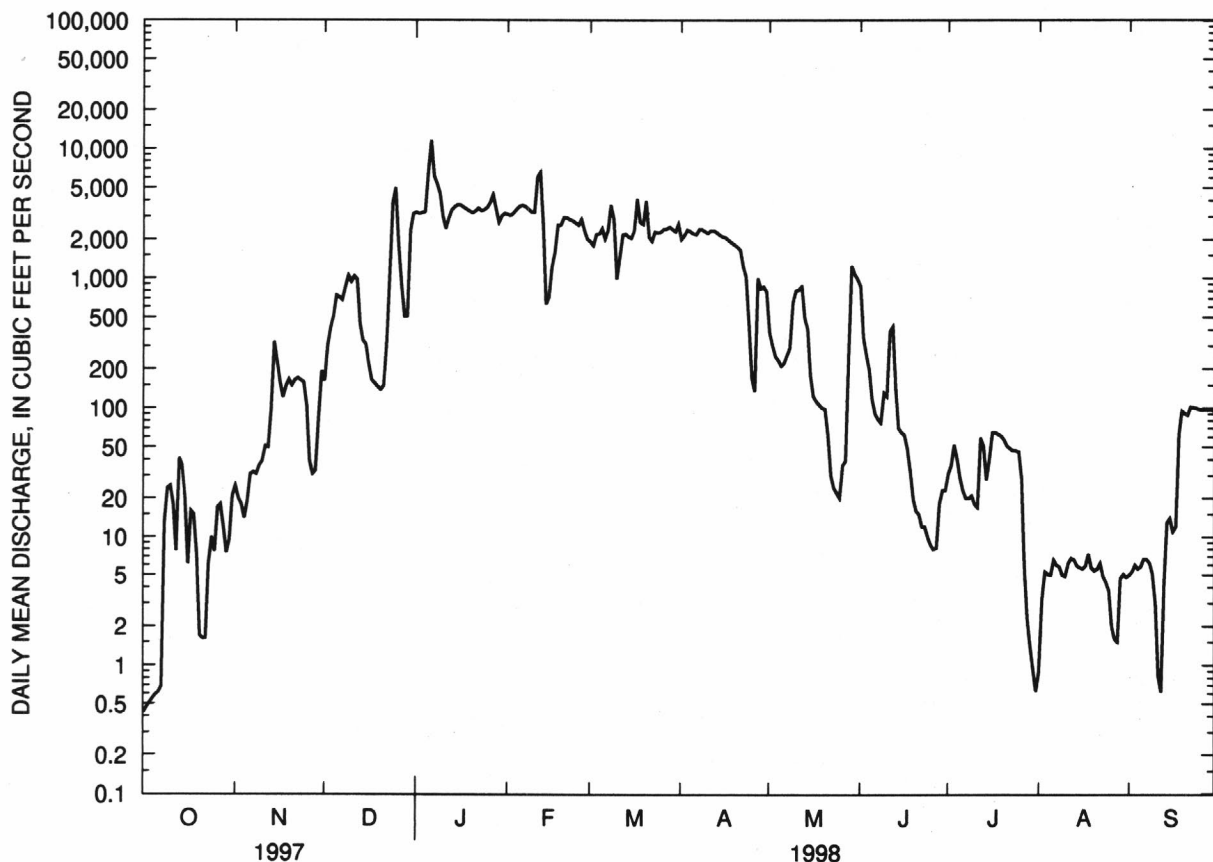
MEAN	185	605	1188	1182	1317	1492	1366	1435	753	327	182	110
MAX	3261	3296	4004	3920	4941	3233	3821	6142	2801	2268	2101	1108
(WY)	1985	1973	1983	1998	1949	1973	1957	1990	1957	1957	1957	1950
MIN	1.03	1.27	3.84	3.82	25.2	82.5	106	46.4	26.9	2.49	4.07	6.79
(WY)	1947	1996	1966	1964	1967	1967	1963	1977	1966	1985	1947	1982

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1947 - 1998	
ANNUAL TOTAL	268904.86		379435.39			
ANNUAL MEAN	737		1040		^a 843	
HIGHEST ANNUAL MEAN					1920	
LOWEST ANNUAL MEAN					187	
HIGHEST DAILY MEAN	5600	Feb 22	11600	Jan 6	26400	Dec 3 1982
LOWEST DAILY MEAN	.43	Oct 1	.43	Oct 1	.00	Aug 11 1956
ANNUAL SEVEN-DAY MINIMUM	.55	Oct 1	.55	Oct 1	.13	Nov 2 1988
INSTANTANEOUS PEAK FLOW			14300	Jan 6	^b 47500	Dec 3 1982
INSTANTANEOUS PEAK STAGE			24.98	Jan 6	^c 29.36	Dec 3 1982
INSTANTANEOUS LOW FLOW			.41	Oct 1	.00	at times
ANNUAL RUNOFF (AC-FT)	533400		752600		610700	
10 PERCENT EXCEEDS	2420		3230		2550	
50 PERCENT EXCEEDS	140		149		183	
90 PERCENT EXCEEDS	8.8		5.3		10	

^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



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 Oct. 1 to Nov. 19, which are poor.

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	e.00	e11	6.0	123	195	440	602	102	21	.00	1.8	e.00
2	e.00	e8.0	8.6	114	178	370	422	91	16	.00	1.3	e.00
3	e.00	e8.0	9.9	108	162	317	524	85	13	1.7	.70	e.00
4	e.00	e6.0	9.9	107	149	278	475	77	11	2.4	.64	e.00
5	e.00	e6.0	11	2510	137	311	368	67	18	1.8	.64	e.00
6	e.00	e8.0	13	2260	128	1070	304	59	25	1.4	1.2	e.00
7	e.00	e14	12	1520	119	861	282	54	41	1.5	.84	e.00
8	e.00	e11	18	1180	112	5380	262	48	25	.76	.95	e.00
9	e8.0	e8.0	35	813	105	2300	203	45	101	.38	.62	e.00
10	e40	e8.0	67	574	133	1180	170	38	97	.01	4.7	e.00
11	e18	e11	61	455	1300	795	146	33	53	.19	12	.00
12	e14	e14	50	382	910	604	130	31	32	1.3	11	.00
13	e35	e21	42	325	586	508	121	27	23	.82	8.6	.00
14	e51	e35	36	284	447	429	113	23	18	.28	8.7	.00
15	e40	e40	33	561	363	386	106	21	14	.13	6.7	.00
16	e30	e30	31	509	435	549	101	19	11	.00	5.1	.00
17	e26	e26	28	402	953	1300	100	17	8.8	.00	3.9	.00
18	e21	e21	26	331	1010	1070	87	15	7.4	.00	3.3	.00
19	e14	e18	24	297	665	1060	78	13	6.7	.00	2.5	.00
20	e11	15	22	255	518	1950	73	11	5.7	.00	2.1	.00
21	e8.0	16	25	225	421	1080	67	10	5.4	.00	2.0	2.3
22	e6.0	15	30	209	355	753	62	9.1	4.7	.00	2.0	2.4
23	e8.0	13	66	198	309	581	57	8.4	3.1	.00	1.8	.70
24	e8.0	11	312	178	267	470	52	7.8	2.5	.00	.71	.67
25	e6.0	11	385	161	235	391	47	7.0	1.9	.00	.04	.29
26	e8.0	10	245	202	307	329	43	32	1.8	.00	.23	.00
27	e18	9.0	220	337	597	285	90	126	1.9	.00	e.00	.00
28	e30	7.9	197	305	494	351	190	78	1.6	2.8	e.00	.00
29	e26	6.5	182	277	---	291	147	47	.79	3.6	e.00	.00
30	e18	6.1	166	242	---	242	119	32	.35	2.8	e.00	.00
31	e14	---	142	215	---	380	---	26	---	2.2	e.00	---
TOTAL	458.00	424.5	2513.4	15659	11590	26311	5541	1259.3	571.64	24.07	84.07	6.36
MEAN	14.8	14.1	81.1	505	414	849	185	40.6	19.1	.78	2.71	.21
MAX	51	40	385	2510	1300	5380	602	126	101	3.6	12	2.4
MIN	.00	6.0	6.0	107	105	242	43	7.0	.35	.00	.00	.00
AC-FT	908	842	4990	31060	22990	52190	10990	2500	1130	48	167	13
CFSM	.09	.08	.48	2.99	2.45	5.02	1.09	.24	.11	.00	.02	.00
IN.	.10	.09	.55	3.45	2.55	5.79	1.22	.28	.13	.01	.02	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1998, BY WATER YEAR (WY)

	MEAN	77.7	290	428	392	477	566	479	381	144	39.6	44.0	56.9
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	.094	.025	
(WY)	1955	1955	1955	1955	1963	1972	1960	1988	1988	1998	1980	1995	

ARKANSAS RIVER BASIN

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07261000 CADRON CREEK NEAR GUY--CONTINUED

SUMMARY STATISTICS

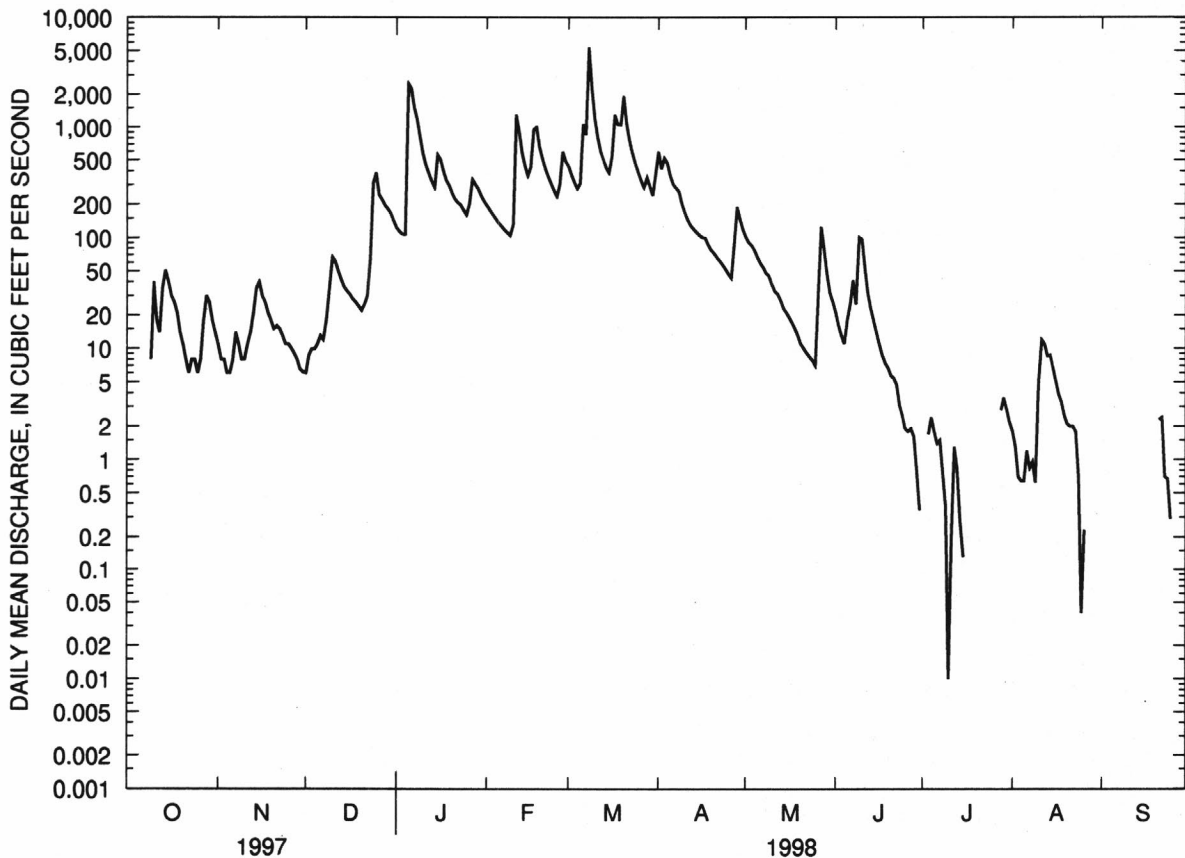
FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1955 - 1998

ANNUAL TOTAL	93427.71		64442.34			
ANNUAL MEAN	256		177		280	
HIGHEST ANNUAL MEAN					566	1973
LOWEST ANNUAL MEAN					120	1996
HIGHEST DAILY MEAN	2600	Mar 4	5380	Mar 8	14800	Dec 4 1982
LOWEST DAILY MEAN	.00	Sep 22	.00	Oct 1	.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 30	.00	Oct 1	.00	Oct 1 1954
INSTANTANEOUS PEAK FLOW			7290	Mar 8	24200	Dec 4 1982
INSTANTANEOUS PEAK STAGE			13.93	Mar 8	29.29	Dec 4 1982
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	185300		127800		202900	
ANNUAL RUNOFF (CFSM)	1.51		1.04		1.66	
ANNUAL RUNOFF (INCHES)	20.57		14.18		22.52	
10 PERCENT EXCEEDS	980		472		663	
50 PERCENT EXCEEDS	26		22		93	
90 PERCENT EXCEEDS	1.0		.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 fair, except for those below 2.0 ft³/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.1	15	29	57	129	305	15	6.3	.00	53	.00
2	.00	1.6	16	24	47	107	176	13	3.9	.06	1.5	.00
3	.00	.96	18	22	38	91	138	15	2.5	.00	.36	.00
4	.00	.76	20	24	32	81	101	13	1.6	.00	.91	.00
5	.00	28	18	464	28	94	83	12	1.9	.00	.59	.00
6	.00	33	19	653	24	99	72	10	1.2	.00	.22	.00
7	.00	14	18	638	21	292	61	12	.86	.00	.10	.00
8	.00	8.5	46	421	18	937	50	9.5	.62	.00	.25	.00
9	.00	5.4	51	249	16	356	42	7.9	.49	.00	.35	.00
10	.00	7.3	40	158	792	214	35	6.9	.30	.00	27	.00
11	.00	9.9	30	118	2470	160	30	5.4	.10	.00	9.5	.00
12	.00	12	23	107	460	126	26	4.3	.01	.00	18	.00
13	.54	94	19	83	252	108	23	3.5	.35	.00	8.7	.00
14	.15	66	16	73	175	93	21	2.7	.28	.00	4.5	.00
15	.03	40	14	114	137	97	20	2.4	.11	.00	2.5	.00
16	.03	27	12	102	233	691	30	2.0	.00	.00	1.5	.00
17	.04	20	10	83	416	794	29	1.4	.00	.00	1.0	.00
18	.03	16	8.6	68	291	321	24	.99	.00	.00	.77	.00
19	.02	13	7.6	55	194	381	19	.72	.00	.00	.52	.00
20	.02	11	6.7	46	150	378	16	.46	.00	.00	.19	.00
21	.03	9.9	17	40	121	225	16	.37	.00	.00	.19	.00
22	.03	8.1	25	63	103	161	14	.37	.00	.00	.02	.00
23	.05	7.0	92	70	88	126	12	.06	.00	.00	.00	.00
24	.17	6.8	762	62	74	101	11	.00	.00	.00	.00	.00
25	.09	8.1	188	55	65	86	9.5	.10	.00	.00	.00	.00
26	.08	10	109	272	236	72	8.7	17	.00	3.4	.00	.00
27	.05	8.4	88	347	238	66	24	18	.00	.49	.00	.00
28	.05	8.5	69	183	168	70	34	12	.00	.00	.00	.00
29	.05	11	59	120	---	56	24	17	.00	.00	.00	.00
30	.06	12	47	88	---	48	18	16	.00	.00	.00	.00
31	8.7	---	37	69	---	634	---	9.8	---	22	.00	---
TOTAL	10.22	501.32	1900.9	4900	6944	7194	1472.2	228.87	20.52	25.95	131.67	0.00
MEAN	.33	16.7	61.3	158	248	232	49.1	7.38	.68	.84	4.25	.000
MAX	8.7	94	762	653	2470	937	305	18	6.3	22	53	.00
MIN	.00	.76	6.7	22	16	48	8.7	.00	.00	.00	.00	.00
AC-FT	20	994	3770	9720	13770	14270	2920	454	41	51	261	.00
CFSM	.01	.36	1.33	3.43	5.38	5.03	1.06	.16	.01	.02	.09	.00
IN.	.01	.40	1.53	3.95	5.60	5.81	1.19	.18	.02	.02	.11	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1998, BY WATER YEAR (WY)

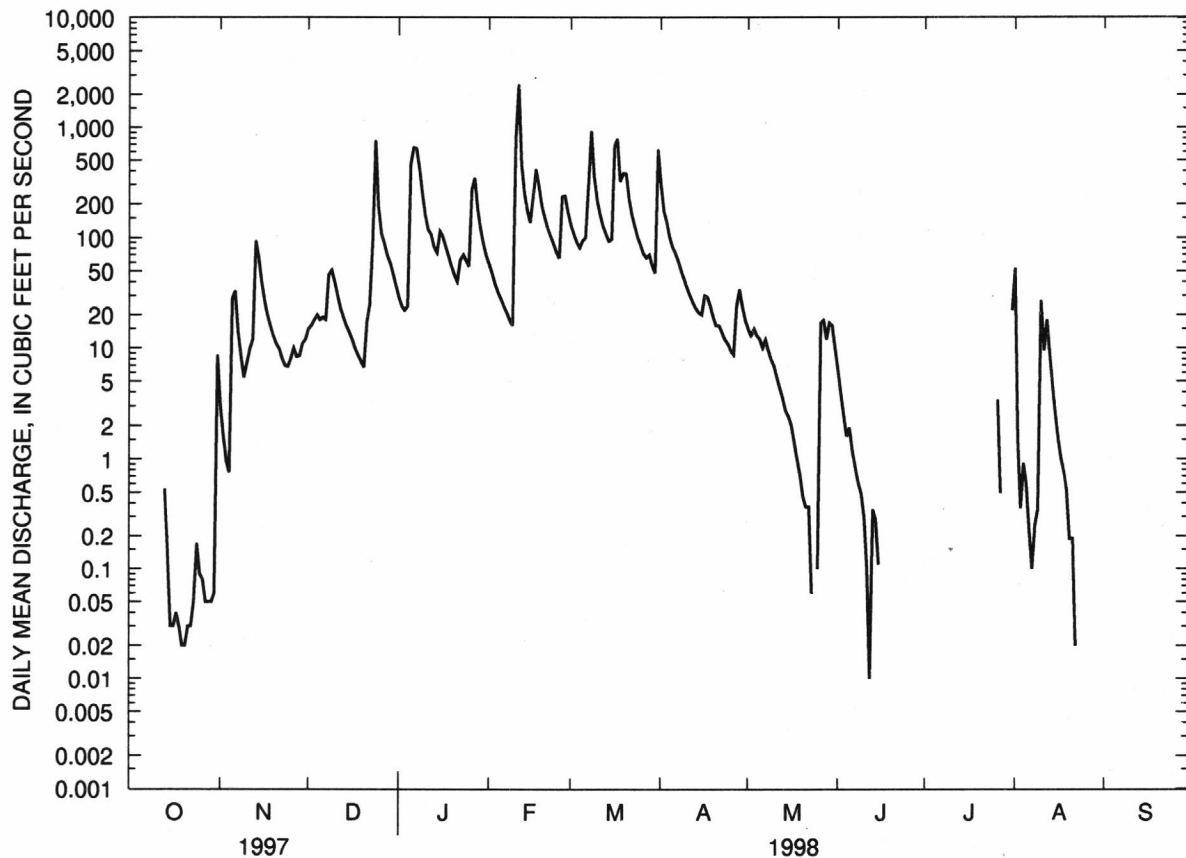
MEAN	22.6	71.5	120	116	110	131	122	72.0	19.1	9.90	2.41	2.60
MAX	85.9	265	222	228	248	256	247	257	56.4	47.3	12.9	10.7
(WY)	1991	1997	1992	1991	1998	1990	1991	1990	1996	1994	1992	1991
MIN	.000	3.97	3.53	44.6	13.9	39.4	8.26	1.20	.68	.016	.000	.000
(WY)	1993	1990	1990	1996	1996	1996	1992	1992	1998	1990	1990	1993

ARKANSAS RIVER BASIN

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07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1990 - 1998
ANNUAL TOTAL	20877.66	23329.65	
ANNUAL MEAN	57.2	63.9	66.4
HIGHEST ANNUAL MEAN			91.9 1990
LOWEST ANNUAL MEAN			23.8 1996
HIGHEST DAILY MEAN	1710 Apr 5	2470 Feb 11	2620 Dec 3 1993
LOWEST DAILY MEAN	.00 Jul 29	.00 Oct 1	.00 Jul 4 1990
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 29	.00 Oct 1	.00 Jul 4 1990
INSTANTANEOUS PEAK FLOW		5670 Feb 11	6450 Dec 3 1993
INSTANTANEOUS PEAK STAGE		10.97 Feb 11	12.19 Dec 3 1993
INSTANTANEOUS LOW FLOW		.00 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	41410	46270	48100
ANNUAL RUNOFF (CFSM)	1.24	1.39	1.44
ANNUAL RUNOFF (INCHES)	16.85	18.83	19.57
10 PERCENT EXCEEDS	135	160	153
50 PERCENT EXCEEDS	10	9.5	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 1997 TO SEPTEMBER 1998

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)
DEC											
08...	1145	80513	81213	40	23	6.2	748	5.8	20	6.4	11.3
JAN											
05...	1215	80513	81213	553	21	6.5	752	11.6	80	30	9.7
FEB											
17...	1100	80513	81213	408	20	6.2	742	9.3	40	9.9	11.1
MAY											
26...	1115	80513	81213	2.8	36	6.3	742	23.9	20	3.8	6.4

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	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)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
DEC									
08...	92	110	300	7	1.1	1.1	1.0	21	.2
JAN									
05...	90	K540	3000	7	1.2	1.0	<.10	--	.60
FEB									
17...	99	43	490	5	.80	.80	1.2	31	.40
MAY									
26...	78	K4300	K3700	13	2.0	1.9	1.8	22	.70

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) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
DEC										
08...	5	3.3	2.2	<.10	5.9	24	18	.03	2.59	.008
JAN										
05...	4	2.9	1.4	<.10	5.2	42	--	--	--	.006
FEB										
17...	5	2.9	1.2	<.10	5.9	20	16	.03	22.0	.009
MAY										
26...	11	1.6	2.9	<.10	3.4	24	22	.03	.18	.071

ARKANSAS RIVER BASIN

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07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

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)
DEC										
08...	.04	.002	.01	.010	.008	.01	--	<.20	--	.010
JAN										
05...	.03	.004	.01	.010	.010	.01	.40	.41	.42	.030
FEB										
17...	.04	.001	.00	.010	.006	.01	--	<.20	--	.010
MAY										
26...	.31	.003	.01	.074	.087	.11	.33	.42	.49	.020

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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
DEC										
08...	<.001	2.4	2.3	200	390	22	13	<.10	10	1.1
JAN										
05...	<.001	5.4	5.2	280	480	32	16	<.10	26	39
FEB										
17...	<.001	2.8	2.7	90	220	11	5.7	<.10	11	12
MAY										
26...	<.001	2.0	2.0	360	800	110	81	<.10	16	.12

ARKANSAS RIVER BASIN

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 1997 TO SEPTEMBER 1998

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 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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
DEC												
10...	0925	80513	80513	--	17.0	--	--	754	1.70	--	--	--
10...	0929	80513	80513	.00	17.0	21	6.2	754	--	8.1	11.2	96
10...	0930	80513	80513	5.00	17.0	22	6.2	754	--	8.1	11.2	96
10...	0931	80513	80513	10.0	17.0	23	6.1	754	--	7.5	11.0	93
10...	0932	80513	80513	15.0	17.0	24	6.1	754	--	7.4	10.9	92
10...	0933	80513	80513	17.0	17.0	24	6.1	754	--	7.4	10.9	92
10...	0935	80513	81213	--	17.0	21	--	754	--	--	--	--
FEB												
18...	0925	80513	80513	--	20.0	--	--	755	.76	--	--	--
18...	0938	80513	80513	.00	20.0	19	6.1	755	--	8.7	10.9	95
18...	0939	80513	80513	5.00	20.0	19	6.1	755	--	8.7	10.8	93
18...	0940	80513	80513	10.0	20.0	19	6.1	755	--	8.7	10.7	93
18...	0941	80513	80513	15.0	20.0	19	6.0	755	--	8.7	10.7	93
18...	0942	80513	80513	20.0	20.0	19	5.9	755	--	8.7	10.7	92
18...	0945	80513	81213	--	20.0	23	--	755	--	--	--	--
MAY												
28...	1310	80513	80513	--	17.0	--	--	759	1.80	--	--	--
28...	1312	80513	80513	.00	17.0	23	6.6	759	--	26.7	8.1	102
28...	1313	80513	80513	5.00	17.0	23	6.5	759	--	26.7	8.0	101
28...	1314	80513	80513	10.0	17.0	24	6.1	759	--	26.5	6.9	86
28...	1315	80513	80513	15.0	17.0	29	5.6	759	--	24.3	1.8	22
28...	1316	80513	80513	17.0	17.0	31	5.6	759	--	23.4	1.0	12
28...	1317	80513	80513	15.0	17.0	29	5.6	759	--	24.3	1.8	21
28...	1318	80513	80513	17.0	17.0	31	5.6	759	--	23.4	1.1	14
28...	1325	80513	81213	--	17.0	--	--	759	--	--	--	--
AUG												
25...	1200	80513	80513	--	14.0	--	--	761	.98	--	--	--
25...	1203	80513	80513	.00	14.0	24	6.3	761	--	31.5	7.5	102
25...	1204	80513	80513	5.00	14.0	24	6.1	761	--	30.4	7.0	93
25...	1205	80513	80513	10.0	14.0	24	5.9	761	--	30.1	5.9	79
25...	1206	80513	80513	14.0	14.0	26	5.7	761	--	30.0	3.2	42
25...	1210	80513	81213	--	14.0	--	--	761	--	--	--	--

ARKANSAS RIVER BASIN

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07263297 LAKE MAUMELLE EAST OF HWY 10 BRIDGE NEAR WYE--CONTINUED

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)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC									
10...	0935	.00	15	10	3.8	K20	36	6	12
FEB									
18...	0945	.00	20	40	8.8	86	140	5	22
MAY									
28...	1325	.00	12	5	3.2	K3	K9	6	2
AUG									
25...	1210	.00	12	20	5.6	K4	K2	7	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)
DEC									
10...	.028	.12	.001	.00	.029	.012	.02	.19	.20
FEB									
18...	.019	.08	.001	.00	.020	.006	.01	--	<.20
MAY									
28...	--	--	<.001	--	<.002	.004	.01	.27	.27
AUG									
25...	--	--	.002	.01	<.002	.005	.01	--	<.20

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- ORTHOPHOS- 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)
DEC								
10...	.23	.010	<.001	2.5	2.5	210	28	4.30
FEB								
18...	--	.010	<.001	2.6	2.5	360	20	<.100
MAY								
28...	--	.020	<.001	2.5	2.4	210	58	.500
AUG								
25...	--	.015	<.001	2.8	2.5	300	96	4.90

ARKANSAS RIVER BASIN

07263299 LAKE MAUMELLE NEAR LITTLE ITALY

LOCATION.--Lat 34°43'34", long 92°34'35", 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 1997 TO SEPTEMBER 1998

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) (004000)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (000078)	TEMPER- ATURE WATER (DEG C) (000010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (003000)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (003010)
DEC												
10...	0845	80513	80513	--	45.0	--	--	752	2.00	--	--	--
10...	0848	80513	80513	.00	45.0	21	6.3	752	--	9.2	11.0	97
10...	0849	80513	80513	5.00	45.0	21	6.3	752	--	9.2	11.0	97
10...	0850	80513	80513	10.0	45.0	21	6.2	752	--	9.2	11.0	97
10...	0851	80513	80513	15.0	45.0	21	6.2	752	--	9.2	10.9	96
10...	0852	80513	80513	20.0	45.0	21	6.2	752	--	9.2	10.9	96
10...	0853	80513	80513	25.0	45.0	21	6.2	752	--	9.2	10.9	96
10...	0854	80513	80513	30.0	45.0	21	6.2	752	--	9.2	10.9	96
10...	0855	80513	80513	35.0	45.0	21	6.2	752	--	9.3	10.9	96
10...	0856	80513	80513	40.0	45.0	21	6.2	752	--	9.3	10.9	96
10...	0857	80513	80513	45.0	45.0	21	6.1	752	--	9.2	10.9	96
10...	0900	80513	81213	--	45.0	21	--	752	--	--	--	--
FEB												
18...	0855	80513	80513	--	45.0	--	--	755	1.20	--	--	--
18...	0856	80513	80513	.00	45.0	23	6.3	755	--	8.7	11.1	97
18...	0857	80513	80513	5.00	45.0	23	6.3	755	--	8.7	11.1	96
18...	0858	80513	80513	10.0	45.0	23	6.3	755	--	8.7	11.0	96
18...	0859	80513	80513	15.0	45.0	23	6.3	755	--	8.7	11.0	95
18...	0900	80513	80513	20.0	45.0	22	6.3	755	--	8.7	11.0	95
18...	0901	80513	80513	25.0	45.0	23	6.3	755	--	8.7	11.0	95
18...	0902	80513	80513	30.0	45.0	23	6.3	755	--	8.7	10.9	95
18...	0903	80513	80513	35.0	45.0	23	6.3	755	--	8.7	10.9	95
18...	0904	80513	80513	40.0	45.0	23	6.3	755	--	8.7	10.9	94
18...	0905	80513	80513	45.0	45.0	22	6.3	755	--	8.7	10.9	94
18...	0915	80513	81213	--	45.0	23	--	755	--	--	--	--
MAY												
28...	1215	80513	80513	--	40.0	--	--	759	1.90	--	--	--
28...	1217	80513	80513	.00	40.0	23	6.6	759	--	26.1	8.1	100
28...	1218	80513	80513	5.00	40.0	23	6.7	759	--	26.0	8.1	100
28...	1219	80513	80513	10.0	40.0	23	6.6	759	--	25.9	8.0	99
28...	1220	80513	80513	15.0	40.0	23	6.3	759	--	24.4	7.8	94
28...	1222	80513	80513	16.0	40.0	23	6.0	759	--	22.8	8.0	93
28...	1223	80513	80513	17.0	40.0	23	6.0	759	--	21.5	7.5	86
28...	1224	80513	80513	18.0	40.0	23	5.8	759	--	20.8	6.2	70
28...	1225	80513	80513	20.0	40.0	23	5.6	759	--	19.8	4.9	54
28...	1226	80513	80513	25.0	40.0	26	5.6	759	--	18.8	2.9	31
28...	1227	80513	80513	30.0	40.0	29	5.7	759	--	18.5	2.2	24
28...	1228	80513	80513	35.0	40.0	29	5.6	759	--	18.4	2.0	21
28...	1229	80513	80513	40.0	40.0	30	5.7	759	--	18.4	1.8	19
28...	1235	80513	81213	--	40.0	--	--	759	--	--	--	--
28...	1240	80513	81213	--	40.0	--	--	759	--	--	--	--

ARKANSAS RIVER BASIN

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07263299 LAKE MAUMELLE NEAR LITTLE ITALY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
AUG												
25...	1105	80513	80513	--	40.0	--	--	761	2.50	--	--	--
25...	1106	80513	80513	.00	40.0	24	7.1	761	--	30.9	8.3	112
25...	1107	80513	80513	5.00	40.0	24	7.1	761	--	30.4	8.4	112
25...	1108	80513	80513	10.0	40.0	23	6.9	761	--	30.1	8.2	109
25...	1109	80513	80513	15.0	40.0	23	6.7	761	--	30.1	8.0	106
25...	1112	80513	80513	18.0	40.0	23	6.1	761	--	29.7	6.7	89
25...	1113	80513	80513	19.0	40.0	24	5.8	761	--	29.1	3.5	46
25...	1114	80513	80513	20.0	40.0	25	5.6	761	--	27.5	.5	7
25...	1115	80513	80513	23.0	40.0	28	5.7	761	--	26.2	.1	1
25...	1116	80513	80513	24.0	40.0	36	5.8	761	--	25.0	.1	1
25...	1117	80513	80513	25.0	40.0	47	6.0	761	--	23.9	.1	1
25...	1119	80513	80513	26.0	40.0	66	6.3	761	--	22.9	.1	1
25...	1120	80513	80513	30.0	40.0	78	6.5	761	--	22.1	.1	1
25...	1121	80513	80513	35.0	40.0	80	6.6	761	--	21.1	.1	1
25...	1122	80513	80513	40.0	40.0	80	6.7	761	--	20.8	.1	1
25...	1123	80513	81213	--	40.0	--	--	761	--	--	--	--
25...	1125	80513	81213	--	40.0	--	--	761	--	--	--	--

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 MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC									
10...	0900	.00	45	5	2.8	K1	K3	6	20
FEB									
18...	0915	.00	45	10	3.9	K2	K11	7	18
MAY									
28...	1235	.00	18	5	<1.0	K3	<1	5	14
28...	1240	21	39	5	1.4	<1	K5	5	16
AUG									
25...	1123	.00	18	5	1.4	<1	<1	6	20
25...	1125	21	39	60	4.9	K1	<1	11	26

ARKANSAS RIVER BASIN

07263299 LAKE MAUMELLE NEAR LITTLE ITALY--CONTINUED

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)
DEC									
10...	--	--	<.010	--	.030	.026	.03	--	<.20
FEB									
18...	.029	.13	.001	.00	.030	.018	.02	.18	.20
MAY									
28...	--	--	.002	.01	<.002	.005	.01	--	<.20
28...	.009	.04	.003	.01	.012	.037	.05	--	<.20
AUG									
25...	--	--	.002	.01	<.002	.004	.01	--	<.20
25...	.000	.00	.002	.01	.002	.110	.14	.11	.22
DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH, 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)
DEC									
10...	--	<.020	.010	.03	2.5	2.4	130	40	4.00
FEB									
18...	.23	.010	<.001	--	2.5	2.3	180	28	2.30
MAY									
28...	--	.010	<.001	--	2.2	2.0	80	20	4.60
28...	--	.010	<.001	--	2.1	2.0	170	220	--
AUG									
25...	--	.010	<.001	--	2.6	2.4	50	35	4.20
25...	.22	.021	.001	.00	2.6	2.4	1900	1300	--

ARKANSAS RIVER BASIN

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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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	SAM- PLING DEPTH (FEET)	RESER- VOIR DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER FIELD (STAND- ARD UNITS)	BARO- METRIC PRES- SURE (MM OF HG)	TRANS- PAR- ENCY (SECCHI DISK) (M)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)
DEC												
10...	0800	80513	80513	--	33.0	--	--	752	1.90	--	--	--
10...	0804	80513	80513	.00	33.0	21	6.5	752	--	9.3	11.2	99
10...	0805	80513	80513	5.00	33.0	22	6.4	752	--	9.6	10.9	97
10...	0806	80513	80513	10.0	33.0	22	6.3	752	--	9.6	10.9	97
10...	0807	80513	80513	15.0	33.0	22	6.3	752	--	9.6	10.9	97
10...	0808	80513	80513	20.0	33.0	22	6.3	752	--	9.6	10.9	96
10...	0809	80513	80513	25.0	33.0	22	6.2	752	--	9.6	10.9	97
10...	0810	80513	80513	30.0	33.0	22	6.2	752	--	9.6	10.9	96
10...	0811	80513	80513	33.0	33.0	22	6.2	752	--	9.6	10.8	96
10...	0830	80513	81213	--	33.0	21	--	752	--	--	--	--
FEB												
18...	0800	80513	80513	--	45.0	--	--	754	1.60	--	--	--
18...	0807	80513	80513	.00	45.0	23	6.2	754	--	8.7	11.1	96
18...	0808	80513	80513	5.00	45.0	23	6.2	754	--	8.7	11.0	96
18...	0809	80513	80513	10.0	45.0	23	6.2	754	--	8.7	11.0	96
18...	0810	80513	80513	15.0	45.0	23	6.2	754	--	8.7	11.0	95
18...	0811	80513	80513	20.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0812	80513	80513	25.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0813	80513	80513	30.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0814	80513	80513	35.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0815	80513	80513	40.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0816	80513	80513	45.0	45.0	23	6.3	754	--	8.7	10.9	95
18...	0830	80513	81213	--	45.0	23	--	754	--	--	--	--
MAY												
28...	1100	80513	80513	--	43.0	--	--	759	2.60	--	--	--
28...	1107	80513	80513	.00	43.0	23	6.3	759	--	25.9	8.3	102
28...	1108	80513	80513	5.00	43.0	23	6.4	759	--	25.9	8.3	102
28...	1109	80513	80513	10.0	43.0	23	6.5	759	--	25.9	8.2	102
28...	1110	80513	80513	12.0	43.0	23	6.5	759	--	25.3	8.5	104
28...	1112	80513	80513	14.0	43.0	23	6.6	759	--	24.0	8.9	106
28...	1113	80513	80513	15.0	43.0	23	6.5	759	--	22.9	8.9	105
28...	1114	80513	80513	18.0	43.0	23	6.3	759	--	21.6	8.6	98
28...	1115	80513	80513	20.0	43.0	23	6.1	759	--	21.1	7.8	88
28...	1116	80513	80513	22.0	43.0	25	5.7	759	--	19.4	3.5	39
28...	1117	80513	80513	25.0	43.0	28	5.6	759	--	18.8	2.8	30
28...	1122	80513	80513	30.0	43.0	30	5.7	759	--	18.5	2.1	22
28...	1123	80513	80513	35.0	43.0	32	5.8	759	--	18.3	1.4	14
28...	1124	80513	80513	40.0	43.0	32	5.8	759	--	18.2	1.2	13
28...	1125	80513	80513	43.0	43.0	33	5.8	759	--	18.0	.9	10
28...	1130	80513	81213	--	43.0	--	--	759	--	--	--	--
28...	1135	80513	81213	--	43.0	--	--	759	--	--	--	--

ARKANSAS RIVER BASIN

072632995 LAKE MAUMELLE NEAR NATURAL STEPS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
AUG												
25...	0945	80513	80513	--	41.0	--	--	761	3.00	--	--	--
25...	0954	80513	80513	.00	41.0	24	7.3	761	--	30.2	8.6	114
25...	0955	80513	80513	5.00	41.0	24	7.4	761	--	29.8	8.6	114
25...	0956	80513	80513	10.0	41.0	24	7.4	761	--	29.6	8.6	113
25...	0957	80513	80513	15.0	41.0	23	7.2	761	--	29.4	8.5	111
25...	0958	80513	80513	20.0	41.0	24	6.5	761	--	29.0	6.2	81
25...	1000	80513	80513	22.0	41.0	24	5.6	761	--	27.9	1.1	15
25...	1002	80513	80513	23.0	41.0	30	5.7	761	--	26.3	.1	1
25...	1003	80513	80513	24.0	41.0	45	5.9	761	--	24.2	.1	1
25...	1004	80513	80513	25.0	41.0	55	6.1	761	--	23.0	.1	1
25...	1005	80513	80513	26.0	41.0	59	6.2	761	--	22.5	.1	1
25...	1006	80513	80513	28.0	41.0	70	6.4	761	--	21.5	.1	1
25...	1007	80513	80513	30.0	41.0	75	6.5	761	--	21.0	.1	1
25...	1009	80513	80513	35.0	41.0	77	6.6	761	--	20.6	.1	1
25...	1010	80513	80513	40.0	41.0	78	6.6	761	--	20.3	.1	1
25...	1011	80513	80513	41.0	41.0	78	6.6	761	--	20.3	.1	1
25...	1015	80513	81213	--	41.0	--	--	761	--	--	--	--
25...	1025	80513	81213	--	41.0	--	--	761	--	--	--	--

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, 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)
DEC											
10...	0830	3.0	30	5	2.0	K2	K3	9	1.3	1.3	.90
FEB											
18...	0830	.00	45	10	3.4	K14	K5	8	1.3	1.2	1.4
MAY											
28...	1130	.00	18	5	<1.0	K5	K1	8	1.2	1.1	1.4
28...	1135	21	42	5	1.7	K2	K4	8	1.4	1.2	1.2
AUG											
25...	1025	21	39	40	4.0	<1	<1	9	1.3	1.3	1.5

ARKANSAS RIVER BASIN

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072632995 LAKE MAUMELLE NEAR NATURAL STEPS--CONTINUED

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)
DEC											
10...	17	.1	.60	8	2.9	1.8	<.10	2.4	22	16	.03
FEB											
18...	25	.2	.60	7	2.9	1.7	<.10	2.4	18	16	.02
MAY											
28...	27	.2	.60	5	3.0	1.7	<.10	.50	22	13	.03
28...	22	.2	.60	7	3.0	1.7	<.10	1.9	20	16	.03
AUG											
25...	21	.2	.60	7	3.0	1.7	<.10	1.3	20	14	.03
25...	26	.2	.60	9	2.6	1.7	<.10	2.6	22	18	.03

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	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, 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)
DEC											
10...	.028	.12	.003	.002	.01	.030	.032	.04	--	<.20	--
FEB											
18...	.026	.12	--	.001	.00	.027	.016	.02	.18	.20	.23
MAY											
28...	--	--	--	.002	.01	<.002	.008	.01	.20	.21	--
28...	.008	.04	--	.005	.02	.013	.052	.07	.22	.27	.28
AUG											
25...	--	--	--	.002	.01	<.002	.004	.01	--	<.20	--
25...	--	--	--	.002	.01	<.002	.036	.05	--	<.20	--

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTH- 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)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
DEC										
10...	.009	<.001	2.7	2.3	9.0	100	61	.60	<.10	--
FEB										
18...	.009	<.001	2.5	2.3	40	140	32	14	<.10	3.10
MAY										
28...	.009	<.001	2.2	2.0	20	70	19	.70	<.10	.500
28...	.010	<.001	2.2	2.0	30	210	360	310	<.10	--
AUG										
25...	.012	<.001	2.6	2.6	2.8	40	25	.30	<.10	4.20
25...	.021	<.001	2.4	2.2	390	920	760	760	<.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.--No estimated daily discharges. Records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	239	406	483	1.5	.00	.00	.00	.00
2	.00	.00	.00	.00	210	350	444	.50	.00	.00	.00	.00
3	.00	.00	.00	.00	186	271	447	2.3	.00	.00	.00	.00
4	.00	.00	.00	.00	162	224	331	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	138	241	275	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	119	241	228	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	96	248	214	1.3	.00	.00	.00	.00
8	.00	.00	.00	.00	85	778	191	.00	.00	.00	.00	.00
9	.00	.00	.00	6.8	68	906	160	.00	.00	.00	.00	.00
10	.00	.00	.00	30	306	735	105	.00	.00	.00	.00	.00
11	.00	.00	.00	61	2710	626	78	.00	.00	.00	.00	.00
12	.00	.00	.00	91	2540	513	58	.00	.00	.00	.00	.00
13	.00	.00	.00	106	1990	448	47	.00	.00	.00	.00	.00
14	.00	.00	.00	115	1530	382	42	.00	.00	.00	.00	.00
15	.00	.00	.00	154	1210	338	37	.00	.00	.00	.00	.00
16	.00	.00	.00	165	1090	449	54	.00	.00	.00	.00	.00
17	.00	.00	.00	174	1180	1070	36	.00	.00	.00	.00	.00
18	.00	.00	.00	162	1090	1100	27	.00	.00	.00	.00	.00
19	.00	.00	.00	158	943	1050	20	.00	.00	.00	.00	.00
20	.00	.00	.00	138	805	1090	17	.00	.00	.00	.00	.00
21	.00	.00	.00	133	653	916	17	.00	.00	.00	.00	.00
22	.00	.00	.00	162	549	791	14	.00	.00	.00	.00	.00
23	.00	.00	.00	171	453	653	3.3	.00	.00	.00	.00	.00
24	.00	.00	.00	167	367	539	.81	.00	.00	.00	.00	.00
25	.00	.00	.00	152	296	451	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	202	354	375	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	311	436	325	2.9	.00	.00	.00	.00	.00
28	.00	.00	.00	350	460	296	11	.00	.00	.00	.00	.00
29	.00	.00	.00	344	---	250	9.6	.00	.00	.00	.00	.00
30	.00	.00	.00	310	---	208	7.7	.00	.00	.00	.00	.00
31	.00	---	.00	269	---	347	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	3931.80	20265	16617	3360.31	5.60	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	127	724	536	112	.18	.000	.000	.000	.000
MAX	.00	.00	.00	350	2710	1100	483	2.3	.00	.00	.00	.00
MIN	.00	.00	.00	.00	68	208	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	7800	40200	32960	6670	11	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1998, BY WATER YEAR (WY)

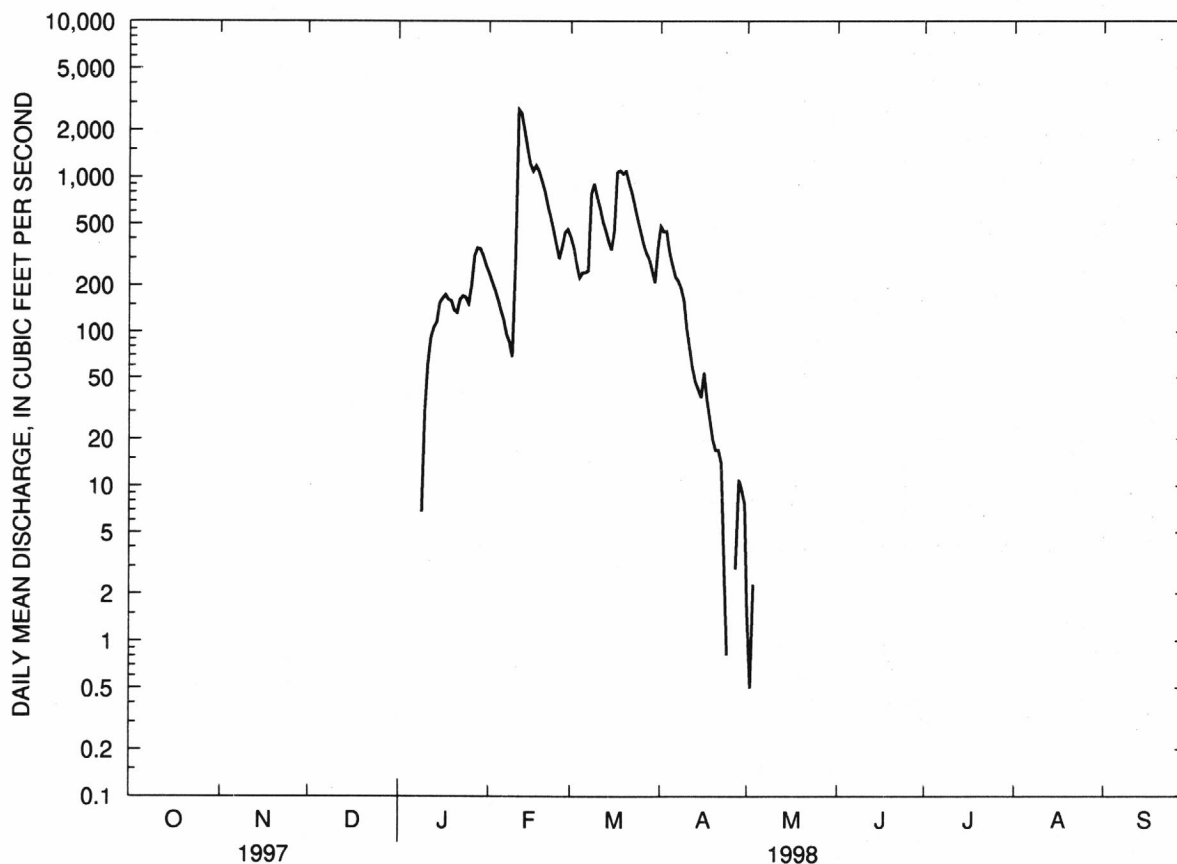
MEAN	.000	84.0	303	255	296	422	307	241	48.7	15.1	6.09	.000
MAX	.000	435	840	836	724	947	642	546	198	86.3	53.1	.000
(WY)	1990	1997	1992	1991	1998	1997	1991	1990	1992	1994	1992	1989
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1990	1990	1990	1996	1996	1996	1992	1998	1990	1990	1989

ARKANSAS RIVER BASIN

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07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1990 - 1998
ANNUAL TOTAL	70660.27	44179.71	
ANNUAL MEAN	194	121	165
HIGHEST ANNUAL MEAN			274 1997
LOWEST ANNUAL MEAN			13.9 1996
HIGHEST DAILY MEAN	2460 Apr 6	2710 Feb 11	2970 Mar 8 1990
LOWEST DAILY MEAN	.00 Jun 6	.00 Oct 1	.00 Aug 17 1989
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 6	.00 Oct 1	.00 Aug 17 1989
INSTANTANEOUS PEAK FLOW		3070 Feb 11	3420 Mar 8 1990
INSTANTANEOUS PEAK STAGE		92.33 Feb 11	92.49 Mar 8 1990
INSTANTANEOUS LOW FLOW		.00 at times	.00 at times
ANNUAL RUNOFF (AC-FT)	140200	87630	119200
10 PERCENT EXCEEDS	628	378	511
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00



ARKANSAS RIVER BASIN

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK

LOCATION.--Lat 34°47'27", long 92°21'32", in sec.23, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, in metal shelter on dam and at mile 141.5.

DRAINAGE AREA.--158,030 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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34900	18000	34300	105000	78400	67300	176000	123000	46100	8440	7640	5980
2	23600	14100	15300	102000	64700	47200	178000	126000	39900	17200	5970	1700
3	13600	9110	32800	103000	72000	41200	169000	126000	43600	25600	21500	3780
4	23300	8210	39000	105000	69000	37700	163000	119000	22900	26300	8870	3920
5	17700	7890	38000	136000	66900	41800	159000	104000	19600	17700	13800	3520
6	7550	14100	22800	210000	68200	54600	152000	103000	26100	5450	10400	3520
7	2380	7100	16200	247000	70300	55800	150000	108000	8840	9510	2950	322
8	3710	4690	8250	251000	68700	68200	148000	110000	3400	16400	2530	69
9	17800	835	34000	242000	64600	107000	139000	110000	16600	8820	5040	215
10	37100	12800	50200	233000	60100	119000	146000	105000	27100	6640	15300	973
11	22900	19900	49100	223000	93200	103000	147000	85900	29900	8410	18500	1290
12	10800	13500	44800	198000	123000	93800	150000	73200	22700	18200	10500	3650
13	26100	20000	37600	190000	109000	90900	149000	69500	24900	20400	10100	1200
14	44200	11000	31800	191000	79500	91000	145000	69900	17300	18600	3620	20300
15	41900	24400	22500	190000	56600	83500	141000	66900	19100	17400	8080	53400
16	27700	24400	21100	186000	52500	76300	136000	52000	3200	27000	6550	43300
17	28100	11300	20900	182000	62700	120000	125000	38100	2400	16800	5900	9630
18	33900	16600	27700	179000	74800	161000	93300	35000	9180	3680	10200	20800
19	22000	14300	21100	177000	82100	173000	64700	29200	9550	4280	11700	10200
20	19900	13200	11400	170000	70500	188000	72500	31100	11400	13600	8820	7120
21	20400	13800	18200	163000	58300	196000	74100	29600	8320	10700	9180	9740
22	17000	8150	43700	162000	56600	191000	66300	24000	12500	11800	7920	11100
23	14700	2540	61700	156000	48900	189000	59600	23900	14800	12000	9030	17700
24	27200	1240	71700	145000	41700	177000	52400	26200	9000	12700	7240	18600
25	13300	7470	109000	119000	43000	164000	40000	27600	9390	10900	9910	9730
26	13000	7840	131000	99800	47700	158000	35500	30700	11900	3880	8140	12200
27	25600	725	130000	107000	62600	156000	40600	29000	5990	11600	9340	5670
28	9330	70	111000	123000	76700	155000	57700	32700	1060	10400	7080	14900
29	17600	8680	100000	126000	---	158000	83200	36100	9660	12300	5260	15200
30	6430	46000	105000	105000	---	159000	112000	38500	10300	10600	2800	23700
31	1030	---	107000	89200	---	161000	---	41400	---	9140	6600	---
TOTAL	624730	361950	1567150	5015000	1922300	3684300	3424900	2024500	496690	406450	270470	333429
MEAN	20150	12070	50550	161800	68650	118800	114200	65310	16560	13110	8725	11110
MAX	44200	46000	131000	251000	123000	196000	178000	126000	46100	27000	21500	53400
MIN	1030	70	8250	89200	41700	37700	35500	23900	1060	3680	2530	69
AC-FT	1239000	717900	3108000	9947000	3813000	7308000	6793000	4016000	985200	806200	536500	661400

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 - 1998, BY WATER YEAR (WY)

MEAN	28380	47520	54090	47930	47220	74870	79350	77000	66290	31300	16670	16500
MAX	215100	176000	155400	161800	108200	169500	215900	234800	191600	116500	62730	51690
(WY)	1987	1975	1993	1998	1975	1987	1973	1990	1995	1995	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

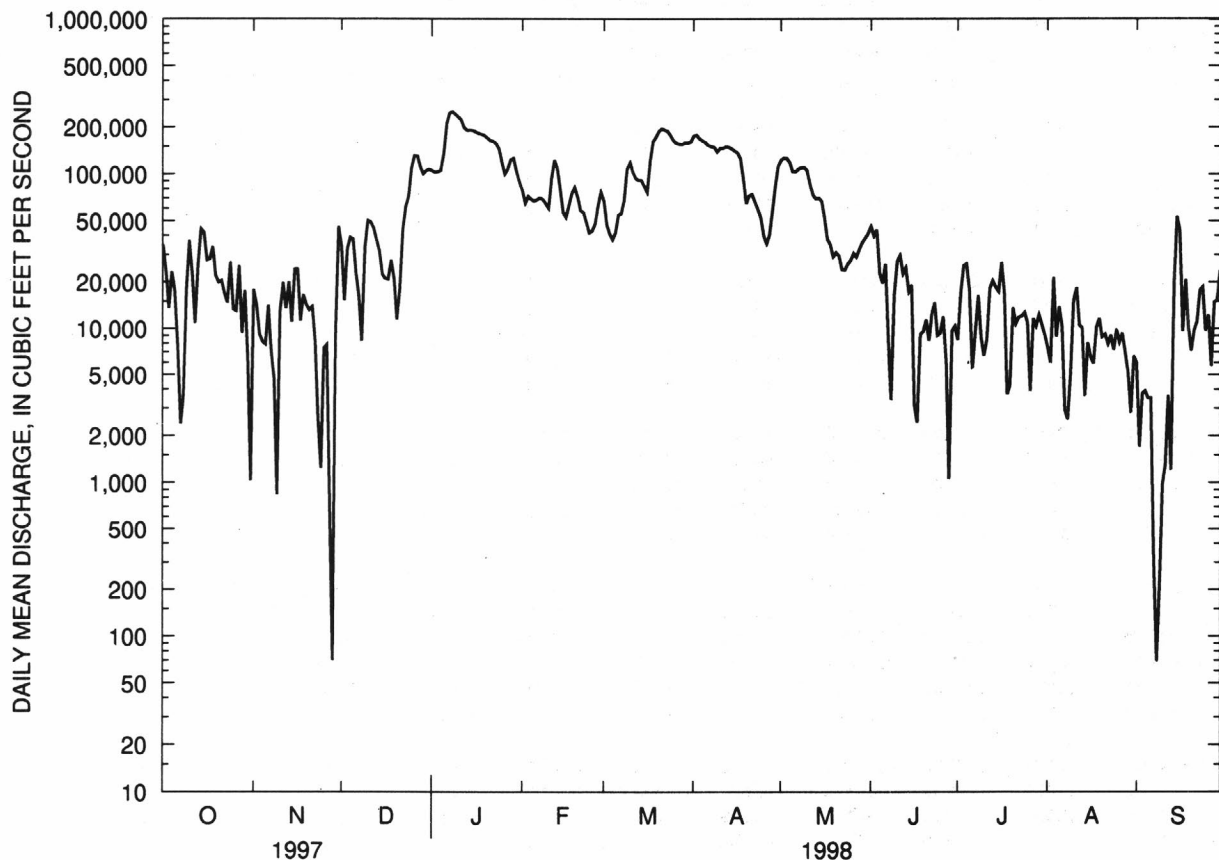
SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1970 - 1998	
ANNUAL TOTAL	16242272		20131869			
ANNUAL MEAN	44500		55160		^a 48900	
HIGHEST ANNUAL MEAN					96810	1993
LOWEST ANNUAL MEAN					12880	1981
HIGHEST DAILY MEAN	194000	Mar 5	251000	Jan 8	404000	May 8 1990
LOWEST DAILY MEAN	28	Sep 12	69	Sep 8	^b 14	Oct 25 1978
ANNUAL SEVEN-DAY MINIMUM	2850	Sep 10	1100	Sep 7	432	Oct 15 1982
INSTANTANEOUS PEAK FLOW			253000	Jan 8	^c 406000	May 7 1990
INSTANTANEOUS PEAK STAGE			246.61	Jan 8	^d 256.97	May 7 1990
ANNUAL RUNOFF (AC-FT)	32220000		39930000		35430000	
10 PERCENT EXCEEDS	106000		155000		132000	
50 PERCENT EXCEEDS	33100		27600		30100	
90 PERCENT EXCEEDS	9690		5810		3920	

^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



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.

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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 13, 1978, reached a stage of 18.22 ft, discharge, 22,500 ft³/s.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	119	118	11	7.7	518	3.9	13	2.3	14	2.3	.54
2	.91	34	42	10	7.0	381	3.6	49	1.6	7.8	2.2	.54
3	.69	13	25	9.1	299	362	3.3	32	1.4	5.0	2.2	32
4	.44	8.2	17	8.5	239	73	220	9.7	3.8	3.8	2.2	6.3
5	.34	5.6	161	6.0	51	601	576	6.0	2.3	3.3	4.4	2.3
6	.28	4.4	42	5.4	32	93	71	4.4	1.5	3.1	2.4	2.0
7	.21	415	23	5.0	128	45	28	3.2	1.3	2.9	2.2	1.6
8	.20	54	16	56	73	30	18	3.0	1.7	29	4.8	1.3
9	.21	20	12	52	35	57	14	31	1.6	46	7.3	1.2
10	.18	11	10	22	24	34	11	6.8	3.2	154	2.8	1.1
11	.12	7.4	9.1	12	19	21	41	3.4	3.8	16	6.0	.97
12	.10	5.4	7.7	9.1	17	20	15	2.9	2.7	6.8	4.5	.95
13	.10	4.7	6.0	6.9	50	531	10	2.6	21	4.2	25	.84
14	.10	7.1	5.9	6.1	105	108	8.0	5.3	8.4	3.5	4.7	.84
15	.10	4.5	224	80	61	40	6.5	2.7	2.4	3.2	2.8	.82
16	.10	4.9	218	33	41	26	5.6	2.4	197	12	2.6	.76
17	.10	218	58	16	26	31	5.2	2.2	420	5.0	2.4	.73
18	.08	43	30	12	20	33	29	2.0	51	3.0	131	1.0
19	.05	20	19	11	155	123	3.9	2.0	11	2.9	12	.91
20	.05	15	14	9.9	76	39	2.9	16	5.2	2.7	3.9	.84
21	162	12	13	23	194	24	2.6	3.0	3.5	2.7	2.2	.77
22	348	7.7	13	71	47	17	24	2.1	2.3	2.6	2.0	.73
23	18	6.2	72	33	28	13	47	1.8	1.7	2.6	1.9	287
24	6.2	341	43	116	21	11	7.5	2.8	1.4	2.4	1.4	540
25	3.8	610	19	33	17	25	24	2.5	1.1	2.4	1.0	54
26	2.6	84	120	21	167	13	162	2.3	26	2.4	.85	14
27	461	35	54	19	93	9.0	380	57	2.8	2.4	.68	6.4
28	255	22	29	15	53	8.1	283	96	248	5.7	.62	4.3
29	34	309	20	11	---	5.7	62	6.3	293	3.1	.54	3.5
30	13	324	15	9.6	---	6.7	25	5.6	36	2.5	.54	2.8
31	18	---	13	8.5	---	.40	---	7.0	---	2.4	.54	---
TOTAL	1327.16	2765.1	1468.7	741.1	2085.7	3298.90	2093.0	386.0	1359.0	359.4	239.97	971.04
MEAN	42.8	92.2	47.4	23.9	74.5	106	69.8	12.5	45.3	11.6	7.74	32.4
MAX	461	610	224	116	299	601	576	96	420	154	131	540
MIN	.05	4.4	5.9	5.0	7.0	.40	2.6	1.8	1.1	2.4	.54	.54
AC-FT	2630	5480	2910	1470	4140	6540	4150	766	2700	713	476	1930
CFSM	2.09	4.50	2.31	1.17	3.63	5.19	3.40	.61	2.21	.57	.38	1.58
IN.	2.41	5.02	2.67	1.34	3.78	5.99	3.80	.70	2.47	.65	.44	1.76

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ARKANSAS RIVER BASIN

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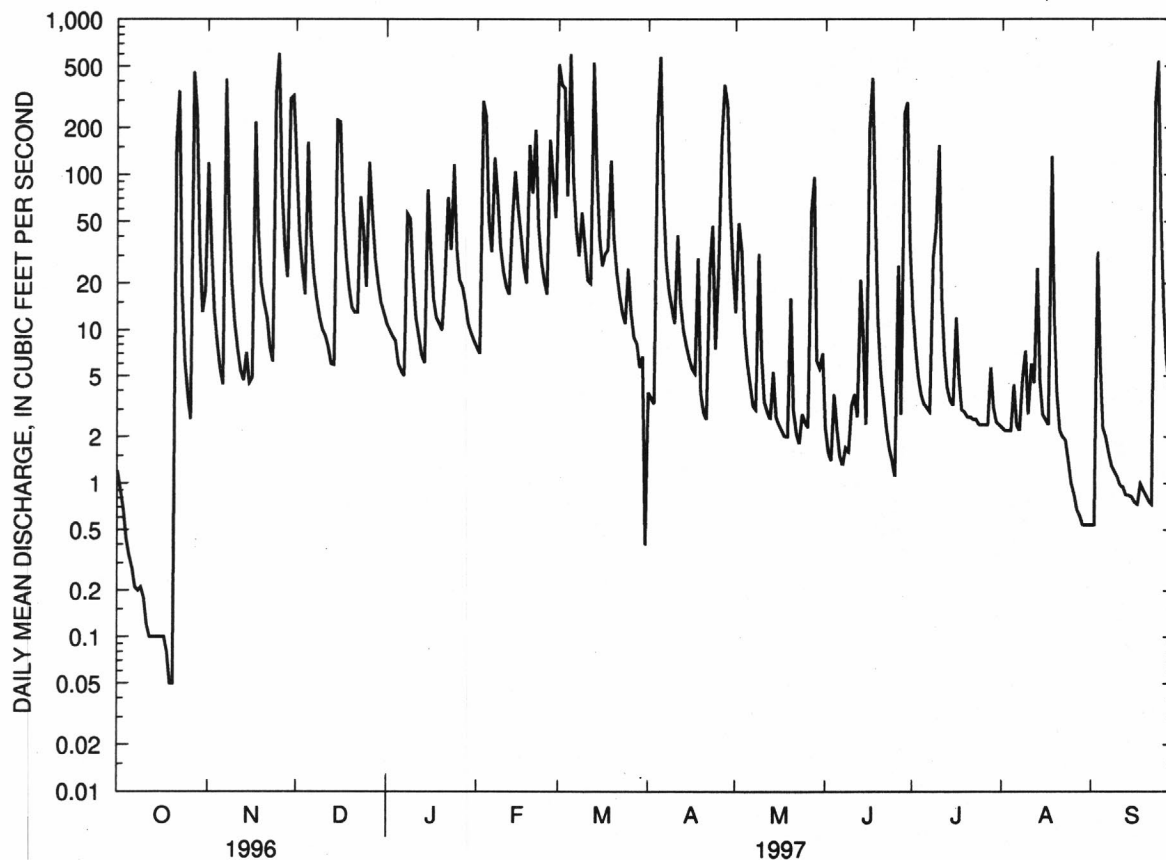
07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

SUMMARY STATISTICS

FOR 1997 WATER YEAR

ANNUAL TOTAL	17095.07	
ANNUAL MEAN	46.8	
HIGHEST DAILY MEAN	610	Nov 25
LOWEST DAILY MEAN	.05	Oct 19
ANNUAL SEVEN-DAY MINIMUM	.08	Oct 14
INSTANTANEOUS PEAK FLOW	^a 4650	Oct 27
INSTANTANEOUS PEAK STAGE	7.47	Oct 27
INSTANTANEOUS LOW FLOW	.05	Oct 18
ANNUAL RUNOFF (AC-FT)	33910	
ANNUAL RUNOFF (CFSM)	2.28	
ANNUAL RUNOFF (INCHES)	31.02	
10 PERCENT EXCEEDS	129	
50 PERCENT EXCEEDS	8.5	
90 PERCENT EXCEEDS	.91	

^aFrom rating curve extended above 1,200 ft³/s



ARKANSAS RIVER BASIN

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

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	2.2	38	11	14	12	18	23	2.7	1.6	.30	1.3	.75
2	1.9	15	9.1	13	12	14	14	17	1.5	.31	1.1	.77
3	1.7	9.5	96	12	10	11	13	47	1.4	2.4	243	.75
4	1.6	6.6	23	13	8.9	10	9.3	5.6	1.4	.55	73	.73
5	1.5	469	14	178	7.9	115	7.7	3.0	135	3.8	22	.73
6	1.5	108	10	574	7.1	37	7.2	2.6	9.9	1.6	54	.73
7	1.5	30	12	359	6.4	206	6.3	21	2.9	.75	12	.73
8	3.9	19	196	157	4.5	327	5.5	2.9	2.2	20	3.9	.73
9	91	14	49	77	4.0	67	4.6	11	1.9	4.5	23	1.0
10	12	65	30	45	723	34	3.8	17	1.7	1.6	81	.84
11	4.5	34	20	135	521	24	3.3	1.9	1.6	2.1	84	.74
12	2.9	39	15	141	84	19	2.9	1.5	1.5	14	69	120
13	222	320	12	55	40	16	2.7	1.4	4.6	54	7.9	58
14	20	86	11	88	26	15	2.7	1.4	1.7	13	3.9	95
15	8.0	35	9.4	217	20	33	2.6	1.4	1.4	4.6	2.6	326
16	4.7	21	8.3	61	214	238	312	1.3	1.3	1.4	1.7	48
17	3.8	16	7.9	37	257	246	25	1.2	1.1	1.1	1.4	13
18	3.5	13	7.9	27	69	84	11	1.1	.82	.95	1.2	5.8
19	3.2	11	6.8	21	37	175	6.9	1.1	32	.84	1.1	3.3
20	3.1	9.4	7.8	18	27	87	5.2	.99	1.1	.80	1.1	2.2
21	8.6	8.4	115	16	20	41	16	.95	.64	.73	.99	29
22	5.2	7.5	35	101	16	28	4.8	.95	.59	.73	.95	23
23	98	6.2	210	37	13	22	3.1	1.0	.52	45	.95	3.8
24	88	6.1	472	23	11	20	2.7	.96	.44	13	.93	1.9
25	101	5.4	80	18	e11	16	7.8	.95	.37	91	.86	1.5
26	53	5.0	87	175	e100	14	3.8	255	.37	228	.84	1.4
27	13	4.7	55	75	44	17	85	13	.37	35	.84	1.2
28	7.3	20	39	36	31	18	30	14	.37	5.4	.95	1.2
29	5.5	68	32	25	---	12	7.2	7.9	.35	17	.95	1.1
30	4.8	17	23	18	---	12	3.8	3.2	.30	3.8	.84	60
31	332	---	18	15	---	86	---	2.0	---	1.5	.84	---
TOTAL	1110.9	1506.8	1722.2	2781	2336.8	2062	632.9	443.00	210.94	569.76	698.14	803.90
MEAN	35.8	50.2	55.6	89.7	83.5	66.5	21.1	14.3	7.03	18.4	22.5	26.8
MAX	332	469	472	574	723	327	312	255	135	228	243	326
MIN	1.5	4.7	6.8	12	4.0	10	2.6	.95	.30	.30	.84	.73
AC-FT	2200	2990	3420	5520	4640	4090	1260	879	418	1130	1380	1590
CFSM	1.75	2.45	2.71	4.38	4.07	3.24	1.03	.70	.34	.90	1.10	1.31
IN.	2.02	2.73	3.13	5.05	4.24	3.74	1.15	.80	.38	1.03	1.27	1.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
MEAN	39.3	71.2	51.5	56.8	79.0	86.5	45.4	13.4	26.2	15.0	15.1	29.6
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	35.8	50.2	47.4	23.9	74.5	66.5	21.1	12.5	7.03	11.6	7.74	26.8
(WY)	1998	1998	1997	1997	1997	1998	1998	1997	1998	1997	1997	1998

ARKANSAS RIVER BASIN

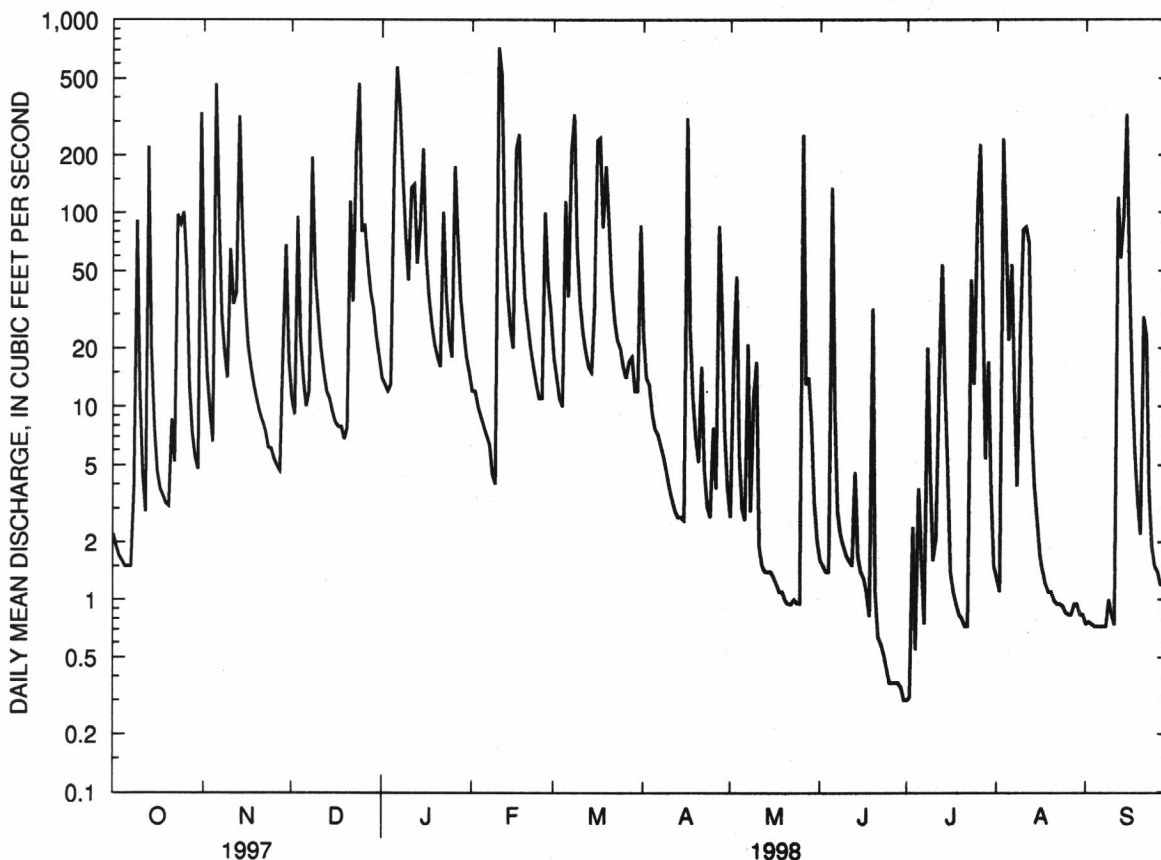
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07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	15874.01		14878.34			
ANNUAL MEAN	43.5		40.8		43.8	
HIGHEST ANNUAL MEAN					46.8	1997
LOWEST ANNUAL MEAN					40.8	1998
HIGHEST DAILY MEAN	601	Mar 5	723	Feb 10	723	Feb 10 1998
LOWEST DAILY MEAN	.40	Mar 31	.30	Jun 30	.05	Oct 19 1996
ANNUAL SEVEN-DAY MINIMUM	.57	Aug 27	.34	Jun 26	.08	Oct 14 1996
INSTANTANEOUS PEAK FLOW			^a 3200	Jan 6	^a 4650	Oct 27 1996
INSTANTANEOUS PEAK STAGE			6.48	Jan 6	7.47	Oct 27 1996
INSTANTANEOUS LOW FLOW			.30	Jun 29-Jul 2	.05	Oct 18-21 1996
ANNUAL RUNOFF (AC-FT)	31490		29510		31730	
ANNUAL RUNOFF (CFSM)	2.12		1.99		2.14	
ANNUAL RUNOFF (INCHES)	28.81		27.00		29.03	
10 PERCENT EXCEEDS	106		100		116	
50 PERCENT EXCEEDS	9.1		10		9.4	
90 PERCENT EXCEEDS	1.6		.95		.95	

^aFrom rating curve extended above 1,200 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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	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...	0810	80513	80020	2380	--	781	7.6	768	24.6	2.8	6.4	76
DEC												
08...	1015	80513	80020	--	6160	806	7.8	763	9.1	2.9	12.4	108
JAN												
08...	0915	80513	80020	--	252000	403	7.2	757	12.8	76	14.6	139
MAR												
09...	1155	80513	80020	--	106000	432	7.8	764	9.3	20	8.7	76
APR												
08...	1000	80513	80020	--	153000	414	7.6	755	15.1	35	9.9	100
MAY												
02...	1105	80513	80020	--	115000	751	8.1	758	18.6	20	8.4	91
JUN												
08...	1015	80513	80020	--	5890	552	8.1	764	26.2	3.1	6.1	76
JUL												
13...	0925	80513	80020	--	23300	877	7.8	756	31.1	2.4	4.4	60
AUG												
10...	0815	80513	80020	--	8140	939	7.8	762	29.9	2.4	5.4	71
SEP												
08...	0945	80513	80020	69	--	818	8.0	759	29.8	1.5	6.2	82
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 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)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)
OCT												
07...	160	59	44	12	92	55	3	4.7	102	0	125	102
DEC												
08...	150	65	41	12	96	57	3	4.5	88	0	107	88
JAN												
08...	100	8	27	7.5	39	45	2	3.1	93	0	112	92
MAR												
09...	98	37	27	7.6	46	50	2	2.4	61	0	75	62
APR												
08...	120	46	33	8.9	32	36	1	2.9	75	0	91	74
MAY												
02...	190	100	53	14	73	45	2	3.7	85	0	106	87
JUN												
08...	140	55	38	11	50	43	2	3.3	84	0	102	84
JUL												
13...	200	100	51	16	96	51	3	4.2	95	0	112	92
AUG												
10...	180	100	45	17	107	55	3	4.3	78	0	95	78
SEP												
08...	160	75	37	16	94	56	3	4.5	84	0	102	68

ARKANSAS RIVER BASIN

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07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER 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												
07...	63	130	.23	8.3	431	420	.59	2770	.443	2.0	.020	.07
DEC												
08...	78	150	.26	6.0	<10	442	.60	7350	--	--	<.010	--
JAN												
08...	41	56	.14	5.3	226	237	.31	154000	--	--	<.010	--
MAR												
09...	46	67	.10	5.7	253	240	.34	72400	--	--	<.010	--
APR												
08...	45	37	<.10	6.5	230	214	.31	95000	.589	2.6	.014	.05
MAY												
02...	96	110	.18	5.2	452	406	.61	140000	--	--	<.010	--
JUN												
08...	62	70	.17	5.7	316	292	.43	5030	.513	2.3	.039	.13
JUL												
13...	100	140	.22	.63	503	461	.68	31600	--	--	<.010	--
AUG												
10...	110	150	.28	.55	542	490	.74	11900	.086	.38	.026	.09
SEP												
08...	98	130	.24	1.1	462	435	.63	86.1	--	--	.023	.08

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- 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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT												
07...	.463	.058	.07	.33	.20	.39	.26	.85	.72	.104	.071	.084
DEC												
08...	.664	.137	.18	.21	.29	.35	.42	1.0	1.1	.066	.064	.071
JAN												
08...	.407	<.020	--	--	--	.62	.34	1.0	.74	.162	.036	.028
MAR												
09...	.491	.052	.07	.39	.22	.44	.28	.94	.77	.075	.032	.036
APR												
08...	.603	.025	.03	.58	.38	.60	.41	1.2	1.0	.145	.054	.050
MAY												
02...	<.050	.054	.07	.45	.28	.50	.33	--	--	.088	.043	.044
JUN												
08...	.552	.055	.07	.43	.30	.48	.35	1.0	.90	.078	.079	.050
JUL												
13...	<.050	.144	.19	.37	.32	.51	.46	--	--	.069	.040	.039
AUG												
10...	.112	.082	.11	.46	.30	.54	.38	.66	.49	.042	.028	.035
SEP												
08...	<.050	.101	.13	.47	.30	.58	.40	--	--	.099	.056	.059

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	PHOS- PHATE, ORTHO, 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)	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)
OCT											
07...	.26	3.5	.40	69	3.2	<1.0	2	94	<1.0	<1.0	2.0
DEC											
08...	.22	3.6	.30	70	2.4	<1.0	1	95	<1.0	<1.0	1.2
JAN											
08...	.09	4.8	2.0	36	5.5	<1.0	<1	64	<1.0	<1.0	<1.0
MAR											
09...	.11	4.1	.60	34	7.8	<1.0	<1	55	<1.0	<1.0	1.7
APR											
08...	.15	4.9	.50	37	3.6	<1.0	<1	64	<1.0	<1.0	1.2
MAY											
02...	.13	4.3	--	53	2.1	<1.0	1	91	<1.0	<1.0	2.3
JUN											
08...	.15	4.2	.40	50	6.7	<1.0	<1	76	<1.0	<1.0	1.5
JUL											
13...	.12	4.0	.90	70	8.1	<1.0	2	102	<1.0	<1.0	1.7
AUG											
10...	.11	4.1	.80	78	11	<1.0	2	107	<1.0	<1.0	1.6
SEP											
08...	.18	5.3	.60	71	2.8	<1.0	2	99	<1.0	<1.0	<1.0

DATE	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)	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)
OCT											
07...	<1.0	1.9	<3.0	<1.0	6	1.5	1.5	1.6	<1	<1.0	385
DEC											
08...	<1.0	2.2	<10	<1.0	7	6.6	1.4	1.6	<1	<1.0	356
JAN											
08...	<1.0	1.6	28	<1.0	4	7.2	<1.0	1.6	<1	<1.0	212
MAR											
09...	<1.0	2.0	34	<1.0	8	8.6	<1.0	1.3	<1	<1.0	209
APR											
08...	<1.0	2.0	12	<1.0	5	1.4	<1.0	1.4	<1	<1.0	251
MAY											
02...	<1.0	2.2	<10	<1.0	14	<1.0	1.0	1.5	<1	<1.0	436
JUN											
08...	<1.0	2.5	<10	<1.0	<4	1.3	<1.0	1.7	<1	<1.0	325
JUL											
13...	<1.0	1.9	<10	<1.0	8	3.7	1.5	1.8	<1	<1.0	488
AUG											
10...	<1.0	3.2	<10	<1.0	12	<1.0	1.7	2.0	<1	<1.0	481
SEP											
08...	<1.0	2.0	<10	<1.0	8	<1.0	1.6	1.7	<1	<1.0	430

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 1997 TO SEPTEMBER 1998

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	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)	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)
OCT											
07...	<6	<1.0	53	341	91	.425	.004	101	<.001	85.1	<.004
DEC											
08...	<6	<1.0	66	1100	93	.255	.004	115	<.001	88.1	<.004
JAN											
08...	<10	1.7	226	154000	86	.239	<.002	113	<.001	102	<.004
MAR											
09...	<10	1.4	56	16000	89	.093	<.002	105	<.001	94.6	<.004
APR											
08...	<10	1.6	120	49600	80	.294	.005	99.1	<.001	90.5	<.004
MAY											
02...	<10	1.7	118	36600	94	.274	<.002	105	<.001	95.5	<.004
JUN											
08...	<10	1.8	42	668	98	.271	.005	110	<.001	107	<.004
JUL											
13...	<10	1.2	52	3270	97	.478	.004	115	<.001	101	<.004
AUG											
10...	<10	1.8	58	1270	98	.523	.005	91.0	<.001	105	<.004
SEP											
08...	<10	1.2	50	9.3	99	.541	<.002	116	<.001	93.3	<.004

DATE	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)	P,P' DDE DISSOLV (UG/L) (34653)
OCT											
07...	<.005	.202	<.004	<.0020	.004	<.0020	<.0040	<.0040	E.0270	<.0030	<.0060
DEC											
08...	<.005	.068	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0167	<.0030	<.0060
JAN											
08...	<.005	.057	<.004	<.0020	E.004	<.0020	<.0040	<.0040	E.0342	<.0030	<.0060
MAR											
09...	<.005	.018	<.004	<.0020	<.002	<.0020	E.0034	<.0040	E.0114	<.0030	<.0060
APR											
08...	<.005	.015	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0113	<.0030	<.0060
MAY											
02...	<.005	.027	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0115	<.0030	<.0060
JUN											
08...	<.005	.094	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0164	<.0030	<.0060
JUL											
13...	<.005	.108	<.004	<.0020	.006	<.0020	<.0040	<.0040	E.0367	<.0030	<.0060
AUG											
10...	<.005	.121	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0413	<.0030	<.0060
SEP											
08...	<.005	.106	<.004	<.0020	<.002	<.0020	<.0040	<.0040	E.0512	<.0030	<.0060

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	METHYL-PARA- THION WAT FLT 0.7 U (UG/L) (82667)
OCT											
07...	.0205	<.0070	.0148	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
DEC											
08...	.0283	<.0070	.0324	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JAN											
08...	E.0104	<.0070	.0294	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
MAR											
09...	E.0057	<.0070	.0603	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
APR											
08...	<.0180	<.0070	.0379	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
MAY											
02...	E.0071	<.0070	.0351	<.004	<.0030	<.0020	<.0040	<.0020	E.0073	<.0020	<.0060
JUN											
08...	E.0119	<.0070	.0262	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
JUL											
13...	E.0102	<.0070	.0287	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
AUG											
10...	E.0146	<.0070	.0301	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
SEP											
08...	E.0091	<.0070	.0223	<.004	<.0030	<.0020	<.0040	<.0020	<.0070	<.0020	<.0060
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 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)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC PERCENT (91064)	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...	<.0020	<.0040	.0164	<.0040	<.0030	<.0020	<.0030	<.0130	132	<.0030	<.0170
DEC											
08...	<.0020	<.0040	E.0187	<.0040	<.0030	<.0020	<.0030	<.0130	130	<.0030	<.0170
JAN											
08...	<.0020	<.0040	.0404	<.0040	<.0030	<.0020	<.0030	<.0130	130	<.0030	<.0170
MAR											
09...	<.0020	<.0040	.0126	<.0040	<.0030	<.0020	<.0030	<.0130	106	<.0030	<.0170
APR											
08...	<.0020	<.0040	.0348	<.0040	<.0030	<.0020	<.0030	<.0130	108	<.0030	<.0170
MAY											
02...	<.0020	<.0040	<.0100	<.0040	<.0030	<.0020	<.0030	<.0130	110	<.0030	<.0170
JUN											
08...	<.0020	<.0040	.0285	<.0040	<.0030	<.0020	<.0030	<.0130	131	<.0030	<.0170
JUL											
13...	<.0020	<.0040	.0179	E.0031	<.0030	<.0020	<.0030	<.0130	114	<.0030	<.0170
AUG											
10...	<.0020	<.0040	.0277	<.0040	<.0030	<.0020	<.0030	<.0130	124	<.0030	<.0170
SEP											
08...	<.0020	<.0040	.0239	<.0040	<.0030	<.0020	<.0030	<.0130	119	<.0030	<.0170

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 1997 TO SEPTEMBER 1998

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
DEC											
08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JAN											
08...	<.0010	<.0040	E.0132	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAR											
09...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
APR											
08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
MAY											
02...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUN											
08...	<.0010	.0118	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
JUL											
13...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
AUG											
10...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020
SEP											
08...	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.0130	<.0010	<.0050	<.0020

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)
SEP							
18...	1351	80513	80513	400	2.80	11.2	20.0
18...	1353	80513	80513	400	11.2	14.0	20.0
18...	1356	80513	80513	400	6.40	32.0	60.0
18...	1357	80513	80513	400	25.6	32.0	60.0
18...	1359	80513	80513	400	5.40	27.0	100.0
18...	1401	80513	80513	400	21.6	21.6	100.0
18...	1403	80513	80513	400	4.60	23.0	140.0
18...	1405	80513	80513	400	18.4	23.0	140.0
18...	1406	80513	80513	400	3.40	17.0	180.0
18...	1407	80513	80513	400	13.6	17.0	180.0
18...	1409	80513	80513	400	3.40	17.0	220.0
18...	1410	80513	80513	400	13.6	17.0	220.0
18...	1412	80513	80513	400	3.40	17.0	260.0
18...	1413	80513	80513	400	13.6	17.0	260.0
18...	1415	80513	80513	400	3.80	19.0	300.0
18...	1416	80513	80513	400	15.2	19.0	300.0
18...	1418	80513	80513	400	5.20	26.0	340.0
18...	1419	80513	80513	400	20.8	26.0	340.0
18...	1421	80513	80513	400	4.00	20.0	380.0
18...	1422	80513	80513	400	16.0	20.0	380.0

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (MG/L) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
18...	21100	984	7.2	26.8	5.3	68	751
18...	--	987	7.2	26.1	5.1	64	751
18...	--	984	7.3	26.4	5.7	72	751
18...	--	989	7.3	26.1	5.2	65	751
18...	--	985	7.3	26.3	5.7	72	751
18...	--	991	7.3	26.0	5.2	65	751
18...	--	993	7.3	26.3	5.5	69	751
18...	--	993	7.3	26.1	5.2	66	751
18...	--	993	7.3	26.4	5.5	69	751
18...	--	993	7.3	26.1	5.2	66	751
18...	--	993	7.3	26.6	5.5	69	751
18...	--	992	7.3	26.2	5.2	66	751
18...	--	991	7.3	26.5	5.5	70	751
18...	--	993	7.3	26.1	5.2	66	751
18...	--	986	7.3	26.7	5.4	69	751
18...	--	986	7.3	26.0	5.2	65	751
18...	--	974	7.3	26.6	5.5	69	751
18...	--	992	7.3	26.0	5.1	65	751
18...	--	972	7.3	26.9	5.4	69	751
18...	--	989	7.3	26.0	5.1	64	751

ARKANSAS RIVER BASIN

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07264000 BAYOU METO NEAR LONOKE

LOCATION.--Lat 34°44'10", long 91°54'58", in SW1/4 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.--No estimated daily discharges. 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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	74	33	697	279	456	200	77	48	2.2	.98	1.1
2	29	113	45	493	230	453	213	64	33	1.2	1.3	3.2
3	18	138	59	307	202	384	226	52	18	1.1	1.1	4.0
4	13	115	61	225	184	311	210	46	14	1.9	.47	.89
5	9.7	145	77	191	181	279	186	55	12	3.0	.75	2.9
6	6.7	351	101	267	174	259	162	50	11	1.6	.77	4.3
7	5.8	428	99	664	151	365	147	57	21	1.1	.17	4.4
8	6.6	468	114	889	132	755	128	58	24	.80	.78	3.7
9	8.8	432	151	1050	119	915	131	56	26	.69	7.3	1.9
10	11	308	230	1170	132	978	114	51	19	2.0	5.8	1.2
11	13	199	287	1220	362	1020	100	45	15	2.5	6.9	3.4
12	17	139	269	1250	648	1030	92	41	12	11	6.2	1.8
13	23	154	222	1180	822	976	82	37	17	32	4.4	8.7
14	30	237	175	1040	1010	849	78	34	18	29	6.8	9.5
15	41	338	139	904	1150	678	71	37	10	22	8.9	24
16	55	447	117	770	1220	500	113	35	9.4	17	7.7	82
17	44	448	100	699	1230	508	237	23	7.4	15	8.4	152
18	29	341	83	655	1150	598	223	18	5.8	11	4.5	132
19	19	222	71	590	1070	690	174	17	4.8	2.9	3.1	98
20	14	154	63	499	1010	832	119	17	2.6	1.6	3.4	66
21	10	109	69	397	964	921	81	16	1.1	9.6	4.3	43
22	8.6	80	87	328	866	934	63	11	.90	6.8	4.0	30
23	9.2	65	122	319	722	909	58	12	.83	.86	2.8	24
24	14	54	510	373	549	832	52	15	3.3	.28	1.4	19
25	20	46	680	421	367	700	48	17	3.7	.09	.97	15
26	62	44	743	404	282	533	48	31	1.3	2.5	.41	12
27	96	43	828	386	288	366	45	126	.77	3.4	.14	10
28	75	39	913	400	367	280	48	187	.66	.23	.33	8.7
29	56	34	953	436	---	240	67	180	.46	.01	.44	7.5
30	37	31	930	409	---	218	79	127	2.1	.00	1.1	8.3
31	40	---	846	353	---	208	---	78	---	.23	1.6	---
TOTAL	858.4	5796	9177	18986	15861	18977	3595	1670	343.12	183.59	97.21	782.49
MEAN	27.7	193	296	612	566	612	120	53.9	11.4	5.92	3.14	26.1
MAX	96	468	953	1250	1230	1030	237	187	48	32	8.9	152
MIN	5.8	31	33	191	119	208	45	11	.46	.00	.14	.89
AC-FT	1700	11500	18200	37660	31460	37640	7130	3310	681	364	193	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1998, BY WATER YEAR (WY)

MEAN	63.2	249	466	421	506	554	515	445	159	58.4	49.5	69.3
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	1.77	2.84
(WY)	1957	1955	1955	1955	1972	1972	1960	1988	1988	1980	1980	1993

ARKANSAS RIVER BASIN

07264000 BAYOU METO NEAR LONOKE--CONTINUED

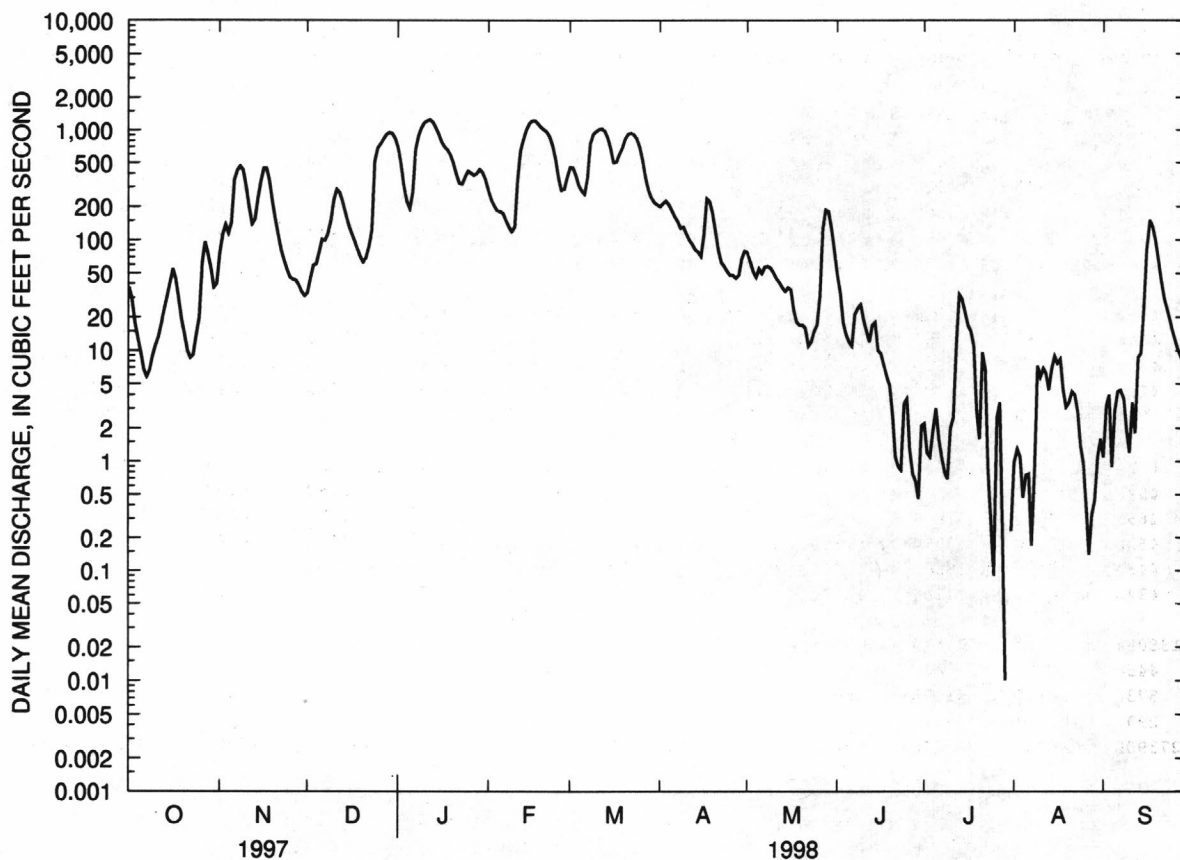
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1955 - 1998

ANNUAL TOTAL	122844.14		76326.81			
ANNUAL MEAN	337		209		295	
HIGHEST ANNUAL MEAN					550	1973
LOWEST ANNUAL MEAN					95.2	1963
HIGHEST DAILY MEAN	2740	Mar 10	1250	Jan 12	5570	Dec 29 1987
LOWEST DAILY MEAN	.00	Jun 10	.00	Jul 30	.00	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 10	.55	Jul 28	.00	Oct 18 1954
INSTANTANEOUS PEAK FLOW			1210	Jan 12	5750	Dec 29 1987
INSTANTANEOUS PEAK STAGE			18.69	Jan 12	27.11	Dec 29 1987
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	243700		151400		213900	
10 PERCENT EXCEEDS	952		748		881	
50 PERCENT EXCEEDS	139		58		87	
90 PERCENT EXCEEDS	7.1		1.4		6.7	



RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4000	4160	6340	29400	42300	40400	51000	11200	3960	3160	4620	4410
2	3400	4100	5990	31500	40000	34500	51800	10800	4760	3140	4510	4490
3	3270	4040	4760	34200	35300	28800	51200	10400	5030	2910	4520	4420
4	3380	3990	5650	32900	31300	25200	50800	10100	4420	2490	4640	3790
5	3750	4260	7900	33900	28600	22700	50100	9790	3540	2490	4610	2960
6	5050	4820	8970	60900	27400	20100	50300	9590	3450	2970	4440	2620
7	5600	4890	9860	84100	23000	17000	49300	9470	4510	3830	4010	2850
8	5730	4620	10400	86000	20400	14300	48400	9410	5010	4340	3750	2950
9	5400	5500	11400	79800	19600	11400	42500	9280	5190	4250	4210	2970
10	4880	5410	14400	79300	19600	12600	33600	9190	5170	3360	4480	2950
11	5430	4880	15200	77700	30000	22000	24900	9150	4490	2680	4570	2670
12	5240	4860	13200	82300	37800	23700	21200	9100	3410	3180	4660	2460
13	4860	4810	10900	82200	30100	21300	19900	9030	2950	4100	4450	2540
14	5310	4340	8910	77500	23700	24500	17700	8950	3200	4380	3480	3210
15	5640	4490	7400	74500	19500	25700	16400	8910	3850	4470	2790	4110
16	4960	5370	6370	71300	16600	24100	16000	8870	4380	4300	3510	6170
17	3720	5980	4900	68100	15800	33300	15100	8850	4570	3340	4380	6930
18	2990	6360	3560	66500	16700	54100	15500	8820	4400	2660	4640	6430
19	3560	6290	2910	64300	18800	55800	16700	7650	3580	3220	4670	4900
20	4360	5940	3080	61000	19700	56600	15400	5410	3010	4070	4430	5050
21	4390	5550	4780	59100	19500	61600	14300	4420	3070	4420	3380	6190
22	4360	5540	9250	58700	19000	64500	13800	3930	3340	4490	2660	5580
23	4360	5140	32500	57200	18600	66600	13100	4880	3400	4260	3310	5340
24	4140	4370	41000	56700	18200	70300	13300	6090	3340	3350	4190	5180
25	3570	4160	39900	54700	19800	70100	12800	6110	3230	2610	4440	4770
26	4070	4100	39000	52900	24100	65900	12800	5970	2850	3150	4500	3890
27	4590	3680	36100	52700	31100	62300	13600	5740	2480	4000	4330	3120
28	4650	3000	31800	52000	41000	57500	13000	5040	2570	4280	3340	3180
29	4620	3220	30000	51500	---	51100	11700	4240	3020	4340	2610	2820
30	4480	5260	28500	47800	---	49000	11400	4230	3180	4440	3220	2480
31	4320	---	29200	44400	---	49700	---	4320	---	4640	4130	---
TOTAL	138080	143130	484130	1865100	707500	1236700	787600	238940	113360	113320	125480	121430
MEAN	4454	4771	15620	60160	25270	39890	26250	7708	3779	3655	4048	4048
MAX	5730	6360	41000	86000	42300	70300	51800	11200	5190	4640	4670	6930
MIN	2990	3000	2910	29400	15800	11400	11400	3930	2480	2490	2610	2460
AC-FT	273900	283900	960300	3699000	1403000	2453000	1562000	473900	224800	224800	248900	240900

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1998, BY WATER YEAR (WY)

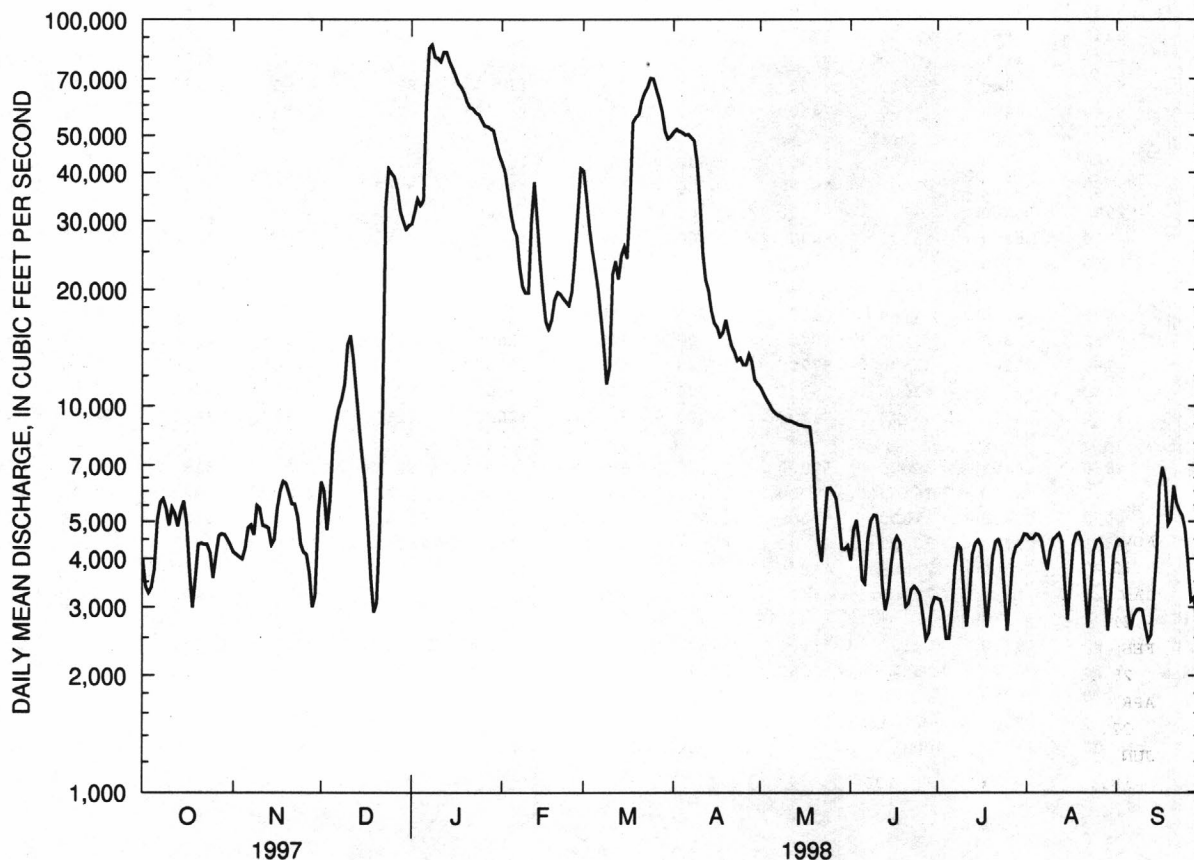
MEAN	8315	10930	12040	11360	14140	17110	17410	24280	22480	9863	5853	6071
MAX	41690	47140	47910	60160	38960	67730	61460	121000	94400	33990	39230	30340
(WY)	1946	1975	1992	1998	1946	1945	1990	1990	1957	1989	1950	1950
MIN	716	642	1206	1360	2127	2233	2096	4199	3098	1162	1025	909
(WY)	1957	1957	1957	1964	1964	1967	1956	1972	1988	1944	1944	1944

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1944 - 1998	
ANNUAL TOTAL	5794970		6074770			
ANNUAL MEAN	15880		16640		a13310	
HIGHEST ANNUAL MEAN					30420	
LOWEST ANNUAL MEAN					4383	
HIGHEST DAILY MEAN	69700	Feb 23	86000	Jan 8	268000	May 10 1990
LOWEST DAILY MEAN	2230	Sep 27	2460	Sep 12	384	Nov 28 1956
ANNUAL SEVEN-DAY MINIMUM	2600	Sep 23	2770	Sep 7	397	Oct 19 1956
INSTANTANEOUS PEAK FLOW			89100	Jan 8	b270000	May 10 1990
INSTANTANEOUS PEAK STAGE			16.39	Jan 8	c32.30	May 10 1990
INSTANTANEOUS LOW FLOW			2400	at times	378	Nov 28 1956
ANNUAL RUNOFF (AC-FT)	11490000		12050000		9639000	
10 PERCENT EXCEEDS	35400		51300		35800	
50 PERCENT EXCEEDS	8560		5500		5990	
90 PERCENT EXCEEDS	4060		3170		2310	

aPrior to regulaton, 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

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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 1997 TO SEPTEMBER 1998

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											
19...	1245	80513	81213	8630	1000	8.3	771	9.4	9.7	84	
JAN											
21...	1335	80513	81213	54400	1130	7.4	764	9.0	10.7	93	
FEB											
25...	1230	80513	81213	19800	1150	8.0	756	12.4	12.5	118	
APR											
22...	1330	80513	81213	13000	1260	8.3	760	19.1	10.3	112	
JUN											
18...	1315	80513	81213	4080	1240	8.1	758	29.4	9.0	119	
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE UREASE (COL / 100 ML) (31633)	STREP- TOCOC CI 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)	
NOV											
19...	<1	K9	63	240	63	21	97	45	3	12	
JAN											
21...	<3	<3	180	280	70	25	110	46	3	3.9	
FEB											
25...	<1	<1	52	300	79	25	100	42	3	3.6	
APR											
22...	K7	K10	K10	330	86	28	120	44	3	4.3	
JUN											
18...	K30	K13	K29	330	83	29	130	46	3	4.8	
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)
NOV											
19...	180	150	650	--	--	<.010	--	.170	.050	.06	
JAN											
21...	220	160	720	--	--	<.010	--	.220	.044	.06	
FEB											
25...	210	170	692	--	--	<.010	--	.290	.029	.04	
APR											
22...	210	180	778	.286	1.3	.014	.05	.300	.032	.04	
JUN											
18...	200	190	812	--	--	<.010	--	<.020	.016	.02	

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AM- 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, 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										
19...	.44	.49	.66	.070	.020	.010	.03	129	3010	96
JAN										
21...	.84	.88	1.1	.300	.040	.010	.03	2660	391000	32
FEB										
25...	.40	.43	.72	.100	<.020	.020	.06	1030	55100	29
APR										
22...	.76	.79	1.1	.100	<.020	.010	.03	326	11400	75
JUN										
18...	.72	.74	--	.110	<.020	<.010	--	334	3680	91

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- TION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
01...	1205	80513	80513	360	3.00	15.0	718
01...	1206	80513	80513	360	12.0	15.0	718
01...	1207	80513	80513	360	3.50	17.0	754
01...	1208	80513	80513	360	13.5	17.0	754
01...	1209	80513	80513	360	5.00	25.0	790
01...	1210	80513	80513	360	20.0	25.0	790
01...	1211	80513	80513	360	4.00	19.0	826
01...	1212	80513	80513	360	15.0	19.0	826
01...	1213	80513	80513	360	4.00	20.0	862
01...	1214	80513	80513	360	16.0	20.0	862
01...	1215	80513	80513	360	4.50	9.00	898
01...	1216	80513	80513	360	3.00	14.0	934
01...	1217	80513	80513	360	10.0	14.0	934
01...	1218	80513	80513	360	3.50	7.00	970
01...	1219	80513	80513	360	3.00	6.00	1010
01...	1220	80513	80513	360	5.00	10.0	1040
01...	1245	80513	81213	--	--	--	--

RED RIVER BASIN

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07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)		
SEP										
	01...	--	1390	8.0	30.1	7.0	93	763		
	01...	--	1390	7.9	30.1	6.9	92	763		
	01...	--	1410	8.0	30.2	7.4	98	763		
	01...	--	1410	8.0	30.2	7.3	98	763		
	01...	--	1430	8.0	30.2	7.3	97	763		
	01...	--	1420	8.0	30.2	7.2	96	763		
	01...	--	1430	8.0	30.2	7.3	97	763		
	01...	--	1430	7.9	30.2	7.2	96	763		
	01...	--	1440	8.0	30.2	7.2	96	763		
	01...	--	1440	7.9	30.1	7.2	96	763		
	01...	--	1440	7.9	30.2	7.2	96	763		
	01...	--	1450	7.9	30.3	7.1	95	763		
	01...	--	1450	7.9	30.1	7.0	93	763		
	01...	--	1450	7.9	30.2	7.1	94	763		
	01...	--	1450	7.9	30.2	7.0	94	763		
	01...	--	1440	7.9	30.2	7.0	94	763		
	01...	4510	1440	8.0	30.2	7.2	96	763		
		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)	
SEP										
	01...	1245	230	K51	330	360	88	33	150	47
		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	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)
SEP										
	01...	3	5.1	250	220	906	<.010	<.020	.010	.01
		NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
SEP										
	01...	1.2	1.2	.100	.040	.010	.03	185	2250	99

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.9	25.3	26.0	17.4	16.6	17.0	13.9	13.1	13.5	6.8	6.3	6.6
2	26.1	24.1	25.0	16.6	15.6	16.0	13.1	12.1	12.5	8.1	6.8	7.4
3	26.1	23.8	24.9	15.6	14.4	14.9	12.5	11.7	12.1	9.6	8.0	8.9
4	25.9	23.9	24.9	14.7	13.6	14.2	11.7	10.7	11.2	10.6	9.6	10.0
5	26.0	23.8	24.8	15.2	14.2	14.6	11.0	9.7	10.2	11.5	10.6	11.0
6	25.7	24.1	24.9	14.5	13.2	13.8	9.8	8.7	9.2	12.4	11.5	11.8
7	25.2	24.5	25.0	13.2	12.5	12.9	9.0	7.9	8.4	13.0	12.4	12.8
8	25.2	24.5	24.9	13.7	12.2	12.9	7.9	7.6	7.7	12.6	11.3	12.1
9	25.5	24.4	24.9	13.5	12.5	13.0	8.1	7.4	7.7	11.3	9.5	10.4
10	25.6	24.3	24.9	13.4	12.6	13.1	7.9	7.0	7.4	9.5	8.3	8.9
11	24.9	24.0	24.5	12.6	12.0	12.3	7.0	6.8	6.9	---	---	8.2
12	24.6	23.6	23.9	12.0	10.7	11.5	6.8	6.5	6.7	---	---	8.5
13	23.6	21.7	22.5	10.8	10.1	10.3	6.5	5.8	6.2	8.8	8.6	8.7
14	21.7	20.2	20.9	10.3	9.8	10.1	6.4	5.2	5.8	8.7	8.2	8.4
15	20.7	19.1	20.0	10.0	9.0	9.5	6.8	5.4	6.2	8.2	8.0	8.1
16	20.5	18.8	19.7	9.7	8.3	9.0	7.6	6.0	6.8	8.0	7.7	7.9
17	19.7	18.4	19.0	9.1	8.0	8.6	8.3	6.8	7.6	8.2	7.7	7.9
18	19.1	17.0	18.2	9.3	8.5	8.9	8.8	7.3	8.0	8.4	8.0	8.2
19	19.9	17.6	18.6	9.8	8.6	9.2	10.1	7.8	8.9	8.7	8.2	8.5
20	20.9	18.7	19.7	10.6	9.2	9.8	11.3	9.6	10.4	8.6	8.4	8.5
21	20.4	18.8	19.8	11.5	10.4	10.9	11.2	10.2	10.8	8.9	8.6	8.7
22	19.3	17.9	18.5	11.8	10.8	11.3	10.2	9.5	9.9	8.9	8.7	8.8
23	18.4	17.0	17.5	12.1	10.7	11.4	9.8	8.9	9.5	8.7	8.3	8.5
24	19.2	16.9	17.8	12.3	10.8	11.5	8.9	8.0	8.5	8.4	7.9	8.2
25	19.7	18.4	18.9	12.8	11.5	12.1	8.0	7.7	7.8	8.0	7.7	7.9
26	19.0	15.6	16.7	14.4	12.8	13.6	7.8	7.3	7.6	8.1	7.9	8.0
27	16.1	14.8	15.4	15.4	14.0	14.6	7.3	6.8	7.0	8.3	7.7	8.0
28	15.1	13.8	14.4	16.5	15.1	15.9	6.8	6.1	6.4	8.6	7.9	8.2
29	14.7	13.8	14.2	16.4	15.2	15.8	6.2	5.8	6.0	9.0	8.4	8.6
30	15.6	14.4	14.9	15.2	13.8	14.4	6.4	5.7	6.1	9.2	8.5	8.9
31	17.4	15.5	16.4	---	---	---	6.7	6.0	6.3	9.2	8.9	9.0
MONTH	26.9	13.8	20.7	17.4	8.0	12.4	13.9	5.2	8.4	---	---	8.9

RED RIVER BASIN

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07337000 RED RIVER AT INDEX--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.3	9.0	9.1	12.4	11.7	12.1	16.3	15.6	15.9	21.4	18.9	20.1
2	9.4	9.0	9.2	11.8	11.2	11.5	16.1	15.4	15.8	21.2	19.5	20.5
3	9.8	8.9	9.3	11.5	10.6	11.1	16.5	15.7	16.0	22.3	20.0	21.2
4	10.1	9.3	9.7	11.5	10.8	11.1	16.3	15.6	16.0	23.1	20.6	21.9
5	9.8	9.3	9.5	12.3	11.5	11.8	---	---	15.8	22.9	21.4	22.2
6	9.3	8.8	9.1	12.1	11.6	11.8	15.9	15.1	15.5	23.7	21.9	22.8
7	9.1	8.3	8.7	11.6	11.4	11.5	16.8	15.6	16.1	24.8	22.8	23.7
8	8.7	8.2	8.4	11.4	10.2	11.1	17.4	16.4	16.8	25.1	23.3	24.3
9	9.0	8.1	8.5	10.4	9.3	9.9	17.2	16.3	16.8	24.9	23.0	23.8
10	9.3	8.8	9.0	9.8	8.4	9.2	17.7	16.4	17.0	24.8	22.7	23.8
11	9.9	9.1	9.5	9.0	8.2	8.6	18.2	16.7	17.4	25.6	23.2	24.5
12	9.9	9.4	9.7	8.6	7.6	8.2	18.7	17.2	17.9	26.1	24.0	25.1
13	10.5	9.8	10.1	8.2	8.0	8.1	19.3	17.8	18.4	26.4	24.4	25.5
14	10.9	10.0	10.4	8.4	8.0	8.2	20.7	18.7	19.6	26.3	24.9	25.6
15	10.6	10.0	10.3	9.3	8.2	8.7	21.3	19.8	20.4	26.1	25.0	25.6
16	10.3	10.0	10.1	10.2	9.3	9.7	21.9	20.5	21.1	27.1	24.8	26.0
17	10.2	9.9	10.2	11.6	10.2	10.9	21.1	19.9	20.4	26.8	25.2	26.1
18	10.6	9.4	10.0	12.1	11.3	11.7	20.4	19.1	19.5	27.3	25.2	26.3
19	10.8	10.0	10.4	12.5	11.8	12.2	19.9	18.2	19.0	27.3	25.7	26.6
20	11.0	10.0	10.4	11.8	10.7	11.2	19.8	18.4	19.0	27.7	25.8	26.7
21	11.2	10.1	10.6	10.9	10.0	10.5	19.9	18.4	19.1	28.6	26.4	27.4
22	11.3	10.9	11.0	11.0	10.2	10.6	19.8	18.2	19.0	28.7	27.2	27.9
23	12.1	10.9	11.4	11.8	10.7	11.2	20.2	17.9	19.0	28.2	27.1	27.6
24	12.7	11.3	12.0	12.3	11.6	11.9	20.4	18.4	19.4	27.5	26.8	27.1
25	12.8	12.3	12.6	13.3	12.2	12.7	20.7	19.1	19.8	27.6	26.4	27.0
26	13.2	12.6	12.9	14.5	13.2	13.8	20.4	19.4	19.8	27.7	26.6	27.1
27	13.0	12.3	12.7	15.2	14.4	14.8	20.4	19.3	19.8	27.2	26.1	26.6
28	12.8	12.1	12.5	16.1	15.1	15.5	20.8	19.3	19.9	26.4	24.8	25.4
29	---	---	---	16.5	15.6	16.0	20.7	18.9	19.8	27.5	24.2	25.6
30	---	---	---	16.6	16.0	16.3	20.7	18.7	19.7	29.5	26.5	27.8
31	---	---	---	16.7	16.1	16.4	---	---	---	30.7	28.3	29.4
MONTH	13.2	8.1	10.3	16.7	7.6	11.6	---	---	18.3	30.7	18.9	25.2

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	31.6	29.0	30.2	31.8	30.5	31.3	32.5	30.2	31.3	31.3	29.5	30.4
2	31.3	29.2	30.3	31.5	29.4	30.4	32.9	30.4	31.5	31.0	29.2	30.0
3	31.0	29.5	30.3	33.3	28.1	30.2	32.4	30.5	31.5	30.9	28.8	29.8
4	30.9	29.5	30.2	33.8	27.4	30.1	30.6	29.3	29.9	30.8	28.8	29.8
5	30.3	27.4	28.7	37.2	27.2	31.3	31.1	28.8	29.7	30.2	27.7	29.0
6	27.4	25.5	26.4	36.6	28.8	32.6	30.1	29.0	29.4	34.4	24.9	28.5
7	26.6	24.8	25.7	33.7	31.3	32.4	29.8	28.4	29.0	32.2	26.3	29.0
8	26.4	24.7	25.5	33.9	31.5	32.7	31.0	28.0	29.3	32.8	27.4	29.9
9	27.9	25.8	26.7	34.3	32.1	33.0	31.5	28.8	30.1	29.6	23.0	26.1
10	29.0	26.8	27.7	33.9	31.8	32.6	31.3	29.6	30.4	24.9	22.1	23.7
11	28.5	27.4	27.9	37.3	29.5	33.5	30.8	29.3	29.9	23.9	22.4	23.2
12	30.2	27.3	28.5	32.9	29.8	31.4	29.9	28.7	29.2	22.8	21.9	22.3
13	32.1	27.5	30.0	32.0	30.3	31.1	29.2	28.2	28.7	24.4	22.7	23.4
14	31.0	28.9	30.0	32.6	30.4	31.4	30.3	28.0	28.9	24.4	23.6	24.0
15	31.1	28.7	29.9	33.4	30.9	32.1	30.5	26.4	28.4	24.3	23.6	23.9
16	31.0	28.5	29.8	33.6	31.5	32.5	31.3	28.1	29.7	---	---	23.5
17	30.8	28.9	29.8	33.1	30.3	31.9	31.7	29.2	30.4	25.6	23.4	24.3
18	30.2	29.0	29.6	37.2	28.6	32.3	32.5	29.8	30.9	26.9	24.8	25.8
19	31.3	28.8	29.9	33.6	29.5	32.0	32.6	30.4	31.4	28.2	26.0	27.0
20	32.2	29.2	30.7	33.9	31.5	32.6	---	---	31.4	29.2	27.1	28.0
21	32.8	28.7	30.9	33.6	31.6	32.5	31.5	28.0	30.1	29.7	27.9	28.9
22	32.5	30.2	31.3	33.4	30.9	32.0	32.3	26.1	29.0	29.8	28.1	29.1
23	32.5	30.5	31.5	32.7	30.9	31.7	31.7	27.8	30.0	29.4	28.0	28.8
24	32.6	30.7	31.5	32.4	29.0	30.7	32.1	29.8	30.9	29.5	27.7	28.6
25	32.7	30.6	31.7	34.9	28.3	31.3	32.8	30.3	31.4	29.5	27.9	28.7
26	33.0	28.3	30.6	33.0	28.9	31.2	33.0	30.7	31.7	29.4	27.9	28.6
27	31.4	26.7	29.0	33.1	30.8	31.9	32.6	30.5	31.4	30.1	27.5	28.8
28	31.5	25.7	29.1	33.1	31.1	32.0	32.2	29.5	31.0	30.1	28.2	29.1
29	32.5	28.2	30.6	33.0	31.0	32.0	32.5	27.7	30.3	30.8	27.1	29.0
30	32.5	30.1	31.3	32.5	30.9	31.6	32.3	28.9	30.7	34.9	26.1	29.4
31	---	---	---	32.3	30.2	31.2	32.0	30.3	31.1	---	---	---
MONTH	33.0	24.7	29.5	37.3	27.2	31.8	---	---	30.3	---	---	27.4

RED RIVER BASIN

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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.--No estimated daily discharges. Records good. Some regulation since Oct. 3, 1968, by Broken Bow Lake (Oklahoma), 31.4 mi upstream, capacity, 1,368,000 acre-ft, and since June 1, 1969, by Pine Creek Lake (Oklahoma), 73.3 mi upstream, capacity, 465,800 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1915, reached a stage of 38.0 ft, discharge, 124,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	3260	2190	14900	8720	6350	7100	892	653	1080	596	598
2	844	3940	2610	15200	6750	5080	9080	765	776	1020	493	485
3	717	2940	5520	14900	4490	6710	6900	658	923	1110	396	474
4	639	3020	8220	14600	3220	6710	4730	584	852	811	593	467
5	574	3530	8770	14800	3440	6950	2840	478	997	768	507	463
6	505	6390	7800	17900	3100	6640	2230	421	1000	935	709	434
7	555	7560	6750	18900	2350	4420	2100	480	780	1290	647	350
8	614	5850	8300	20300	1250	4930	1950	657	644	986	607	418
9	711	4770	11300	18800	1000	4580	1920	738	757	1160	564	449
10	1780	4350	12800	14300	1900	5930	1860	1010	866	959	537	445
11	2340	3350	11800	12200	14900	7790	1180	753	859	950	534	446
12	1560	1900	10500	19300	16700	8970	654	1200	869	625	547	500
13	1520	1670	8060	16900	13100	8760	505	2410	1290	484	647	892
14	4040	2840	3710	13600	10600	6940	866	2240	828	613	591	1640
15	3170	4580	1930	14900	10600	3700	1690	1580	877	662	553	5510
16	1970	4800	2050	16100	10200	3920	2050	1500	1010	659	595	12600
17	1930	4300	2550	16600	10700	9660	809	651	940	659	450	12100
18	2180	3860	2280	16700	13000	12600	675	417	1650	659	480	9430
19	2260	2700	1970	16500	13200	11800	443	2220	1500	547	525	7800
20	2250	2050	1300	16200	12200	12600	747	1730	984	454	512	7860
21	2500	1260	2600	15800	10300	12600	917	884	672	1170	512	7810
22	2520	1180	8140	15900	7410	9290	553	541	581	1970	515	7720
23	2510	887	9790	14200	6180	8120	397	474	1760	1770	442	7650
24	2250	621	13600	14900	7590	11800	385	606	1450	1550	397	7450
25	1290	550	15600	14700	7030	13800	350	704	1640	747	453	6830
26	1290	527	12900	15400	7490	14400	317	758	1580	527	488	5140
27	1280	1330	10500	16200	10100	14100	1530	596	1510	415	476	2080
28	1400	1040	9100	16300	8480	10900	1920	1350	965	561	484	1310
29	2560	3340	8490	16500	---	7530	1430	1950	784	559	491	1370
30	2340	3090	11600	16200	---	6820	1170	1260	1070	590	476	1700
31	2020	---	13900	13000	---	6290	---	903	---	609	621	---
TOTAL	53359	91485	236630	492700	226000	260690	59298	31410	31067	26899	16438	112421
MEAN	1721	3050	7633	15890	8071	8409	1977	1013	1036	868	530	3747
MAX	4040	7560	15600	20300	16700	14400	9080	2410	1760	1970	709	12600
MIN	505	527	1300	12200	1000	3700	317	417	581	415	396	350
AC-FT	105800	181500	469400	977300	448300	517100	117600	62300	61620	53350	32600	223000

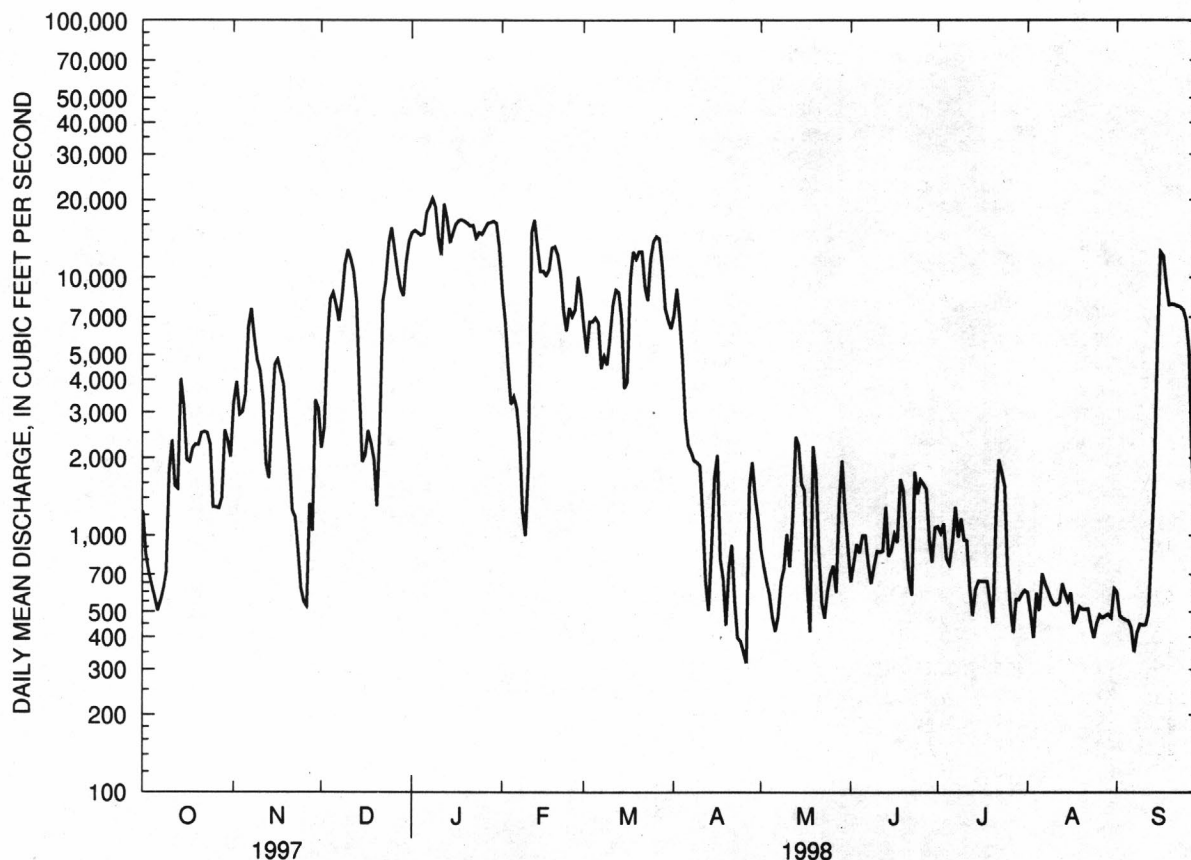
RED RIVER BASIN

07340000 LITTLE RIVER NEAR HORATIO--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1998, BY WATER YEAR (WY)

MEAN	2069	4600	6438	4963	5710	6921	5625	6215	4191	1624	1151	1506
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1969 - 1998	
ANNUAL TOTAL	1617268		1638397		^a 4243	
ANNUAL MEAN	4431		4489		7523	
HIGHEST ANNUAL MEAN					1547	
LOWEST ANNUAL MEAN					57700	
HIGHEST DAILY MEAN	26200	Feb 22	20300	Jan 8	1547	1976
LOWEST DAILY MEAN	359	Jun 9	317	Apr 26	^b 121	Dec 12 1971
ANNUAL SEVEN-DAY MINIMUM	406	Jun 9	429	Sep 5	152	Oct 5 1972
INSTANTANEOUS PEAK FLOW			20600	Jan 8	^c 65100	Oct 4 1972
INSTANTANEOUS PEAK STAGE			23.03	Jan 8	^d 32.84	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	3208000		3250000		3074000	
10 PERCENT EXCEEDS	14000		13600		12600	
50 PERCENT EXCEEDS	2000		1900		1820	
90 PERCENT EXCEEDS	595		503		358	

^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

RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	462	238	114	125	206	448	141	79	13	10	12
2	12	215	172	109	109	166	293	112	59	171	10	12
3	12	134	348	106	94	137	222	92	47	118	10	12
4	11	94	292	169	84	119	168	77	42	44	22	11
5	11	2100	208	2550	78	134	139	69	70	32	23	10
6	11	631	157	1180	72	120	122	93	51	26	34	10
7	11	301	134	1010	67	416	111	88	40	23	23	9.9
8	13	191	617	1340	63	743	98	70	35	21	18	9.3
9	984	138	431	665	55	511	87	60	34	20	16	9.3
10	416	118	279	402	1030	334	77	56	41	20	16	9.0
11	112	96	198	288	2100	242	70	50	67	18	85	9.2
12	67	96	153	286	571	188	66	45	49	19	52	22
13	1040	419	124	263	317	158	66	42	38	21	37	175
14	243	498	106	246	214	138	65	39	31	19	28	383
15	119	317	90	217	166	147	63	40	27	17	23	624
16	76	216	79	184	157	736	620	37	24	16	20	458
17	55	162	71	159	460	1030	312	34	22	15	18	207
18	42	128	64	137	512	580	196	32	21	14	17	114
19	34	103	58	120	341	636	148	31	22	24	15	72
20	29	86	65	105	288	575	120	29	22	17	15	49
21	26	76	226	99	233	371	120	28	19	14	14	37
22	25	66	241	292	199	263	96	28	17	14	14	34
23	41	57	868	345	162	203	85	27	16	17	13	32
24	206	50	2610	256	133	165	77	27	15	16	13	26
25	131	45	725	202	119	138	72	28	14	14	13	23
26	172	42	429	327	479	121	70	40	13	13	12	20
27	111	40	323	348	400	125	1670	53	13	12	12	19
28	80	67	267	279	276	162	501	359	14	11	13	18
29	63	740	218	222	---	143	269	251	14	10	15	17
30	52	391	172	176	---	134	185	204	13	10	16	16
31	1510	---	137	145	---	752	---	119	---	10	13	---
TOTAL	5727	8079	10100	12341	8904	9893	6636	2401	969	809	640	2459.7
MEAN	185	269	326	398	318	319	221	77.5	32.3	26.1	20.6	82.0
MAX	1510	2100	2610	2550	2100	1030	1670	359	79	171	85	624
MIN	11	40	58	99	55	119	63	27	13	10	10	9.0
AC-FT	11360	16020	20030	24480	17660	19620	13160	4760	1920	1600	1270	4880
CFSM	2.06	3.01	3.64	4.44	3.55	3.56	2.47	.86	.36	.29	.23	.92
IN.	2.38	3.35	4.19	5.12	3.70	4.11	2.76	1.00	.40	.34	.27	1.02

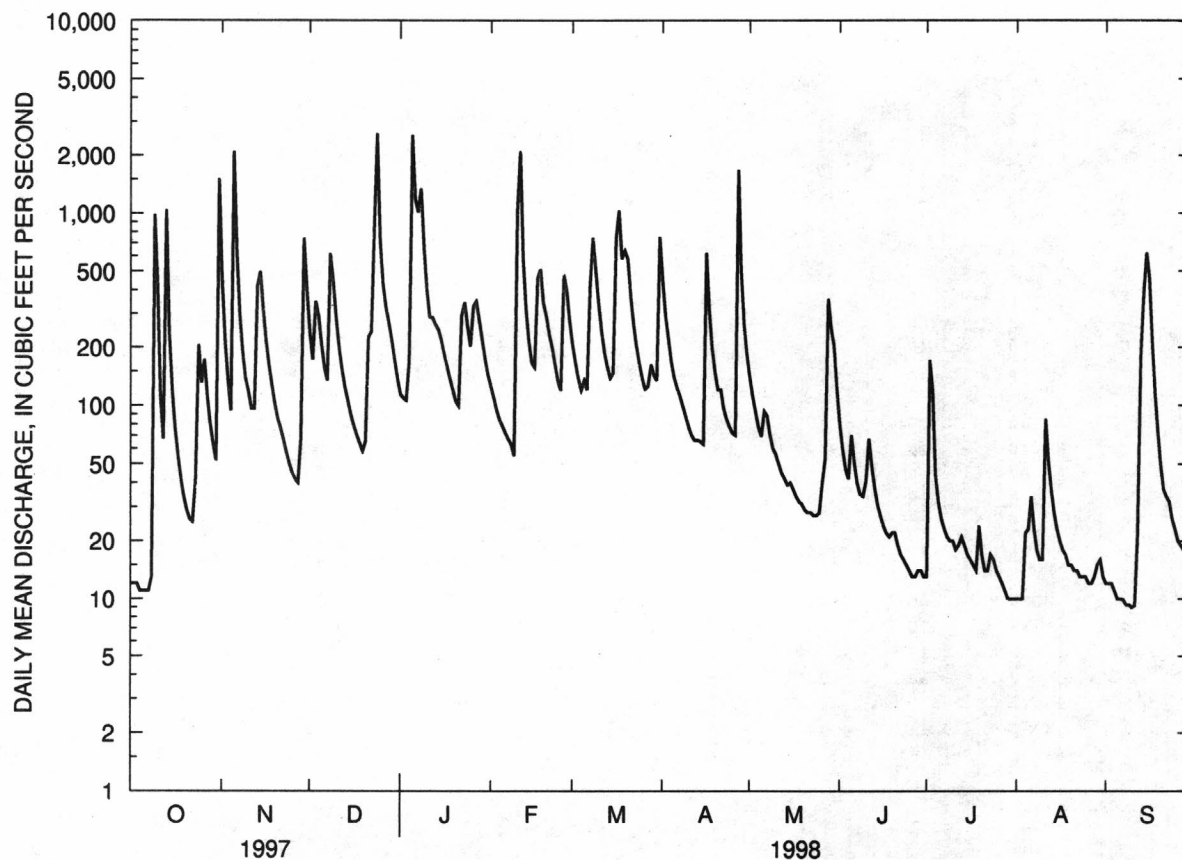
RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1998, BY WATER YEAR (WY)

MEAN	128	238	319	233	245	360	286	254	139	87.2	28.9	58.4
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1967 - 1998	
ANNUAL TOTAL	65210.8		68958.7			
ANNUAL MEAN	179		189		198	
HIGHEST ANNUAL MEAN					358	
LOWEST ANNUAL MEAN					86.3	
HIGHEST DAILY MEAN	3200	Feb 21	2610	Dec 24	15800	Dec 9 1971
LOWEST DAILY MEAN	9.6	Aug 30	9.0	Sep 10	7.2	Aug 29 1972
ANNUAL SEVEN-DAY MINIMUM	10	Aug 25	9.5	Sep 5	7.4	Aug 27 1972
INSTANTANEOUS PEAK FLOW			8050	Dec 23	^a 32000	Dec 2 1982
INSTANTANEOUS PEAK STAGE			11.24	Dec 23	19.50	Dec 2 1982
INSTANTANEOUS LOW FLOW			7.4	Aug 1	7.2	Aug 28-31 1972
ANNUAL RUNOFF (AC-FT)	129300		136800		143500	
ANNUAL RUNOFF (CFSM)	1.99		2.11		2.21	
ANNUAL RUNOFF (INCHES)	27.07		28.63		30.04	
10 PERCENT EXCEEDS	423		452		407	
50 PERCENT EXCEEDS	61		84		66	
90 PERCENT EXCEEDS	13		13		15	

^aFrom rating curve extended above 11,000 ft³/s on basis of step-backwater computations

RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

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)
JUN 19...	0715	80513	81213	30	55	7.4	745	25.5	7.6	95	29
DATE	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 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)
JUN 19...	220	21	5.9	1.5	1.9	16	.2	.70	172	3.3	1.6
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, 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 DIS. (MG/L AS N) (00623)
JUN 19...	<.10	7.4	40	126	.05	3.24	<.010	<.020	.010	.01	<.20
DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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)
JUN 19...	<.010	15	12	<.50	<.50	<1.0	<1.0	2.0	20	<1.0	<4
DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	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)	
JUN 19...	8.9	<2.0	<1.0	<1.0	20	<1	1.8	8	.65	94	

RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
02...	0746	80513	80513	100	.50	1.00	5.00
02...	0747	80513	80513	100	.50	1.00	15.0
02...	0748	80513	80513	100	.50	1.00	25.0
02...	0749	80513	80513	100	.50	1.00	35.0
02...	0750	80513	80513	100	.50	1.00	45.0
02...	0751	80513	80513	100	.50	1.00	55.0
02...	0752	80513	80513	100	.50	1.00	65.0
02...	0753	80513	80513	100	.50	1.00	75.0
02...	0754	80513	80513	100	.50	1.00	85.0
02...	0755	80513	80513	100	.50	1.00	95.0
02...	0815	80513	81213	--	--	--	--

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
02...	--	73	--	25.5	6.8	86	742
02...	--	73	--	25.6	7.3	91	742
02...	--	73	--	25.6	7.3	92	742
02...	--	73	--	25.6	7.3	92	742
02...	--	73	--	25.6	7.3	92	742
02...	--	73	--	25.6	7.2	91	742
02...	--	73	--	25.6	7.2	90	742
02...	--	73	--	25.6	7.1	89	742
02...	--	74	--	25.6	7.0	88	742
02...	--	74	--	25.2	6.7	84	742
02...	10	73	7.8	25.6	7.3	92	742

DATE	TIME	COLI-	STREP-	HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	ANC	SULFATE	
		FORM,	TOCOCCI							WATER		
		FECAL,	FECAL,							UNFLTRD		
		0.7	KF AGAR							FET		
UM-MF	(COLS.	(MG/L	SOLVED	SOLVED	SOLVED	TION	SOLVED	FIELD	SOLVED			
(COLS./	PER	AS	(MG/L	(MG/L	(MG/L	SODIUM	RATIO	(MG/L	MG/L AS	(MG/L		
100 ML)	100 ML)	CAC03)	AS CA)	AS MG)	AS NA)	PERCENT		AS K)	CAC03	AS S04)		
(31625)	(31673)	(00900)	(00915)	(00925)	(00930)	(00932)	(00931)	(00935)	(00410)	(00945)		
SEP												
02...	0815	K8	300	30	8.9	1.9	2.4	14	.2	.70	25	3.8

RED RIVER BASIN

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07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

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 CONSTITUENTS, 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)
SEP 02...	1.9	<.10	6.8	44	42	.06	1.19	<.010	.030	.020	.03
DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)
SEP 02...	<.20	<.010	20	13	<.50	<.50	<1.0	<1.0	<1.0	30	<1.0
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)
SEP 02...	<4	15	<2.0	<1.0	<1.0	25	<1	2.9	6	.16	93

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	249	154	829	285	556	430	351	34	29	32	31
2	15	207	417	792	278	508	374	349	28	29	32	31
3	13	34	497	423	266	403	363	342	26	31	32	25
4	12	24	488	409	229	311	302	325	40	30	36	25
5	12	88	293	1760	211	308	285	106	119	31	39	25
6	12	174	177	3060	148	307	273	58	239	30	65	24
7	12	77	160	2400	129	279	209	56	94	30	49	24
8	13	48	545	1940	125	796	130	45	63	30	47	24
9	17	40	547	739	122	571	95	27	53	30	39	24
10	18	35	402	912	344	685	74	24	52	34	36	23
11	14	32	356	981	3910	640	68	23	48	33	38	23
12	12	33	422	3820	1330	574	64	22	45	31	70	28
13	20	58	306	1190	837	348	60	22	42	34	54	41
14	30	160	289	926	764	274	58	21	40	33	48	42
15	15	113	278	1200	707	264	56	21	38	32	39	180
16	13	77	173	1070	775	481	55	21	36	31	36	200
17	14	56	157	967	1280	1550	53	20	35	32	35	94
18	221	48	152	910	1530	773	49	19	34	32	35	44
19	225	43	125	871	923	757	47	19	33	31	36	28
20	169	39	93	841	986	831	45	19	32	32	36	23
21	22	36	64	827	917	749	47	19	32	31	36	21
22	17	34	107	882	871	703	48	18	30	31	36	19
23	20	32	126	941	861	658	44	18	29	31	37	20
24	30	30	2200	853	799	510	42	18	29	32	37	19
25	28	28	1110	815	568	379	40	17	28	32	36	18
26	19	28	598	964	1140	314	40	17	29	32	36	18
27	18	27	605	1080	992	287	201	20	30	32	33	17
28	17	32	516	800	640	237	166	346	31	31	32	18
29	16	484	489	710	---	226	364	147	30	32	32	17
30	21	294	742	558	---	213	359	70	29	32	32	17
31	231	---	847	302	---	640	---	47	---	31	32	---
TOTAL	1312	2660	13435	34772	21967	16132	4441	2627	1428	972	1213	1143
MEAN	42.3	88.7	433	1122	785	520	148	84.7	47.6	31.4	39.1	38.1
MAX	231	484	2200	3820	3910	1550	430	351	239	34	70	200
MIN	12	24	64	302	122	213	40	17	26	29	32	17
AC-FT	2600	5280	26650	68970	43570	32000	8810	5210	2830	1930	2410	2270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1998, BY WATER YEAR (WY)

MEAN	180	406	689	532	654	802	583	522	355	223	55.3	58.5
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

RED RIVER BASIN

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07341200 SALINE RIVER NEAR LOCKESBURG--CONTINUED

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1975 - 1998

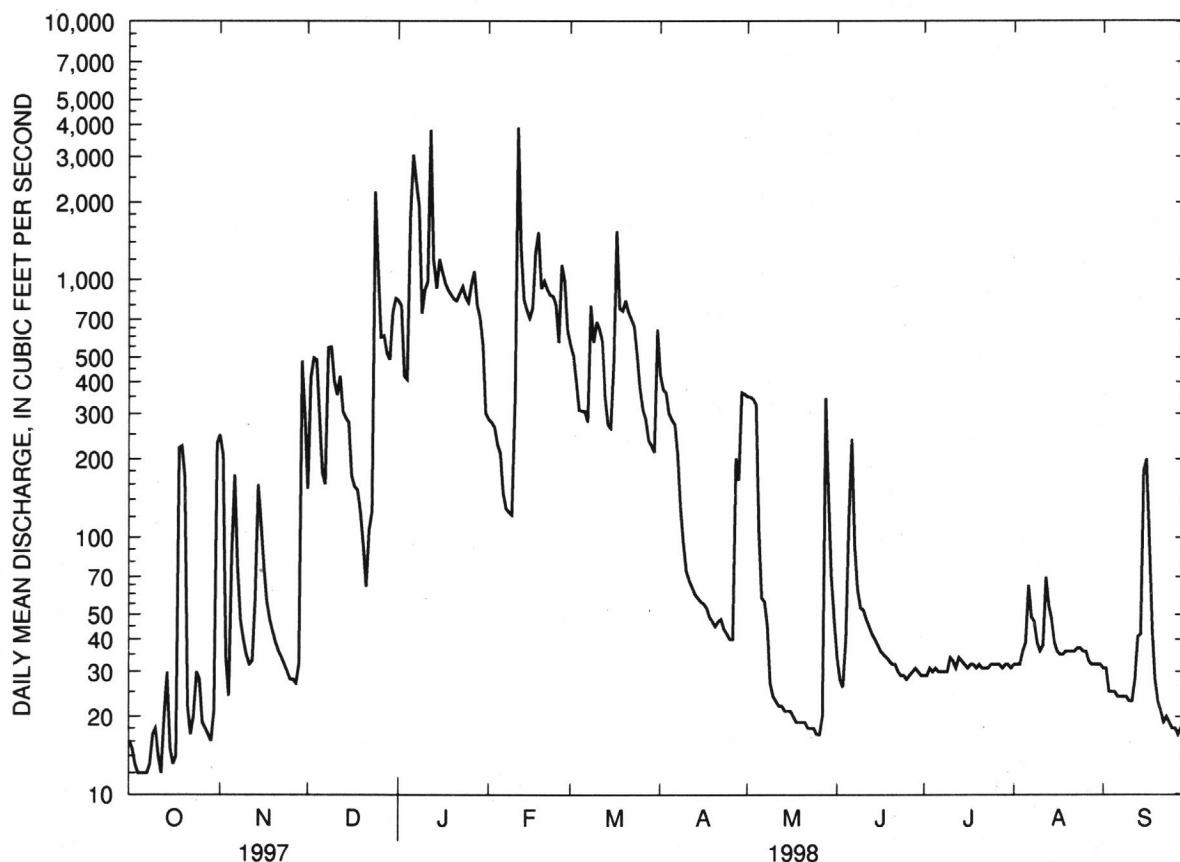
ANNUAL TOTAL	127499		102102			
ANNUAL MEAN	349		280		^a 421	
HIGHEST ANNUAL MEAN					733	1983
LOWEST ANNUAL MEAN					87.0	1996
HIGHEST DAILY MEAN	6420	Apr 5	3910	Feb 11	36800	Dec 3 1982
LOWEST DAILY MEAN	12	Oct 4	12	Oct 4	^b 2.3	Oct 16 1977
ANNUAL SEVEN-DAY MINIMUM	13	Oct 2	13	Oct 2	2.4	Oct 14 1977
INSTANTANEOUS PEAK FLOW			4970	Feb 11	^c 59600	Dec 3 1982
INSTANTANEOUS PEAK STAGE			15.58	Feb 11	^d 20.52	Dec 3 1982
ANNUAL RUNOFF (AC-FT)	252900		202500		304800	
10 PERCENT EXCEEDS	963		833		1020	
50 PERCENT EXCEEDS	71		48		118	
90 PERCENT EXCEEDS	15		19		17	

^aPrior to regulation, water years 1964-74, 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.--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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	1750	944	644	657	997	1750	591	912	57	21	8.7
2	31	833	742	574	582	821	1170	486	666	54	19	8.6
3	30	563	1080	540	507	699	935	421	e500	53	19	8.3
4	29	435	1150	559	452	612	754	353	e430	53	22	7.9
5	28	618	871	6300	410	723	638	310	e450	50	35	7.4
6	26	1310	705	6040	374	798	560	347	e1000	48	44	7.1
7	25	766	605	4310	342	837	500	706	e500	44	51	6.7
8	26	579	1690	6630	317	3710	444	498	e300	40	51	6.1
9	40	475	1770	3640	294	2630	391	401	230	38	46	6.6
10	3540	451	1290	2310	1000	1750	349	372	204	37	40	15
11	686	495	977	1730	11900	1320	312	326	191	38	36	16
12	397	461	796	1660	3850	1040	279	274	217	56	39	25
13	1720	1220	668	1310	2260	873	254	230	850	49	43	e80
14	1220	2280	580	1080	1530	759	234	199	373	50	44	e150
15	608	1370	509	1080	1140	738	232	183	251	44	34	e500
16	422	966	452	917	1060	2600	808	169	200	40	28	600
17	321	762	406	793	1710	5560	865	152	168	36	25	424
18	251	634	363	693	2180	2960	559	138	148	34	24	304
19	202	535	329	621	1570	3550	441	126	260	32	21	213
20	174	460	301	552	1270	3700	366	114	195	31	20	155
21	152	406	1310	509	1010	2200	324	106	170	29	23	131
22	138	361	1810	911	875	1560	295	98	141	29	22	118
23	135	318	1380	1330	829	1180	259	91	118	29	18	121
24	396	282	11400	964	688	949	227	86	102	33	15	101
25	544	251	3960	804	599	797	206	83	89	36	13	94
26	547	224	2330	1270	1550	676	192	591	79	37	12	79
27	491	204	1910	1770	1840	604	5630	2310	73	35	11	69
28	372	204	1420	1310	1270	803	1980	5680	68	29	10	62
29	303	1740	1170	1060	---	665	1050	4000	65	25	9.5	57
30	256	1430	948	879	---	571	743	2480	61	23	9.0	53
31	2260	---	767	752	---	2240	---	1440	---	22	8.9	---
TOTAL	15404	22383	44633	53542	42066	48922	22747	23361	9011	1211	813.4	3434.4
MEAN	497	746	1440	1727	1502	1578	758	754	300	39.1	26.2	114
MAX	3540	2280	11400	6630	11900	5560	5630	5680	1000	57	51	600
MIN	25	204	301	509	294	571	192	83	61	22	8.9	6.1
AC-FT	30550	44400	88530	106200	83440	97040	45120	46340	17870	2400	1610	6810

RED RIVER BASIN

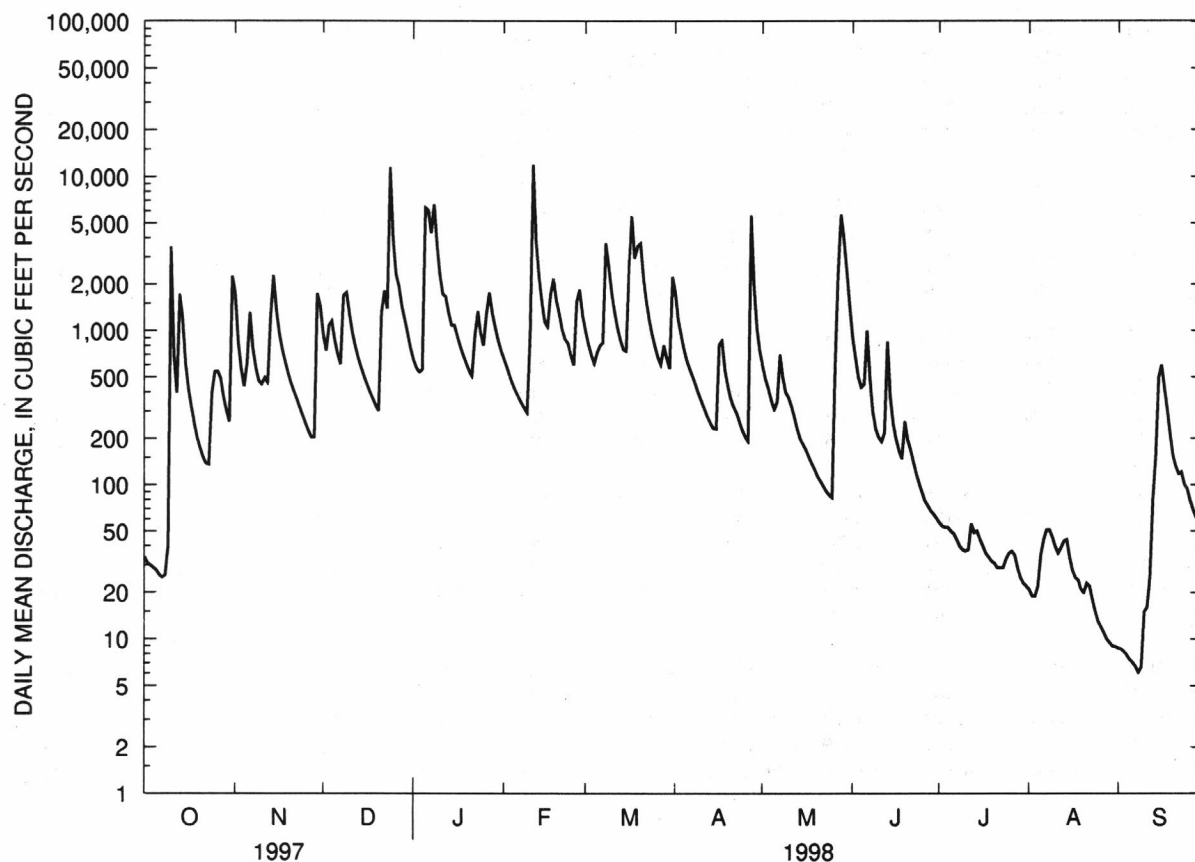
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07356000 OUACHITA RIVER NEAR MOUNT IDA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1998, BY WATER YEAR (WY)

MEAN	361	749	1039	913	1127	1354	1130	1125	500	237	94.5	200
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1942 - 1998	
ANNUAL TOTAL	253628		287527.8			
ANNUAL MEAN	695		788		734	
HIGHEST ANNUAL MEAN					1499	1945
LOWEST ANNUAL MEAN					263	1963
HIGHEST DAILY MEAN	11400	Feb 21	11900	Feb 11	79800	Dec 3 1982
LOWEST DAILY MEAN	24	Sep 14	6.1	Sep 8	2.5	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	25	Sep 14	7.2	Sep 3	2.8	Aug 19 1954
INSTANTANEOUS PEAK FLOW			15800	Feb 11	102000	Dec 3 1982
INSTANTANEOUS PEAK STAGE			16.02	Feb 11	^a 39.78	Dec 3 1982
INSTANTANEOUS LOW FLOW			5.8	Sep 9	2.3	Aug 25 1954
ANNUAL RUNOFF (AC-FT)	503100		570300		531800	
10 PERCENT EXCEEDS	1660		1760		1600	
50 PERCENT EXCEEDS	324		410		248	
90 PERCENT EXCEEDS	37		26		32	

^aFrom floodmark^eEstimated

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655	4240	1440	3560	3480	3470	2670	3630	1520	749	756	747
2	801	1460	1250	1800	3490	3290	3520	3650	1640	1120	311	977
3	639	945	1310	1830	3500	2420	1540	3650	1290	915	1160	596
4	560	1100	871	3540	2340	2120	812	3160	1030	1340	842	717
5	845	4290	611	7050	2570	3120	490	2130	998	1210	867	578
6	598	4950	1680	9900	3490	6810	1480	3410	589	1490	912	515
7	639	886	2710	8500	3490	8590	1280	2400	1030	2100	490	464
8	709	937	3750	7870	3490	8680	918	822	713	1190	1140	469
9	1250	2620	1210	6230	3480	7180	706	673	1510	1600	1130	544
10	671	2700	1120	6610	11100	6990	436	834	1610	1090	1390	486
11	648	2750	2930	7130	22200	5370	830	1220	1720	1380	1230	491
12	718	3360	3370	8650	7160	7240	516	888	1460	1110	1250	621
13	587	2480	3330	7440	6980	6230	1000	992	1730	521	786	496
14	625	3390	2730	7460	7330	4520	1900	697	1890	458	626	1350
15	764	3780	1230	7470	6830	4950	653	1450	1120	1140	477	4740
16	567	3770	575	6610	6850	6840	2540	1430	1260	1770	784	2530
17	633	3540	569	3470	6980	6260	2240	1790	1020	1750	1350	2920
18	632	3760	1250	3480	5570	4070	3590	910	1570	1630	1050	1100
19	574	2330	996	4250	6820	5020	3510	1500	1240	1320	1310	1260
20	643	3750	1910	3680	6690	5070	2590	1110	1400	1680	728	1450
21	2420	3740	1060	3960	4710	7530	2990	563	1090	1990	940	1190
22	2190	3730	1040	2640	4740	6990	811	1030	1040	1890	486	1340
23	2560	3740	1520	3480	5790	6730	1260	864	973	708	1200	736
24	2670	2490	7810	3490	4250	6210	680	806	1460	687	1660	460
25	2620	3740	2480	3470	4620	6230	669	663	1230	791	2860	508
26	2960	2040	2510	3510	3470	6250	540	885	975	675	1910	1080
27	848	1190	3560	3510	6950	6670	3620	759	1360	1230	874	1120
28	785	1610	3570	3510	2590	6470	3620	2540	1130	1490	1200	1100
29	1980	1420	3560	3490	---	6460	3620	2960	1440	728	1750	559
30	2460	1210	3560	3310	---	6950	3620	2240	1220	557	1030	1590
31	4880	---	3560	3180	---	4520	---	2420	---	1030	879	---
TOTAL	40131	81948	69072	154080	160960	179250	54651	52076	38258	37339	33378	32734
MEAN	1295	2732	2228	4970	5749	5782	1822	1680	1275	1204	1077	1091
MAX	4880	4950	7810	9900	22200	8680	3620	3650	1890	2100	2860	4740
MIN	560	886	569	1800	2340	2120	436	563	589	458	311	460
AC-FT	79600	162500	137000	305600	319300	355500	108400	103300	75880	74060	66210	64930

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 - 1998, BY WATER YEAR (WY)

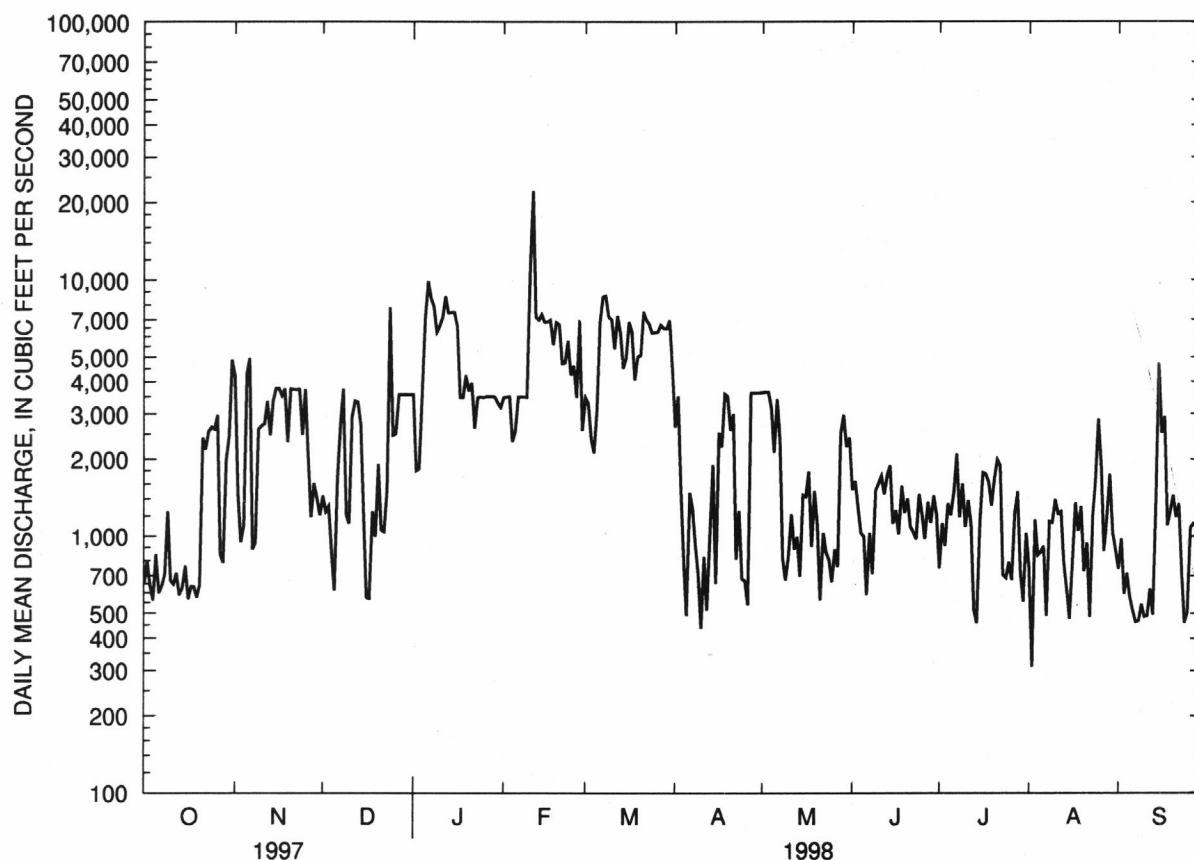
MEAN	1313	2182	3249	3740	3436	3470	3670	3519	1804	1160	1074	1148
MAX	6425	9717	13790	13560	11880	17230	13620	12550	9436	3602	2850	4224
(WY)	1985	1985	1983	1949	1950	1945	1952	1946	1974	1967	1966	1950
MIN	126	97.1	395	87.1	417	442	403	263	161	98.2	93.5	95.7
(WY)	1933	1944	1940	1931	1936	1966	1963	1936	1934	1930	1930	1943

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1929 - 1998	
ANNUAL TOTAL	1023980		933877			
ANNUAL MEAN	2805		2559		2476	
HIGHEST ANNUAL MEAN					5209	1973
LOWEST ANNUAL MEAN					746	1954
HIGHEST DAILY MEAN	31600	Jun 17	22200	Feb 11	104000	Mar 30 1945
LOWEST DAILY MEAN	480	Jan 15	311	Aug 2	39	Jun 22 1929
ANNUAL SEVEN-DAY MINIMUM	620	Sep 14	507	Sep 5	58	Nov 13 1943
INSTANTANEOUS PEAK FLOW			33600	Feb 11	^a 166000	May 20 1990
INSTANTANEOUS PEAK STAGE			14.70	Feb 11	^{bc} 30.30	May 15 1923
INSTANTANEOUS LOW FLOW			21	Jul 26,30	14	Oct 19 1996
ANNUAL RUNOFF (AC-FT)	2031000		1852000		1794000	
10 PERCENT EXCEEDS	6530		6460		5740	
50 PERCENT EXCEEDS	1980		1590		1440	
90 PERCENT EXCEEDS	637		630		275	

^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.--Records good, except estimated daily discharges which are fair and those above 10,000 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	526	257	165	208	331	519	255	e166	43	26	32
2	41	212	193	159	189	274	349	220	e156	55	28	32
3	41	129	243	157	178	237	297	197	e146	63	29	32
4	41	91	204	271	174	215	222	189	e136	52	36	32
5	42	1020	169	5500	173	858	185	186	e146	48	46	30
6	42	417	144	2620	173	475	165	221	e156	43	66	29
7	42	215	131	1830	173	763	151	220	e146	40	54	29
8	43	151	448	1450	171	1490	139	190	e136	38	50	29
9	48	115	382	863	170	802	134	185	e126	40	49	28
10	44	113	290	552	1690	510	130	184	e118	40	68	28
11	44	97	229	512	4110	393	129	182	e109	37	60	30
12	44	99	192	665	1170	316	128	180	e101	49	66	78
13	118	483	164	474	606	269	127	178	e186	54	96	307
14	56	469	143	397	412	234	126	177	e156	46	65	201
15	47	266	129	413	326	236	123	177	e136	42	66	932
16	47	192	125	341	376	1300	641	176	e136	39	53	793
17	46	152	125	293	712	1950	377	175	e118	36	48	381
18	47	125	125	260	601	928	275	174	e101	34	48	214
19	47	105	126	229	457	679	230	174	e118	33	45	142
20	47	98	127	202	411	533	206	173	e136	32	42	107
21	47	94	156	194	330	415	225	172	e101	31	40	90
22	48	91	174	310	294	337	190	171	e86	30	39	80
23	48	91	274	316	254	285	176	171	e72	35	38	73
24	79	90	3470	269	219	245	172	171	e60	33	37	67
25	51	91	958	241	200	219	169	171	e54	34	37	62
26	49	92	549	392	880	200	166	171	e49	33	36	59
27	48	92	413	400	609	194	1270	171	e47	31	36	56
28	48	93	324	337	430	202	583	518	e46	30	34	54
29	48	1220	274	292	---	188	386	326	e45	29	33	52
30	48	417	224	258	---	179	304	194	45	28	33	50
31	6620	---	186	231	---	1020	---	151	---	27	33	---
TOTAL	8101	7446	10948	20593	15696	16277	8294	6200	3334	1205	1437	4129
MEAN	261	248	353	664	561	525	276	200	111	38.9	46.4	138
MAX	6620	1220	3470	5500	4110	1950	1270	518	186	63	96	932
MIN	40	90	125	157	170	179	123	151	45	27	26	28
AC-FT	16070	14770	21720	40850	31130	32290	16450	12300	6610	2390	2850	8190
CFSM	1.92	1.82	2.60	4.88	4.12	3.86	2.03	1.47	.82	.29	.34	1.01
IN.	2.22	2.04	2.99	5.63	4.29	4.45	2.27	1.70	.91	.33	.39	1.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1998, BY WATER YEAR (WY)

MEAN	187	432	479	423	371	443	334	388	157	117	74.0	91.7
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	38.9	40.2	40.6
(WY)	1996	1990	1990	1996	1996	1996	1992	1997	1994	1998	1997	1997

RED RIVER BASIN
07359610 CADDO RIVER NEAR CADDO GAP--CONTINUED

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SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

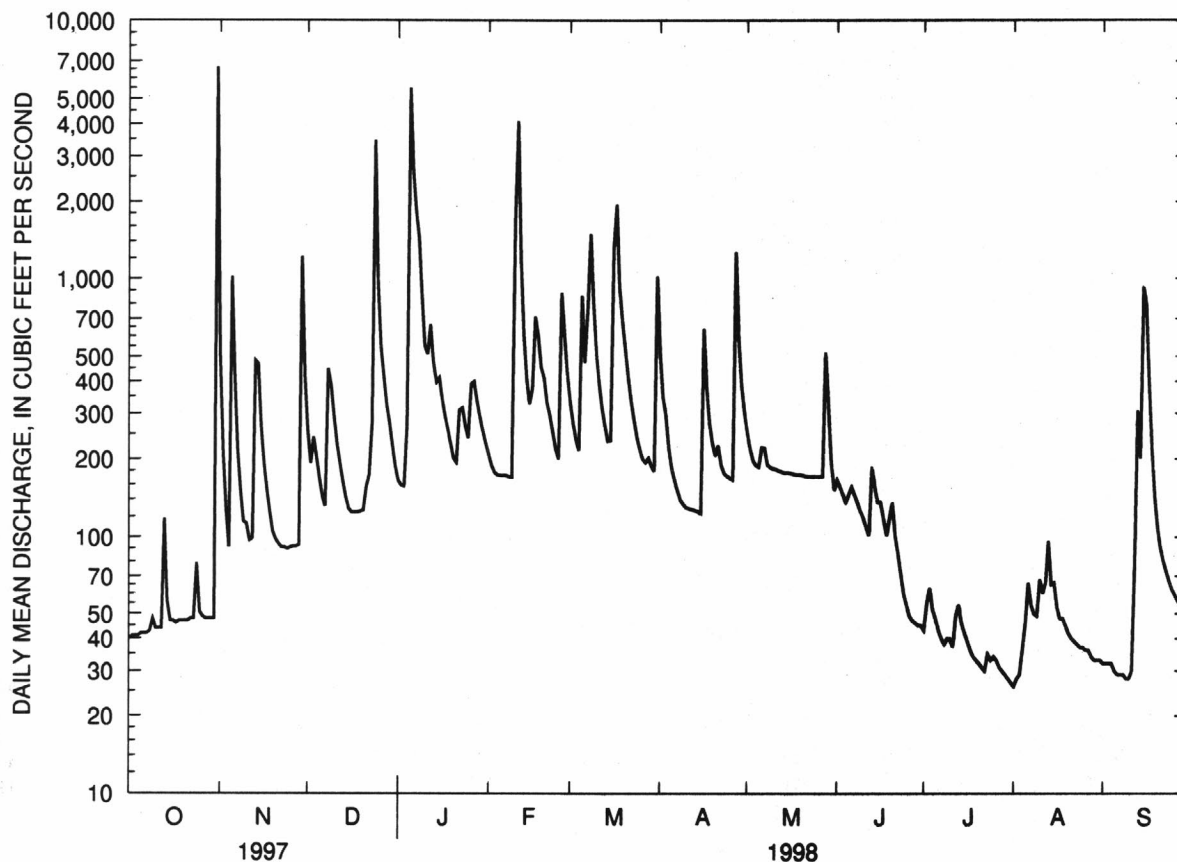
FOR 1998 WATER YEAR

WATER YEARS 1989 - 1998

ANNUAL TOTAL	92061		103660			
ANNUAL MEAN	252		284		291	
HIGHEST ANNUAL MEAN					389	1994
LOWEST ANNUAL MEAN					157	1996
HIGHEST DAILY MEAN	6620	Oct 31	6620	Oct 31	28600	Dec 3 1993
LOWEST DAILY MEAN	36	Aug 27	26	Aug 1	26	Aug 1 1998
ANNUAL SEVEN-DAY MINIMUM	36	Aug 25	28	Jul 28	28	Jul 28 1998
INSTANTANEOUS PEAK FLOW			^a 27500	Oct 31	^a 97200	Dec 3 1993
INSTANTANEOUS PEAK STAGE			17.70	Oct 31	26.27	Dec 3 1993
INSTANTANEOUS LOW FLOW			26	Jul 31	26	Jul 31 1998
ANNUAL RUNOFF (AC-FT)	182600		205600		211000	
ANNUAL RUNOFF (CFSM)	1.85		2.09		2.14	
ANNUAL RUNOFF (INCHES)	25.18		28.35		29.09	
10 PERCENT EXCEEDS	469		529		521	
50 PERCENT EXCEEDS	111		156		123	
90 PERCENT EXCEEDS	40		37		46	

^aFrom rating curve extended above 10,000 ft³/s on basis of slope-conveyance study

^eEstimated



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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	371	87	216	246	459	822	40	143	.24	.00	2.2
2	6.4	200	70	199	222	370	490	32	90	.30	.00	2.0
3	5.4	126	75	192	198	311	370	26	59	.44	.13	1.8
4	5.0	83	106	196	174	276	282	20	39	.38	.35	1.6
5	4.9	1170	88	1830	151	374	236	16	86	.37	.48	1.5
6	5.0	789	75	4800	134	361	207	15	148	.32	.42	1.3
7	4.4	369	71	3540	119	783	183	31	85	.24	.37	.98
8	6.1	254	523	1840	107	2400	150	48	45	.25	.31	.95
9	18	198	522	1150	99	1040	123	37	29	.23	.49	.95
10	55	188	366	800	2380	667	101	30	19	.22	.81	.95
11	22	209	271	1400	6510	497	87	20	14	.19	3.5	.95
12	13	185	223	4040	1500	394	77	14	11	.17	110	1.9
13	26	628	190	1340	907	338	71	11	7.7	.13	98	9.0
14	66	857	161	871	635	295	65	9.4	4.8	.10	51	32
15	44	486	134	826	490	270	60	8.2	3.7	.08	35	106
16	25	334	113	606	618	1200	57	7.3	2.5	.10	25	574
17	17	259	99	490	1080	2340	52	6.2	1.8	.07	18	448
18	13	220	86	414	1040	1010	47	5.3	1.4	.03	14	235
19	10	187	76	360	706	781	41	4.7	8.1	.01	10	148
20	8.7	153	69	310	557	680	37	4.1	12	.00	7.2	91
21	7.4	131	88	280	443	479	43	3.8	4.4	.00	5.6	58
22	6.2	113	154	309	386	382	40	3.5	1.8	.00	4.7	42
23	7.4	95	161	310	367	320	37	3.2	.84	.00	3.5	30
24	74	81	2830	250	296	275	30	3.0	.60	.00	2.7	22
25	130	70	1090	226	262	243	24	2.8	.49	.00	2.3	17
26	210	63	705	572	1200	216	21	2.7	.42	.00	2.2	13
27	132	56	652	632	980	198	157	2.6	.37	.00	2.2	10
28	71	55	470	474	624	210	168	3150	.33	.00	2.3	8.1
29	45	86	388	391	---	178	81	883	.31	.05	2.6	7.0
30	34	122	311	323	---	149	54	371	.26	.03	2.3	6.2
31	452	---	255	277	---	1430	---	226	---	.00	2.1	---
TOTAL	1531.6	8138	10509	29464	22431	18926	4213	5036.8	819.82	3.95	407.56	1873.38
MEAN	49.4	271	339	950	801	611	140	162	27.3	.13	13.1	62.4
MAX	452	1170	2830	4800	6510	2400	822	3150	148	.44	110	574
MIN	4.4	55	69	192	99	149	21	2.6	.26	.00	.00	.95
AC-FT	3040	16140	20840	58440	44490	37540	8360	9990	1630	7.8	808	3720
CFSM	.28	1.52	1.90	5.34	4.50	3.43	.79	.91	.15	.00	.07	.35
IN.	.32	1.70	2.20	6.16	4.69	3.96	.88	1.05	.17	.00	.09	.39

RED RIVER BASIN

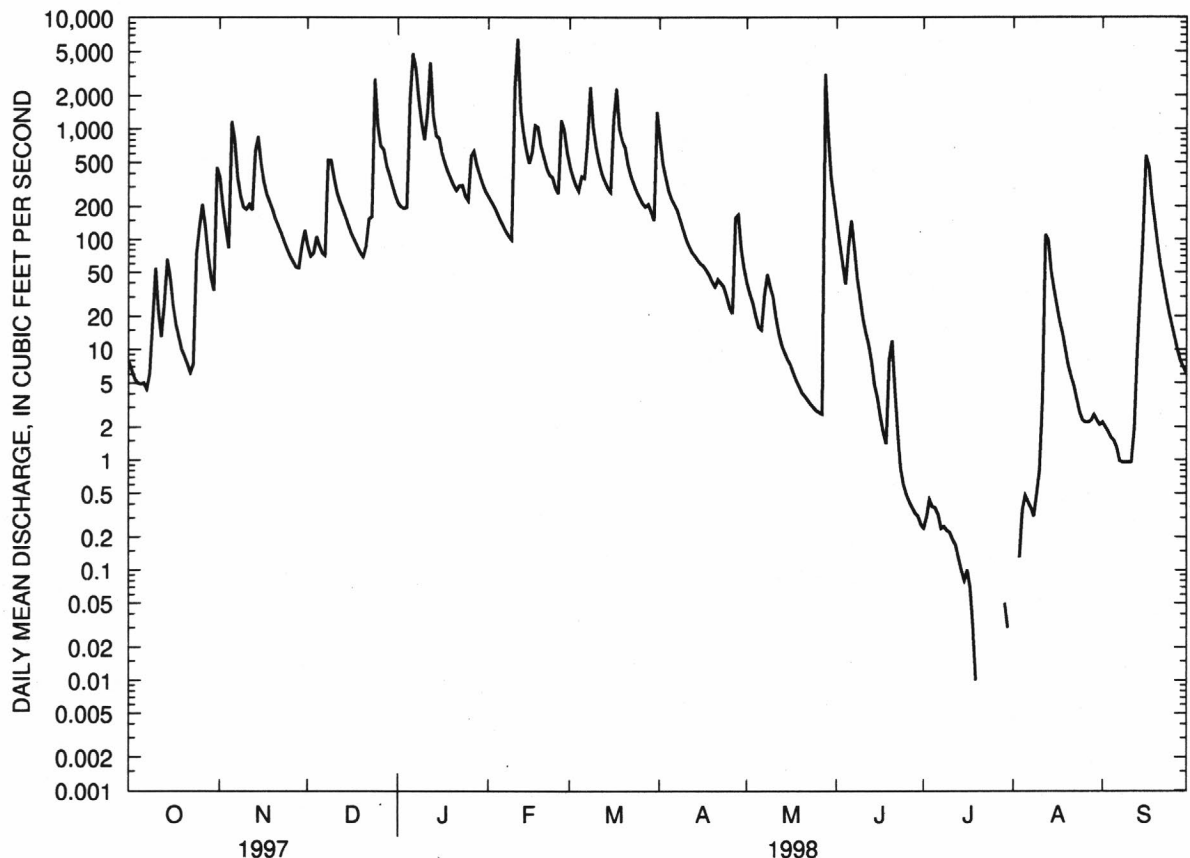
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07361500 ANTOINE RIVER AT ANTOINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1998, BY WATER YEAR (WY)

MEAN	107	306	433	345	454	527	468	419	181	93.4	38.8	39.7
MAX	838	1271	1958	956	1344	1325	1548	2266	1430	823	598	439
(WY)	1985	1974	1988	1991	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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1955 - 1998	
ANNUAL TOTAL	107452.45		103354.11			
ANNUAL MEAN	294		283		283	
HIGHEST ANNUAL MEAN					551	
LOWEST ANNUAL MEAN					109	
HIGHEST DAILY MEAN	4350	Feb 21	6510	Feb 11	20500	May 2 1958
LOWEST DAILY MEAN	.55	Sep 22	.00	Jul 20	.00	Aug 4 1956
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 16	.00	Jul 20	.00	Aug 4 1956
INSTANTANEOUS PEAK FLOW			12200	Feb 11	35500	May 2 1958
INSTANTANEOUS PEAK STAGE			22.42	Feb 11	28.75	May 2 1958
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	213100		205000		205300	
ANNUAL RUNOFF (CFSM)	1.65		1.59		1.59	
ANNUAL RUNOFF (INCHES)	22.46		21.60		21.63	
10 PERCENT EXCEEDS	712		705		603	
50 PERCENT EXCEEDS	106		71		68	
90 PERCENT EXCEEDS	5.8		.36		1.5	



RED RIVER BASIN

07362000 OUACHITA RIVER AT CAMDEN
(National stream-quality accounting network station)

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, 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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	887	3080	2370	8150	10400	20800	13700	6140	15200	1220	861	1200
2	898	5170	2390	7950	8670	19300	14900	5520	12800	1130	933	1100
3	897	4520	2310	6740	7740	16200	14300	5240	5610	1010	971	930
4	921	2280	2670	4590	7410	12100	10400	5060	3110	1020	857	987
5	942	1500	2550	4840	6470	8910	7880	4910	2520	999	945	969
6	866	2970	2580	11100	6190	9530	5550	3860	2100	1160	1200	873
7	922	8210	2810	19700	6210	11300	4040	4350	2020	1100	1110	866
8	869	6850	3970	26400	6520	17700	4350	5610	2080	1280	1110	836
9	874	3750	6640	32200	6080	24000	7700	4690	1820	1630	1020	873
10	926	2300	8330	37100	6040	28400	6090	2810	1460	1560	1140	851
11	974	3150	5880	39400	11700	28800	3400	2390	1600	1410	1360	822
12	962	3630	4930	38300	22600	24400	2610	1950	2720	1170	1370	1000
13	967	3990	6020	37800	31400	19400	2940	2200	3190	1470	1440	1270
14	948	4620	5140	40800	39100	17900	2330	1890	3380	1290	1380	1540
15	966	7370	4340	43100	42100	14500	2660	1870	3720	1020	1430	1910
16	971	7960	4010	43100	38600	12000	4440	2970	1930	825	1230	5010
17	922	7760	2710	39900	31900	14900	4170	4420	1240	976	868	8360
18	984	7930	2040	33900	29000	21600	4600	4380	1220	1360	956	6950
19	866	8000	2520	25500	28800	24700	4420	3960	1770	1490	1190	5010
20	864	6820	2460	20300	28100	25100	4880	3170	2590	1330	1370	3160
21	883	7270	2210	16400	26600	25500	4340	3840	1760	1190	1430	2420
22	918	8310	2460	14700	22900	24800	4150	3490	1510	1380	1570	2410
23	1590	9220	3380	14900	19200	22400	3930	2420	1210	1620	1390	1990
24	2050	8390	5690	14900	17100	19500	2590	2170	1170	2030	1120	1960
25	2330	5320	13300	14600	16100	17000	2590	1810	1150	1180	1070	1480
26	2730	3960	17300	14100	15700	14900	1860	1430	1800	1040	2040	1320
27	2980	4460	16100	14400	16800	13400	1690	1300	1550	1010	3250	1010
28	2910	2470	15200	16000	19400	12600	3180	1480	1230	925	2230	1510
29	1750	1730	14300	16000	---	12100	7720	5620	1340	1060	1620	1560
30	1140	2070	12100	14500	---	11300	7110	11600	1220	1300	1340	1320
31	1700	---	9250	12800	---	11900	---	13400	---	1050	1510	---
TOTAL	39407	155060	187960	684170	528830	556940	164520	125950	86020	38235	41311	61497
MEAN	1271	5169	6063	22070	18890	17970	5484	4063	2867	1233	1333	2050
MAX	2980	9220	17300	43100	42100	28800	14900	13400	15200	2030	3250	8360
MIN	864	1500	2040	4590	6040	8910	1690	1300	1150	825	857	822
AC-FT	78160	307600	372800	1357000	1049000	1105000	326300	249800	170600	75840	81940	122000

RED RIVER BASIN

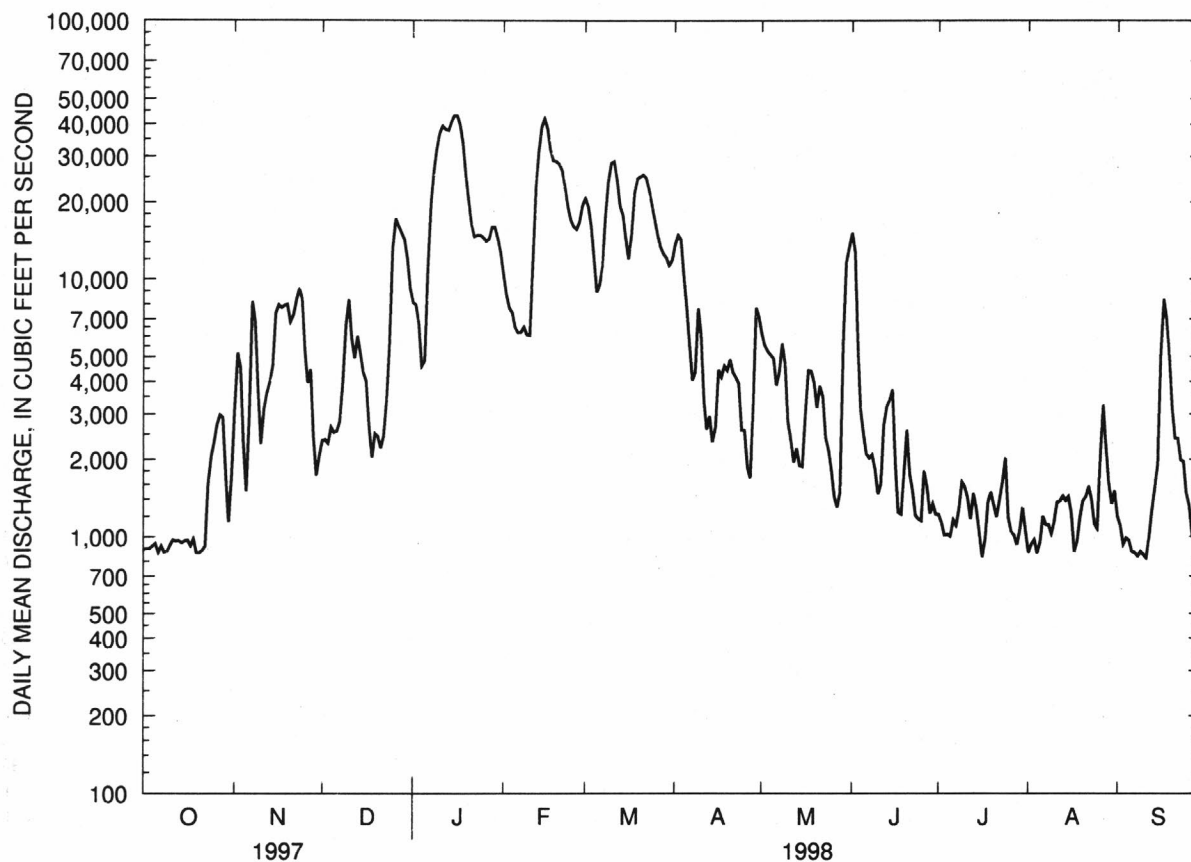
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07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

MEAN	2461	5318	9406	12230	12370	12900	13070	12710	5190	2827	1964	2262
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1929 - 1998	
ANNUAL TOTAL	3252498		2669900			
ANNUAL MEAN	8911		7315		7704	
HIGHEST ANNUAL MEAN					16120	
LOWEST ANNUAL MEAN					2292	
HIGHEST DAILY MEAN	50300	Apr 7	43100	Jan 15	238000	Apr 3 1945
LOWEST DAILY MEAN	806	Sep 18	822	Sep 11	125	Sep 16 1943
ANNUAL SEVEN-DAY MINIMUM	848	Sep 12	870	Sep 5	132	Sep 11 1943
INSTANTANEOUS PEAK FLOW			44500	Jan 15	243000	Apr 3 1945
INSTANTANEOUS PEAK STAGE			33.42	Jan 16	44.82	Apr 3 1945
INSTANTANEOUS LOW FLOW			726	Jul 16	125	Sep 16, 24-26 1943
ANNUAL RUNOFF (AC-FT)	6451000		5296000		5581000	
10 PERCENT EXCEEDS	25200		19600		19300	
50 PERCENT EXCEEDS	4630		3110		3440	
90 PERCENT EXCEEDS	948		971		767	



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 1997 TO SEPTEMBER 1998

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										
19...	0900	80513	81213	8340	57	7.7	772	10.1	7.3	64
JAN										
21...	0920	80513	81213	17100	51	7.0	769	8.7	9.3	79
FEB										
25...	0900	80513	81213	16900	52	7.5	765	10.7	13.1	117
APR										
22...	0905	80513	81213	4350	68	7.6	764	18.1	9.2	97
JUN										
18...	0815	80513	81213	1470	80	7.2	762	28.4	8.4	108
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)
NOV										
19...		<1	37	K360	16	4.1	1.3	3.9	33	.4
JAN										
21...		<1	<1	63	17	4.7	1.2	2.2	21	.2
FEB										
25...		<1	<1	46	18	5.2	1.3	3.0	25	.3
APR										
22...		20	K7	K18	19	5.4	1.4	4.7	33	.5
JUN										
18...		K13	K3	K5	22	6.1	1.7	5.7	34	.5
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										
19...		1.2	6.3	2.7	32	<.010	.140	<.024	--	--
JAN										
21...		1.2	6.0	2.9	54	<.010	.140	.019	.02	.30
FEB										
25...		1.0	6.2	2.6	44	<.010	.140	.022	.03	--
APR										
22...		1.0	7.6	3.2	46	<.010	.060	<.010	--	--
JUN										
18...		1.3	11	3.5	56	<.010	.140	.012	.02	.25
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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV										
19...		<.20	--	.030	<.020	<.010	--	88	1980	42
JAN										
21...		.32	.46	.050	.040	.020	.06	25	1150	96
FEB										
25...		<.20	--	<.020	<.020	<.010	--	29	1320	97
APR										
22...		.29	.35	<.020	<.020	.010	.03	52	611	59
JUN										
18...		.26	.40	<.020	<.020	<.010	--	20	79	95

RED RIVER BASIN

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07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
SEP							
01...	0812	80513	80513	200	4.00	20.0	10.0
01...	0813	80513	80513	200	16.0	20.0	10.0
01...	0814	80513	80513	200	3.00	16.0	30.0
01...	0815	80513	80513	200	13.0	16.0	30.0
01...	0816	80513	80513	200	3.50	18.0	50.0
01...	0817	80513	80513	200	14.5	18.0	50.0
01...	0818	80513	80513	200	3.00	15.0	70.0
01...	0819	80513	80513	200	12.0	15.0	70.0
01...	0820	80513	80513	200	3.00	15.0	90.0
01...	0821	80513	80513	200	12.0	15.0	90.0
01...	0822	80513	80513	200	3.00	15.0	110
01...	0823	80513	80513	200	12.0	15.0	110
01...	0824	80513	80513	200	2.50	12.0	130
01...	0825	80513	80513	200	9.50	12.0	130
01...	0826	80513	80513	200	3.00	15.0	150
01...	0827	80513	80513	200	12.0	15.0	150
01...	0828	80513	80513	200	2.00	10.0	170
01...	0829	80513	80513	200	8.00	10.0	170
01...	0830	80513	80513	200	2.00	4.00	190
01...	0900	80513	81213	--	--	--	--

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
SEP							
01...	--	70	6.7	29.8	7.3	96	762
01...	--	70	6.7	29.8	7.2	96	762
01...	--	70	6.7	29.8	7.2	95	762
01...	--	71	6.7	29.8	7.2	95	762
01...	--	70	6.7	29.9	7.2	95	762
01...	--	70	6.7	29.9	7.2	95	762
01...	--	70	6.6	29.9	7.2	95	762
01...	--	70	6.7	29.9	7.2	95	762
01...	--	70	6.6	29.9	7.2	95	762
01...	--	70	6.6	29.9	7.2	95	762
01...	--	70	6.6	29.9	7.1	94	762
01...	--	70	6.6	29.9	7.1	94	762
01...	--	70	6.6	29.9	7.2	95	762
01...	--	70	6.6	29.9	7.1	94	762
01...	--	70	6.6	29.9	7.2	95	762
01...	--	70	6.5	29.9	7.1	94	762
01...	--	70	6.6	29.9	7.2	95	762
01...	1240	69	6.6	29.9	7.2	95	762

RED RIVER BASIN

07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	COLI-FORM, FECA, 0.7 UM-MF (COLS./ 100 ML)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	
SEP 01...	0900	K10	K4	<1	130	33	12	25	28 .9	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
SEP 01...		4.3	7.1	35	224	<.010	.100	.042	.05	.76
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP 01...		.80	.90	.150	.100	.080	.25	20	67	96

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	26	228	251	627	1890	471	87	441	5.0	3.3	5.2
2	9.6	38	160	216	582	1650	474	64	533	4.9	2.8	6.4
3	10	48	125	196	638	1350	363	53	221	5.3	2.4	5.6
4	12	35	154	190	554	888	233	50	84	5.1	3.6	4.7
5	12	42	182	204	434	526	182	45	72	5.5	11	4.6
6	11	138	158	523	352	426	155	41	216	11	42	4.7
7	11	199	118	1560	312	546	142	40	349	10	40	3.9
8	9.8	138	166	2920	279	1720	155	35	195	7.5	89	3.4
9	8.4	80	371	3810	264	2770	310	32	101	6.1	114	3.2
10	6.8	54	400	2730	319	2610	319	30	66	5.3	41	2.9
11	7.4	45	290	2020	882	2110	216	28	50	4.8	24	2.8
12	7.3	48	182	2030	1490	1610	150	25	41	4.6	44	62
13	14	80	136	2290	3320	1090	120	22	34	4.1	105	364
14	26	186	111	2310	2800	635	106	20	28	3.8	184	420
15	31	229	96	2130	1970	461	99	18	24	3.5	131	569
16	23	169	88	2120	1680	516	94	17	20	3.9	71	720
17	12	109	82	1820	1700	1690	88	16	17	4.5	45	597
18	7.2	79	76	1340	1800	2690	82	15	15	4.8	30	393
19	7.3	65	73	1000	1790	2720	73	13	14	4.8	22	191
20	9.5	55	73	672	1600	2070	69	12	13	4.0	17	107
21	10	50	158	463	1360	1640	68	11	11	3.6	14	74
22	9.7	49	455	843	1090	1200	68	11	9.8	3.2	13	56
23	11	46	484	1750	964	779	68	9.9	8.6	4.6	15	45
24	82	42	1010	2090	988	497	63	9.2	7.7	17	13	40
25	114	39	1610	1820	920	387	55	8.5	7.3	11	12	46
26	97	36	2040	1680	1000	335	49	8.7	6.7	11	11	40
27	68	34	1890	1840	1580	308	60	15	6.0	8.1	9.0	29
28	48	36	1550	1740	1960	278	114	22	6.2	7.7	7.7	24
29	35	119	1110	1410	---	265	159	112	5.5	6.1	6.8	20
30	26	240	555	1160	---	261	129	266	5.1	4.9	6.0	17
31	23	---	326	921	---	301	---	355	---	3.9	5.4	---
TOTAL	767.5	2554	14457	46049	33255	36219	4734	1491.3	2607.9	189.6	1135.0	3861.4
MEAN	24.8	85.1	466	1485	1188	1168	158	48.1	86.9	6.12	36.6	129
MAX	114	240	2040	3810	3320	2770	474	355	533	17	184	720
MIN	6.8	26	73	190	264	261	49	8.5	5.1	3.2	2.4	2.8
AC-FT	1520	5070	28680	91340	65960	71840	9390	2960	5170	376	2250	7660
CFSM	.06	.22	1.21	3.86	3.08	3.03	.41	.12	.23	.02	.10	.33
IN.	.07	.25	1.40	4.45	3.21	3.50	.46	.14	.25	.02	.11	.37

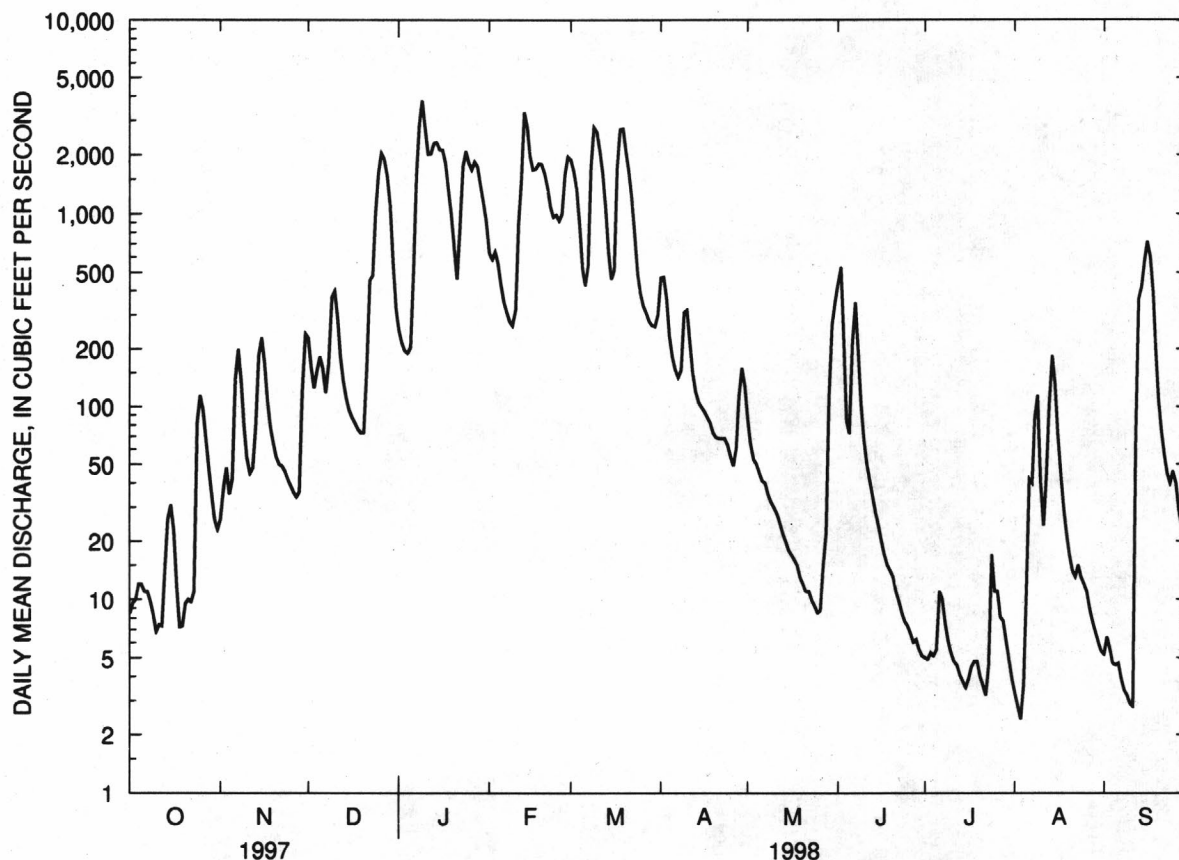
RED RIVER BASIN

07362100 SMACKOVER CREEK NEAR SMACKOVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1998, BY WATER YEAR (WY)

MEAN	119	253	570	644	819	830	752	501	417	133	53.8	98.6
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1962 - 1998	
ANNUAL TOTAL	238677.0		147320.7			
ANNUAL MEAN	654		404		430	
HIGHEST ANNUAL MEAN					1074	1974
LOWEST ANNUAL MEAN					94.4	1963
HIGHEST DAILY MEAN	35300	Apr 6	3810	Jan 9	35300	Apr 6 1997
LOWEST DAILY MEAN	6.5	Sep 25	2.4	Aug 3	.00	Aug 24 1978
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 24	3.6	Sep 5	.05	Aug 22 1978
INSTANTANEOUS PEAK FLOW			4010	Jan 9	^a 52700	Jun 8 1974
INSTANTANEOUS PEAK STAGE			15.00	Jan 9	24.97	Jun 8 1974
INSTANTANEOUS LOW FLOW			2.2	Aug 3	.00	Aug 9 1964
ANNUAL RUNOFF (AC-FT)	473400		292200		311600	
ANNUAL RUNOFF (CFSM)	1.70		1.05		1.12	
ANNUAL RUNOFF (INCHES)	23.06		14.23		15.18	
10 PERCENT EXCEEDS	1670		1640		1220	
50 PERCENT EXCEEDS	161		73		95	
90 PERCENT EXCEEDS	15		5.5		6.2	

^aFrom rating curve extended above 31,000 ft³/s

RED RIVER BASIN

301

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	6.5	9.9	21	38	62	138	21	5.5	.06	.00	.00
2	.13	2.0	8.3	18	31	50	83	17	4.0	.07	.00	.00
3	.11	1.2	12	16	25	41	62	47	3.1	.06	.00	.00
4	.09	.83	15	20	20	35	46	25	2.6	.04	.92	.00
5	.06	38	13	405	16	46	37	17	3.2	.01	.88	.00
6	.04	38	10	380	14	45	31	14	2.8	.00	.56	.00
7	.04	14	8.9	463	12	223	25	23	2.3	.00	.46	.00
8	.04	6.5	86	265	9.8	491	19	15	2.0	.00	.45	.00
9	.13	4.0	68	148	8.6	158	15	11	1.8	.00	.38	.00
10	.10	6.2	45	97	758	99	12	9.1	1.7	.00	.48	.00
11	.08	11	33	76	1380	74	9.3	7.3	1.5	.00	.44	.00
12	.07	11	24	74	165	59	7.6	5.6	1.3	.07	.47	.02
13	1.8	127	18	60	96	50	6.6	4.4	1.2	.07	.45	.14
14	.73	84	14	54	68	42	6.1	3.8	1.0	.03	.43	.22
15	.47	46	11	78	54	38	5.5	3.6	.89	.01	.37	22
16	.36	31	9.1	68	81	532	89	3.1	.73	.00	.32	11
17	.29	20	7.3	56	182	318	60	2.7	.61	.00	.28	8.5
18	.23	15	6.0	45	119	131	40	2.3	.53	.00	.23	5.6
19	.20	11	5.2	36	82	164	31	2.1	.69	.00	.18	3.8
20	.17	8.5	4.5	30	63	152	23	1.8	.52	.00	.15	2.9
21	.15	6.7	14	25	51	97	19	1.6	.38	.00	.13	2.4
22	.12	5.3	25	48	42	71	14	1.4	.31	.00	.11	2.5
23	.15	4.4	115	55	35	56	11	1.3	.22	.03	.09	2.3
24	.22	3.5	742	47	28	44	8.6	1.1	.16	.07	.07	2.2
25	.28	3.2	135	40	23	37	6.6	1.1	.12	.05	.04	1.9
26	.32	2.9	87	361	171	31	5.6	4.4	.10	.07	.02	1.6
27	.33	2.7	73	267	128	28	80	3.3	.09	.07	.00	1.4
28	.32	2.6	59	117	84	34	54	29	.08	.02	.00	1.2
29	.31	6.0	47	80	---	24	37	44	.06	.00	.00	1.1
30	.29	10	37	60	---	20	29	16	.04	.00	.00	1.0
31	47	---	28	47	---	403	---	8.6	---	.00	.00	---
TOTAL	54.75	529.03	1770.2	3557	3784.4	3655	1010.9	347.6	39.53	0.73	7.91	71.78
MEAN	1.77	17.6	57.1	115	135	118	33.7	11.2	1.32	.024	.26	2.39
MAX	47	127	742	463	1380	532	138	47	5.5	.07	.92	22
MIN	.04	.83	4.5	16	8.6	20	5.5	1.1	.04	.00	.00	.00
AC-FT	109	1050	3510	7060	7510	7250	2010	689	78	1.4	16	142
CFSM	.07	.65	2.11	4.25	5.01	4.37	1.25	.42	.05	.00	.01	.09
IN.	.08	.73	2.44	4.90	5.21	5.04	1.39	.48	.05	.00	.01	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1998, BY WATER YEAR (WY)

MEAN	24.3	67.6	115	74.6	74.8	102	95.4	55.6	16.8	4.93	2.57	2.91
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

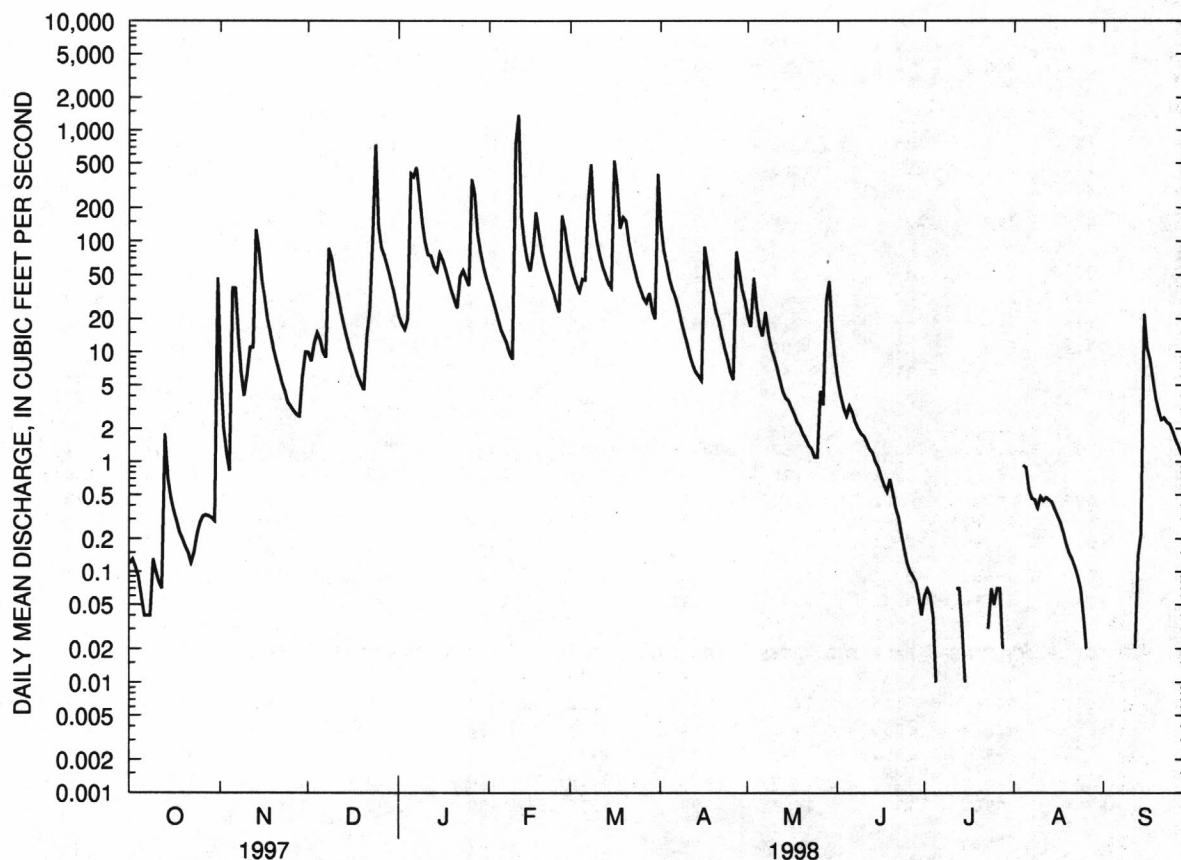
RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1990 - 1998	
ANNUAL TOTAL	16112.39		14828.83			
ANNUAL MEAN	44.1		40.6		52.9	
HIGHEST ANNUAL MEAN					84.8	1991
LOWEST ANNUAL MEAN					19.8	1996
HIGHEST DAILY MEAN	1150	Apr 5	1380	Feb 11	5800	Dec 21 1990
LOWEST DAILY MEAN	.00	Aug 6	.00	Jul 6	.00	Aug 21 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 6	.00	Jul 16	.00	Aug 21 1990
INSTANTANEOUS PEAK FLOW			^a 5450	Feb 11	^a 13500	Dec 21 1990
INSTANTANEOUS PEAK STAGE			11.96	Feb 11	^b 15.30	Dec 21 1990
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	31960		29410		38360	
ANNUAL RUNOFF (CFSM)	1.63		1.50		1.96	
ANNUAL RUNOFF (INCHES)	22.20		20.43		26.64	
10 PERCENT EXCEEDS	111		85		104	
50 PERCENT EXCEEDS	6.7		6.1		9.0	
90 PERCENT EXCEEDS	.02		.01		.03	

^aFrom rating curve extended above 262 ft³/s on basis of step-backwater computations

^bFrom floodmark



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 1997 TO SEPTEMBER 1998

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	TEMPER- ATURE WATER (DEG C) (000010)	COLOR (PLAT- INUM- COBALT UNITS) (000080)	TUR- BID- ITY (NTU) (000076)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DEC											
08...	1000	80513	81213	118	15	6.5	738	5.8	30	9.6	11.7
JAN											
05...	1045	80513	81213	836	17	6.6	742	11.0	100	20	10.4
FEB											
17...	0920	80513	81213	274	20	6.4	730	8.7	20	5.4	11.0
APR											
16...	1100	80513	81213	101	19	6.7	737	16.5	30	7.4	9.1
MAY											
26...	1045	80513	81213	4.4	23	6.4	742	22.5	20	31	7.6

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	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)	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)
DEC											
08...	96	130	290	6	.90	.90	<.10	--	--	.30	5
JAN											
05...	97	K530	3500	6	1.1	.90	<.10	--	--	.40	3
FEB											
17...	99	43	210	5	.80	.70	.90	27	.2	.30	5
APR											
16...	96	240	680	6	1.0	.90	1.2	28	.2	.40	5
MAY											
26...	90	K1600	K13000	9	1.5	1.2	.90	18	.1	.40	8

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER 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)
DEC										
08...	2.5	1.4	<.10	5.4	22	--	--	--	--	--
JAN										
05...	2.4	1.2	<.10	4.9	34	--	--	--	.006	.03
FEB										
17...	2.4	1.0	<.10	5.3	16	15	.02	11.8	--	--
APR										
16...	2.1	1.1	<.10	5.5	30	15	.04	8.18	.006	.03
MAY										
26...	1.4	1.1	<.10	4.2	22	16	.03	.26	.057	.25

RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

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,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)
DEC										
08...	<.010	--	<.020	.016	.02	--	<.20	--	<.020	.020
JAN										
05...	.004	.01	.010	.012	.02	.31	.32	.33	.020	<.001
FEB										
17...	<.001	--	.007	.006	.01	--	<.20	--	.007	<.001
APR										
16...	.001	.00	.007	.002	.00	.23	.23	.24	.010	<.001
MAY										
26...	.002	.01	.059	.110	.14	.28	.39	.45	.020	<.001
DATE	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, 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, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDE (T/DAY) (80155)
DEC										
08...	.06	2.9	2.4	120	270	15	5.0	<.10	17	5.4
JAN										
05...	--	--	15	240	410	28	12	<.10	25	56
FEB										
17...	--	2.1	1.8	70	140	6	2.8	<.10	6	4.4
APR										
16...	--	2.2	1.9	110	180	10	5.6	<.10	12	3.3
MAY										
26...	--	2.3	1.9	170	660	69	41	<.10	38	.45

RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

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 OF HG) (00025)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
DEC												
09...	1025	80513	80513	--	14.0	--	--	737	2.20	--	--	--
09...	1030	80513	80513	.00	14.0	18	6.0	737	--	8.4	10.0	88
09...	1031	80513	80513	5.00	14.0	18	5.9	737	--	8.4	10.0	88
09...	1032	80513	80513	10.0	14.0	18	5.9	737	--	8.0	10.1	88
09...	1033	80513	80513	14.0	14.0	18	5.9	737	--	7.6	10.2	88
09...	1040	80513	81213	--	14.0	27	--	737	--	--	--	--
FEB												
19...	0945	80513	80513	--	25.0	--	--	746	1.20	--	--	--
19...	0947	80513	80513	.00	25.0	15	6.7	746	--	8.4	10.8	94
19...	0948	80513	80513	5.00	25.0	15	6.1	746	--	8.4	10.4	90
19...	0949	80513	80513	10.0	25.0	15	5.9	746	--	8.3	10.3	89
19...	0950	80513	80513	15.0	25.0	15	5.9	746	--	8.3	10.2	88
19...	0951	80513	80513	20.0	25.0	16	5.9	746	--	8.1	10.3	89
19...	0952	80513	80513	25.0	25.0	16	5.9	746	--	8.1	10.3	89
19...	1015	80513	81213	--	25.0	15	--	746	--	--	--	--
MAY												
27...	1145	80513	80513	--	22.0	--	--	743	3.20	--	--	--
27...	1149	80513	80513	.00	22.0	18	6.1	743	--	26.5	7.8	99
27...	1150	80513	80513	5.00	22.0	18	6.1	743	--	26.0	7.7	98
27...	1151	80513	80513	10.0	22.0	19	5.9	743	--	25.6	6.3	80
27...	1152	80513	80513	11.0	22.0	18	5.8	743	--	23.9	7.3	88
27...	1153	80513	80513	12.0	22.0	18	5.7	743	--	23.1	7.8	94
27...	1154	80513	80513	13.0	22.0	18	5.6	743	--	22.0	7.3	86
27...	1155	80513	80513	15.0	22.0	18	5.6	743	--	20.7	6.1	70
27...	1156	80513	80513	20.0	22.0	19	5.6	743	--	17.2	3.9	42
27...	1157	80513	80513	22.0	22.0	18	5.7	743	--	16.7	4.9	52
27...	1210	80513	81213	--	22.0	--	--	743	--	--	--	--
AUG												
24...	1240	80513	80513	--	13.0	--	--	750	2.30	--	--	--
24...	1249	80513	80513	.00	13.0	19	6.2	750	--	30.9	7.0	95
24...	1250	80513	80513	5.00	13.0	19	6.1	750	--	29.9	6.9	93
24...	1251	80513	80513	10.0	13.0	19	5.9	750	--	29.0	6.3	84
24...	1252	80513	80513	13.0	13.0	19	5.7	750	--	27.2	3.0	38
24...	1255	80513	81213	--	13.0	--	--	750	--	--	--	--

RED RIVER BASIN

07362588 LAKE WINONA DOWNSTREAM FROM STILLHOUSE CREEK NEAR REFORM--CONTINUED

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)	ANC WATER UNFLTRD FET MG/L AS CACO3 (00410)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC									
09...	1040	.00	12	20	3.1	K6	K6	5	20
FEB									
19...	1015	.00	24	30	5.7	<1	K12	4	22
MAY									
27...	1210	.00	15	10	<1.0	K4	K4	5	18
AUG									
24...	1255	.00	10	10	1.3	<1	<1	6	16

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)
DEC									
09...	--	--	<.010	--	.050	.020	.03	.28	.30
FEB									
19...	.020	.09	.002	.01	.022	.008	.01	.24	.25
MAY									
27...	.001	.00	.001	.00	.002	.004	.01	--	<.20
AUG									
24...	--	--	<.001	--	<.002	.002	.00	.22	.22

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- ORTHOPHOS- 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)
DEC								
09...	.35	<.020	<.010	2.4	2.3	550	230	1.60
FEB								
19...	.27	.010	<.001	3.4	3.4	180	22	.500
MAY								
27...	--	.010	<.001	2.4	2.2	120	23	3.30
AUG								
24...	--	.009	<.001	2.2	2.2	150	36	1.50

RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
DEC												
09...	0955	80513	80513	--	35.0	--	--	736	2.40	--	--	--
09...	0958	80513	80513	.00	35.0	18	6.0	736	--	9.0	9.8	88
09...	0959	80513	80513	5.00	35.0	18	6.0	736	--	9.0	9.6	86
09...	1000	80513	80513	10.0	35.0	18	5.9	736	--	9.0	9.6	86
09...	1001	80513	80513	15.0	35.0	18	5.9	736	--	9.0	9.5	85
09...	1002	80513	80513	20.0	35.0	18	5.8	736	--	9.0	9.5	85
09...	1003	80513	80513	25.0	35.0	18	5.9	736	--	9.0	9.5	85
09...	1004	80513	80513	30.0	35.0	18	5.8	736	--	9.0	9.5	85
09...	1005	80513	80513	35.0	35.0	18	5.8	736	--	8.7	9.5	85
09...	1010	80513	81213	--	35.0	18	--	736	--	--	--	--
FEB												
19...	0910	80513	80513	--	45.0	--	--	746	1.60	--	--	--
19...	0914	80513	80513	.00	45.0	16	6.0	746	--	8.5	10.9	95
19...	0915	80513	80513	5.00	45.0	16	6.0	746	--	8.4	10.7	93
19...	0916	80513	80513	10.0	45.0	16	5.9	746	--	8.3	10.6	92
19...	0917	80513	80513	15.0	45.0	16	5.9	746	--	8.2	10.6	92
19...	0918	80513	80513	20.0	45.0	16	5.9	746	--	8.1	10.5	91
19...	0919	80513	80513	25.0	45.0	16	5.9	746	--	8.1	10.5	91
19...	0920	80513	80513	30.0	45.0	16	5.9	746	--	8.1	10.5	91
19...	0921	80513	80513	35.0	45.0	16	5.9	746	--	8.1	10.5	91
19...	0922	80513	80513	40.0	45.0	16	5.9	746	--	8.1	10.5	90
19...	0923	80513	80513	45.0	45.0	16	5.9	746	--	8.1	10.4	90
19...	0930	80513	81213	--	45.0	16	--	746	--	--	--	--
MAY												
27...	1050	80513	80513	--	35.0	--	--	744	3.70	--	--	--
27...	1054	80513	80513	.00	35.0	18	6.3	744	--	26.0	8.0	102
27...	1055	80513	80513	5.00	35.0	18	6.3	744	--	25.8	8.0	101
27...	1056	80513	80513	10.0	35.0	18	6.3	744	--	25.8	8.0	100
27...	1057	80513	80513	11.0	35.0	17	6.5	744	--	24.1	9.1	111
27...	1058	80513	80513	12.0	35.0	17	6.7	744	--	22.9	9.5	113
27...	1059	80513	80513	13.0	35.0	17	6.8	744	--	22.1	9.6	113
27...	1100	80513	80513	14.0	35.0	17	6.5	744	--	21.2	9.3	108
27...	1101	80513	80513	15.0	35.0	17	6.4	744	--	20.5	9.0	103
27...	1102	80513	80513	17.0	35.0	17	6.2	744	--	19.4	8.3	92
27...	1103	80513	80513	18.0	35.0	17	6.0	744	--	18.8	7.7	85
27...	1104	80513	80513	20.0	35.0	17	5.7	744	--	17.3	6.8	72
27...	1106	80513	80513	21.0	35.0	17	5.7	744	--	16.7	6.5	69
27...	1107	80513	80513	23.0	35.0	17	5.7	744	--	15.6	6.3	65
27...	1109	80513	80513	25.0	35.0	17	5.7	744	--	14.9	6.1	61
27...	1110	80513	80513	30.0	35.0	16	5.6	744	--	13.6	6.5	64
27...	1111	80513	80513	35.0	35.0	17	5.8	744	--	11.9	6.5	61
27...	1120	80513	81213	--	35.0	--	--	744	--	--	--	--
27...	1125	80513	81213	--	35.0	--	--	744	--	--	--	--

RED RIVER BASIN

07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM--CONTINUED

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) (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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
AUG												
24...	1150	80513	80513	--	33.0	--	--	757	3.40	--	--	--
24...	1153	80513	80513	.00	33.0	19	6.3	757	--	30.0	7.3	98
24...	1155	80513	80513	5.00	33.0	19	6.4	757	--	29.6	7.3	96
24...	1156	80513	80513	10.0	33.0	19	6.4	757	--	29.5	7.2	95
24...	1158	80513	80513	13.0	33.0	19	6.1	757	--	28.8	6.8	89
24...	1159	80513	80513	14.0	33.0	18	5.8	757	--	27.0	6.2	79
24...	1200	80513	80513	15.0	33.0	18	6.8	757	--	26.2	5.9	74
24...	1201	80513	80513	16.0	33.0	18	5.7	757	--	24.8	5.3	64
24...	1202	80513	80513	17.0	33.0	18	5.6	757	--	23.2	4.3	51
24...	1203	80513	80513	18.0	33.0	18	5.5	757	--	21.8	3.9	44
24...	1204	80513	80513	19.0	33.0	18	5.4	757	--	20.7	3.4	38
24...	1205	80513	80513	20.0	33.0	18	5.4	757	--	18.9	3.8	41
24...	1207	80513	80513	21.0	33.0	17	5.5	757	--	17.5	2.9	30
24...	1208	80513	80513	22.0	33.0	18	5.6	757	--	16.6	2.5	26
24...	1209	80513	80513	25.0	33.0	19	5.7	757	--	15.2	1.2	12
24...	1211	80513	80513	27.0	33.0	18	5.7	757	--	14.0	1.7	16
24...	1212	80513	80513	29.0	33.0	19	5.7	757	--	12.6	1.4	13
24...	1213	80513	80513	30.0	33.0	19	5.7	757	--	12.4	1.3	13
24...	1214	80513	80513	33.0	33.0	19	5.7	757	--	11.8	1.1	10
24...	1220	80513	81213	--	33.0	--	--	757	--	--	--	--
24...	1225	80513	81213	--	33.0	--	--	757	--	--	--	--
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) (000080)	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)	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)
DEC												
09...	1010	.00	33	20	2.9	K3	K4	5	22	--	--	<.010
FEB												
19...	0930	.00	45	20	3.8	K2	K7	5	24	.039	.17	.004
MAY												
27...	1120	.00	18	5	1.0	K2	K2	4	12	--	--	<.001
27...	1125	8.0	33	10	<1.0	K1	K2	5	14	--	--	<.001
AUG												
24...	1220	.00	15	10	.99	<1	<1	5	20	--	--	<.001
24...	1225	21	33	10	2.3	<1	<1	6	18	--	--	<.001

RED RIVER BASIN

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07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM--CONTINUED

DATE	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,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (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)
DEC												
09...	--	.050	.022	.03	<.20	<.020	<.010	2.6	2.4	570	250	.900
FEB												
19...	.01	.043	.014	.02	<.20	.009	<.001	3.9	3.5	230	40	.500
MAY												
27...	--	<.002	.003	.00	<.20	.007	<.001	2.4	2.3	70	10	2.80
27...	--	.006	.002	.00	<.20	.008	<.001	2.2	2.1	80	16	--
AUG												
24...	--	<.002	<.002	--	<.20	.006	<.001	2.1	2.1	70	17	.600
24...	--	.012	.002	.00	<.20	.010	<.001	2.7	2.4	200	130	--

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 1997 TO SEPTEMBER 1998

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 OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
DEC												
09...	0900	80513	80513	--	77.0	--	--	747	2.20	--	--	--
09...	0901	80513	80513	.00	77.0	18	5.5	747	--	9.3	9.4	83
09...	0902	80513	80513	5.00	77.0	18	5.5	747	--	9.3	9.4	83
09...	0903	80513	80513	10.0	77.0	18	5.6	747	--	9.3	9.4	83
09...	0904	80513	80513	15.0	77.0	18	5.6	747	--	9.3	9.4	83
09...	0905	80513	80513	20.0	77.0	18	5.6	747	--	9.3	9.4	83
09...	0906	80513	80513	25.0	77.0	18	5.7	747	--	9.3	9.4	83
09...	0907	80513	80513	30.0	77.0	18	5.7	747	--	9.3	9.3	83
09...	0908	80513	80513	35.0	77.0	18	5.7	747	--	9.3	9.4	83
09...	0909	80513	80513	40.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0910	80513	80513	45.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0911	80513	80513	50.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0912	80513	80513	55.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0913	80513	80513	60.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0914	80513	80513	65.0	77.0	18	5.7	747	--	9.2	9.4	83
09...	0915	80513	80513	70.0	77.0	18	5.7	747	--	9.1	9.4	83
09...	0916	80513	80513	75.0	77.0	18	5.7	747	--	9.0	9.5	84
09...	0917	80513	80513	77.0	77.0	18	5.7	747	--	8.9	9.5	84
09...	0925	80513	81213	--	77.0	27	--	747	--	--	--	--
FEB												
19...	0820	80513	80513	--	80.0	--	--	746	1.70	--	--	--
19...	0824	80513	80513	.00	80.0	16	5.7	746	--	8.4	10.7	93
19...	0825	80513	80513	5.00	80.0	16	5.8	746	--	8.4	10.7	93
19...	0826	80513	80513	10.0	80.0	16	5.8	746	--	8.4	10.7	93
19...	0827	80513	80513	15.0	80.0	16	5.8	746	--	8.4	10.6	92
19...	0828	80513	80513	20.0	80.0	16	5.8	746	--	8.4	10.6	92
19...	0829	80513	80513	25.0	80.0	16	5.8	746	--	8.4	10.6	92
19...	0830	80513	80513	30.0	80.0	16	5.8	746	--	8.3	10.6	92
19...	0831	80513	80513	35.0	80.0	16	5.8	746	--	8.3	10.6	92
19...	0832	80513	80513	40.0	80.0	16	5.8	746	--	8.3	10.5	92
19...	0833	80513	80513	45.0	80.0	16	5.8	746	--	8.3	10.6	92
19...	0834	80513	80513	50.0	80.0	16	5.8	746	--	8.2	10.5	91
19...	0835	80513	80513	55.0	80.0	16	5.8	746	--	8.2	10.5	91
19...	0836	80513	80513	60.0	80.0	16	5.8	746	--	8.1	10.5	91
19...	0837	80513	80513	65.0	80.0	16	5.8	746	--	8.1	10.5	91
19...	0838	80513	80513	70.0	80.0	16	5.8	746	--	8.1	10.5	91
19...	0839	80513	80513	75.0	80.0	16	5.8	746	--	8.1	10.5	91
19...	0840	80513	80513	80.0	80.0	16	5.8	746	--	8.1	10.5	90
19...	0850	80513	81213	--	80.0	16	--	746	--	--	--	--

RED RIVER BASIN

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07362590 LAKE WINONA AT REFORM--CONTINUED

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)
MAY												
27...	0940	80513	80513	--	80.0	--	--	745	3.20	--	--	--
27...	0943	80513	80513	.00	80.0	17	6.3	745	--	25.8	8.0	100
27...	0944	80513	80513	5.00	80.0	17	6.3	745	--	25.8	8.0	100
27...	0945	80513	80513	10.0	80.0	17	6.3	745	--	25.8	8.0	101
27...	0946	80513	80513	15.0	80.0	17	6.4	745	--	20.4	9.5	108
27...	0948	80513	80513	11.0	80.0	17	6.4	745	--	24.7	9.1	112
27...	0949	80513	80513	12.0	80.0	17	6.4	745	--	23.9	9.3	113
27...	0950	80513	80513	13.0	80.0	17	6.6	745	--	22.7	9.5	112
27...	0951	80513	80513	14.0	80.0	17	6.7	745	--	21.7	9.6	112
27...	0952	80513	80513	15.0	80.0	17	6.5	745	--	20.5	9.5	108
27...	0953	80513	80513	16.0	80.0	17	6.3	745	--	19.5	9.0	100
27...	0954	80513	80513	18.0	80.0	17	6.0	745	--	17.9	7.8	84
27...	0955	80513	80513	20.0	80.0	16	6.0	745	--	16.8	7.1	75
27...	0957	80513	80513	25.1	80.0	16	6.0	745	--	14.4	7.1	71
27...	0958	80513	80513	30.0	80.0	16	6.1	745	--	13.3	7.1	70
27...	0959	80513	80513	35.0	80.0	16	6.0	745	--	12.1	7.3	69
27...	1000	80513	80513	40.0	80.0	16	6.0	745	--	11.4	7.1	67
27...	1001	80513	80513	45.0	80.0	16	6.0	745	--	10.9	7.5	69
27...	1002	80513	80513	50.0	80.0	16	6.0	745	--	10.1	7.7	70
27...	1003	80513	80513	55.0	80.0	16	6.0	745	--	9.8	8.0	72
27...	1004	80513	80513	60.0	80.0	16	6.0	745	--	9.6	8.1	72
27...	1005	80513	80513	65.0	80.0	16	6.0	745	--	9.4	7.8	70
27...	1006	80513	80513	70.0	80.0	16	5.9	745	--	9.3	7.5	67
27...	1007	80513	80513	75.0	80.0	16	5.9	745	--	9.3	7.3	65
27...	1008	80513	80513	80.0	80.0	17	5.9	745	--	9.2	6.9	61
27...	1015	80513	81213	--	80.0	16	--	745	--	--	--	--
27...	1020	80513	81213	--	80.0	--	--	745	--	--	--	--
AUG												
24...	1015	80513	80513	--	72.0	--	--	751	4.40	--	--	--
24...	1022	80513	80513	.00	72.0	19	6.4	751	--	29.4	7.4	98
24...	1025	80513	80513	5.00	72.0	19	6.4	751	--	29.3	7.3	97
24...	1026	80513	80513	10.0	72.0	19	6.3	751	--	29.2	7.3	97
24...	1028	80513	80513	15.0	72.0	19	6.1	751	--	28.6	7.0	91
24...	1029	80513	80513	16.0	72.0	18	5.7	751	--	25.4	6.2	77
24...	1030	80513	80513	17.0	72.0	18	5.6	751	--	24.1	6.2	75
24...	1032	80513	80513	18.0	72.0	17	5.5	751	--	22.1	6.0	69
24...	1034	80513	80513	19.0	72.0	17	5.6	751	--	19.7	5.4	60
24...	1036	80513	80513	20.0	72.0	17	5.7	751	--	18.0	4.7	50
24...	1038	80513	80513	21.0	72.0	17	5.7	751	--	16.8	4.0	42
24...	1040	80513	80513	22.0	72.0	17	5.8	751	--	15.9	4.0	41
24...	1042	80513	80513	23.0	72.0	17	5.8	751	--	14.8	3.5	35
24...	1044	80513	80513	25.0	72.0	17	5.8	751	--	14.0	3.2	31
24...	1046	80513	80513	30.0	72.0	17	5.7	751	--	12.6	3.0	28
24...	1047	80513	80513	35.0	72.0	17	5.8	751	--	11.8	3.4	32
24...	1048	80513	80513	40.0	72.0	16	5.8	751	--	11.0	4.3	39
24...	1049	80513	80513	45.0	72.0	17	5.8	752	--	10.6	4.2	38
24...	1050	80513	80513	50.0	72.0	17	5.8	751	--	10.2	4.4	40
24...	1051	80513	80513	55.0	72.0	17	5.8	751	--	9.8	4.7	42
24...	1052	80513	80513	60.0	72.0	18	5.8	751	--	9.6	3.4	31
24...	1053	80513	80513	65.0	72.0	19	5.8	751	--	9.5	3.3	30
24...	1054	80513	80513	70.0	72.0	19	5.8	751	--	9.4	2.8	25
24...	1055	80513	80513	72.0	72.0	20	5.8	751	--	9.3	2.2	19
24...	1100	80513	81213	--	72.0	--	--	751	--	--	--	--
24...	1105	80513	81213	--	72.0	--	--	751	--	--	--	--

RED RIVER BASIN

07362590 LAKE WINONA AT REFORM--CONTINUED

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)
------	------	---	--	---	---	---	--	--	---	---	---

DEC

09... 0925 .00 75 20 3.0 K2 K3 7 1.4 .90 <.10

FEB

19... 0850 .00 78 30 4.0 K2 K7 6 1.2 .80 .80

MAY

27... 1015 .00 18 5 <1.0 <1 <1 7 1.3 .83 1.7

27... 1020 18 78 10 1.0 <1 <1 7 1.3 .84 1.9

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)
------	------------------------------	--	--	--	--	--	---	--	---	--	--

DEC

09... -- -- .40 5 2.5 1.0 <.10 3.7 16 -- --

FEB

19... 20 .1 .40 5 2.5 .90 <.10 4.1 16 14 .02

MAY

27... 34 .3 .40 5 2.4 .90 <.10 2.8 12 13 .02

27... 36 .3 .40 5 2.4 1.0 <.10 3.4 12 14 .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)
------	--	--	--	--	--	--	--	---	---	--

DEC

09... .062 .27 .001 .00 .063 .024 .03 -- <.20 --

FEB

19... .043 .19 .004 .01 .047 .016 .02 .19 .21 .26

MAY

27... -- -- .002 .01 <.002 .007 .01 -- <.20 --

27... .016 .07 .002 .01 .018 .009 .01 -- <.20 --

RED RIVER BASIN

313

07362590 LAKE WINONA AT REFORM--CONTINUED

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS 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)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
DEC										
09...	.007	<.001	2.5	2.4	360	470	210	240	<.10	1.50
FEB										
19...	.010	<.001	3.0	2.9	160	230	43	39	<.10	.600
MAY										
27...	.007	<.001	2.4	2.3	30	110	11	.80	<.10	3.00
27...	.008	<.001	2.3	2.0	40	80	10	3.5	<.10	--
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)
AUG										
24...	1100	.00	18	5	.95	<1	<1	7	1.4	.90
24...	1105	21	72	5	1.2	<1	<1	7	1.3	.90
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)
AUG										
24...	1.0	22	.2	.40	6	2.4	1.0	<.10	1.5	20
24...	.40	10	.1	.40	6	2.5	1.0	<.10	2.3	16
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	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,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
AUG										
24...	12	.03	.000	.00	.002	.01	.002	.008	.01	<.20
24...	13	.02	.032	.14	.002	.01	.034	.007	.01	<.20

RED RIVER BASIN

07362590 LAKE WINONA AT REFORM--CONTINUED

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)
AUG										
24...	.005	<.001	2.6	2.3	19	50	12	.80	<.10	<.100
24...	.005	<.001	2.4	2.4	38	100	93	78	<.10	--

RED RIVER BASIN

315

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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	25	90	178	260	584	306	54	14	1.8	.00	2.0
2	14	105	83	148	223	384	364	44	11	1.6	.00	1.8
3	14	87	74	128	203	272	277	38	9.8	3.0	.00	1.9
4	14	49	76	121	184	226	224	32	8.8	3.3	.00	2.3
5	14	44	127	145	167	446	178	32	8.5	2.5	.00	2.0
6	14	127	124	352	148	824	140	31	8.3	3.2	.00	1.8
7	14	288	120	785	127	989	115	25	8.2	3.1	1.4	2.1
8	14	186	167	1020	120	1640	103	22	8.0	2.5	62	2.2
9	14	94	242	1180	116	1790	96	24	6.9	2.1	21	1.8
10	14	65	319	1460	117	2060	90	29	5.8	2.0	10	1.6
11	15	55	277	1550	454	1850	69	e20	5.0	1.6	7.4	1.3
12	16	62	224	1610	783	1230	58	e19	5.0	1.9	12	1.9
13	18	86	193	1510	910	563	51	e18	6.3	3.4	48	16
14	20	187	179	1630	1220	374	47	e17	6.5	2.4	64	95
15	43	340	169	1700	1710	322	43	e16	5.7	2.4	25	123
16	47	310	164	1320	1100	329	42	e15	5.4	5.8	15	172
17	27	195	168	878	797	824	40	e14	4.8	4.9	11	265
18	22	129	139	630	933	1010	59	e13	4.5	4.0	8.7	186
19	19	97	97	463	1020	1230	90	e12	4.0	3.3	7.4	133
20	17	80	84	382	968	1350	73	e11	3.6	2.4	5.9	117
21	17	71	65	334	634	1140	63	e10	3.6	1.8	4.6	106
22	16	65	62	338	421	965	58	e9.0	3.7	1.7	4.2	99
23	15	62	100	462	316	763	55	8.7	3.3	1.5	3.8	102
24	21	58	400	470	267	444	50	8.3	3.0	1.3	3.7	98
25	27	53	726	345	231	320	44	7.2	2.6	1.1	3.3	44
26	62	50	788	353	241	267	34	7.4	2.2	1.0	3.0	29
27	64	50	805	671	482	230	34	7.9	2.2	.85	3.0	26
28	54	48	503	765	624	209	38	24	2.6	.65	3.0	23
29	34	54	307	689	---	195	54	35	3.0	.55	2.6	13
30	19	68	249	468	---	178	60	19	2.5	.16	2.2	8.2
31	16	---	226	330	---	192	---	19	---	.00	2.2	---
TOTAL	729	3190	7347	22415	14776	23200	2955	641.5	168.8	67.81	334.40	1677.9
MEAN	23.5	106	237	723	528	748	98.5	20.7	5.63	2.19	10.8	55.9
MAX	64	340	805	1700	1710	2060	364	54	14	5.8	64	265
MIN	14	25	62	121	116	178	34	7.2	2.2	.00	.00	1.3
AC-FT	1450	6330	14570	44460	29310	46020	5860	1270	335	135	663	3330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	29.5	131	208	382	466	624	763	128	202	64.2	51.8	31.3
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	10.8	16.3
(WY)	1996	1996	1996	1996	1996	1996	1998	1998	1998	1998	1998	1997

RED RIVER BASIN

07363400 HURRICANE CREEK BELOW SHERIDAN--CONTINUED

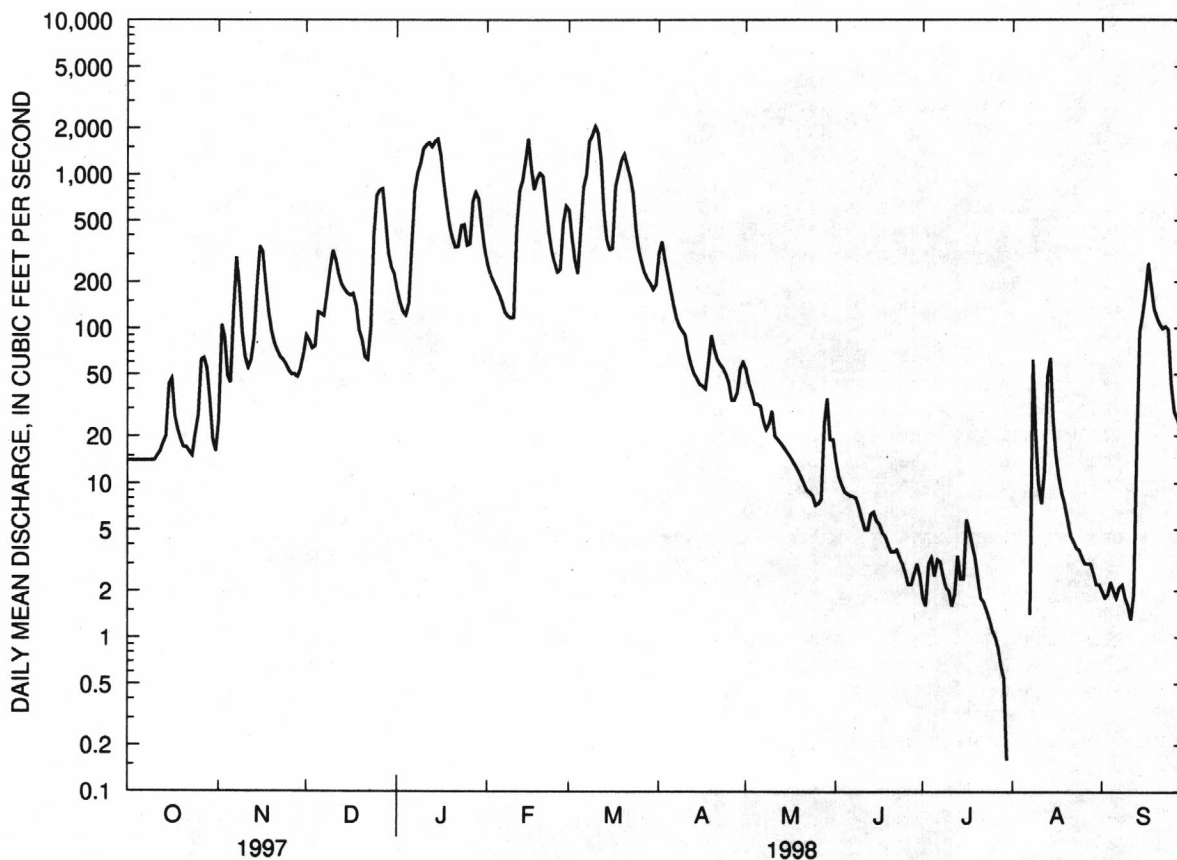
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1996 - 1998

ANNUAL TOTAL	167271		77502.41			
ANNUAL MEAN	458		212		255	
HIGHEST ANNUAL MEAN					488	1997
LOWEST ANNUAL MEAN					64.8	1996
HIGHEST DAILY MEAN	20100	Apr 6	2060	Mar 10	20100	Apr 6 1997
LOWEST DAILY MEAN	13	Jul 29	.00	Jul 31	.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	13	Jul 29	.00	Jul 31	.00	Oct 1 1995
INSTANTANEOUS PEAK FLOW			2160	Mar 10	^a 26400	Apr 6 1997
INSTANTANEOUS PEAK STAGE			11.75	Mar 10	16.34	Apr 6 1997
INSTANTANEOUS LOW FLOW			.00	at times	.00	at times
ANNUAL RUNOFF (AC-FT)	331800		153700		184700	
10 PERCENT EXCEEDS	1150		764		627	
50 PERCENT EXCEEDS	90		51		46	
90 PERCENT EXCEEDS	13		2.2		3.3	

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

RED RIVER BASIN

317

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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	277	280	406	3600	3970	4780	2160	878	236	65	58	57
2	202	225	418	3880	4020	3950	1950	1040	254	60	71	53
3	153	184	483	4000	4060	3630	2050	953	304	54	65	48
4	122	440	536	3620	3890	3630	2360	778	330	50	73	44
5	100	1020	556	2320	3200	3910	2630	651	310	46	78	42
6	88	1020	572	1620	2280	4420	2860	571	267	43	61	40
7	78	746	641	2580	1740	4800	2980	533	222	45	55	37
8	73	660	735	3780	1480	5730	2790	540	191	47	52	35
9	69	1140	718	4190	1310	6470	2290	521	177	55	46	33
10	65	1570	680	4390	1670	6820	1740	486	181	64	46	32
11	62	1720	778	4570	3270	6990	1400	458	175	79	58	31
12	60	1410	1120	5880	3800	7070	1180	452	167	83	102	44
13	78	991	1430	6960	3870	7050	1020	440	159	84	123	58
14	99	784	1470	7560	4000	7070	899	398	151	89	129	62
15	108	771	1270	8320	4020	7390	807	366	143	118	237	72
16	127	904	1050	9100	4540	7790	731	331	138	142	540	73
17	160	1330	900	9550	6210	8600	669	305	133	210	591	134
18	219	1750	803	9600	8000	8970	624	280	127	177	491	290
19	302	1950	738	9330	9880	8750	671	260	120	150	416	1030
20	282	1850	691	8890	12300	8260	1250	243	115	157	360	1630
21	221	1390	654	8360	12800	7620	1600	228	108	144	294	1780
22	174	999	592	7820	11600	6980	1420	216	98	122	232	1370
23	152	801	558	7170	10200	6530	1060	200	92	110	184	852
24	157	698	750	6340	8940	6520	846	186	88	102	151	585
25	134	625	1040	5130	7880	6830	743	177	84	e93	125	464
26	125	570	1520	3940	7060	7100	683	168	79	e75	106	424
27	126	523	2010	3760	6640	7160	653	161	74	65	93	394
28	162	489	2430	4020	5850	6920	709	156	70	58	84	313
29	247	478	2710	4170	---	6330	822	161	65	57	76	245
30	315	433	2980	4150	---	5080	820	167	60	58	68	203
31	323	---	3270	4040	---	3170	---	205	---	54	62	---
TOTAL	4860	27751	34509	172640	158480	196320	42417	12509	4718	2756	5127	10475
MEAN	157	925	1113	5569	5660	6333	1414	404	157	88.9	165	349
MAX	323	1950	3270	9600	12800	8970	2980	1040	330	210	591	1780
MIN	60	184	406	1620	1310	3170	624	156	60	43	46	31
AC-FT	9640	55040	68450	342400	314300	389400	84130	24810	9360	5470	10170	20780
CFSM	.07	.44	.53	2.65	2.69	3.01	.67	.19	.07	.04	.08	.17
IN.	.09	.49	.61	3.06	2.80	3.47	.75	.22	.08	.05	.09	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1998, BY WATER YEAR (WY)

	MEAN	495	1233	2933	3854	5113	5368	5336	4704	1496	596	293	352
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	

RED RIVER BASIN

07363500 SALINE RIVER NEAR RYE--CONTINUED

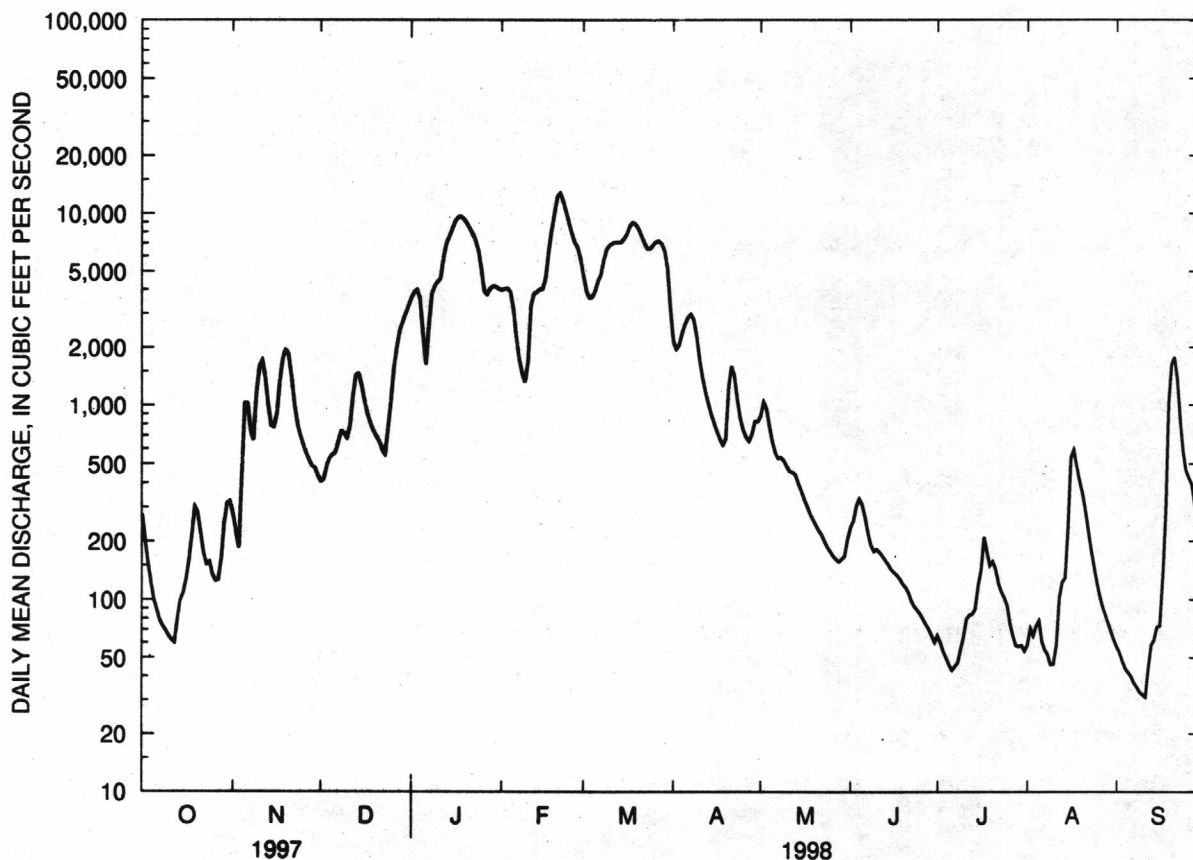
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1938 - 1998

ANNUAL TOTAL	1188544		672562			
ANNUAL MEAN	3256		1843		2635	
HIGHEST ANNUAL MEAN					5436	1973
LOWEST ANNUAL MEAN					704	1972
HIGHEST DAILY MEAN	25400	Apr 10	12800	Feb 21	72500	May 18 1968
LOWEST DAILY MEAN	42	Sep 26	31	Sep 11	3.8	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	49	Sep 21	36	Sep 5	4.0	Sep 15 1954
INSTANTANEOUS PEAK FLOW			13100	Feb 21	74500	May 18 1968
INSTANTANEOUS PEAK STAGE			23.09	Feb 21	31.40	May 18 1968
INSTANTANEOUS LOW FLOW			31	Sep 11	3.5	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	2357000		1334000		1909000	
ANNUAL RUNOFF (CFSM)	1.55		.88		1.25	
ANNUAL RUNOFF (INCHES)	21.03		11.90		17.03	
10 PERCENT EXCEEDS	9500		6820		7490	
50 PERCENT EXCEEDS	900		540		683	
90 PERCENT EXCEEDS	85		62		66	

^eEstimated

RED RIVER BASIN

319

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. Records good. Satellite telemeter at station.

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	26	33	165	493	538	711	435	575	353	81	97	23
2	18	28	164	439	484	612	352	515	255	95	96	23
3	13	30	135	395	437	521	283	410	153	105	98	20
4	12	34	112	350	401	447	220	330	87	114	96	17
5	11	38	118	312	370	391	179	287	85	119	99	17
6	11	40	128	336	342	381	159	264	161	115	102	16
7	10	73	111	557	307	558	138	236	285	96	103	14
8	9.2	152	98	935	268	830	126	199	360	86	120	12
9	13	150	108	1310	220	1030	118	158	343	79	160	10
10	11	104	195	1540	186	1180	121	131	267	77	179	9.4
11	8.9	139	230	1630	303	1230	122	124	187	81	172	8.3
12	7.9	49	197	2000	578	1230	122	110	140	89	151	10
13	9.2	50	147	2400	830	1220	121	99	119	121	142	14
14	10	72	112	2620	942	1210	123	76	113	178	197	15
15	9.8	176	92	2730	942	1210	124	56	112	233	258	17
16	10	261	83	2740	980	1190	119	48	110	249	278	23
17	11	247	80	2660	1100	1200	112	47	100	222	265	34
18	11	187	79	2480	1240	1280	105	42	89	184	219	43
19	11	130	76	2280	1290	1350	105	37	87	148	154	38
20	11	94	73	2050	1230	1330	98	36	89	126	103	28
21	10	72	98	1810	1120	1290	96	36	96	108	75	23
22	9.9	62	131	1610	1010	1230	86	28	99	90	62	20
23	11	59	203	1430	952	1140	79	22	85	87	54	20
24	50	58	365	1290	887	1070	78	27	62	108	48	18
25	115	61	478	1130	800	1000	84	25	45	142	40	16
26	189	62	639	981	749	943	85	24	41	168	33	13
27	174	62	760	864	789	877	84	24	42	162	28	13
28	165	65	775	791	785	798	142	24	47	158	23	12
29	132	85	725	726	---	713	326	195	55	152	20	11
30	80	111	644	650	---	622	510	358	65	132	20	12
31	46	---	562	592	---	529	---	401	---	109	20	---
TOTAL	1215.9	2784	7883	42131	20080	29323	4852	4944	4132	4014	3512	549.7
MEAN	39.2	92.8	254	1359	717	946	162	159	138	129	113	18.3
MAX	189	261	775	2740	1290	1350	510	575	360	249	278	43
MIN	7.9	28	73	312	186	381	78	22	41	77	20	8.3
AC-FT	2410	5520	15640	83570	39830	58160	9620	9810	8200	7960	6970	1090
CFSM	.10	.24	.67	3.58	1.89	2.49	.43	.42	.36	.34	.30	.05
IN.	.12	.27	.77	4.12	1.97	2.87	.47	.48	.40	.39	.34	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1998, BY WATER YEAR (WY)

MEAN	119	338	647	1092	1099	1182	939	582	285	387	175	63.9
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

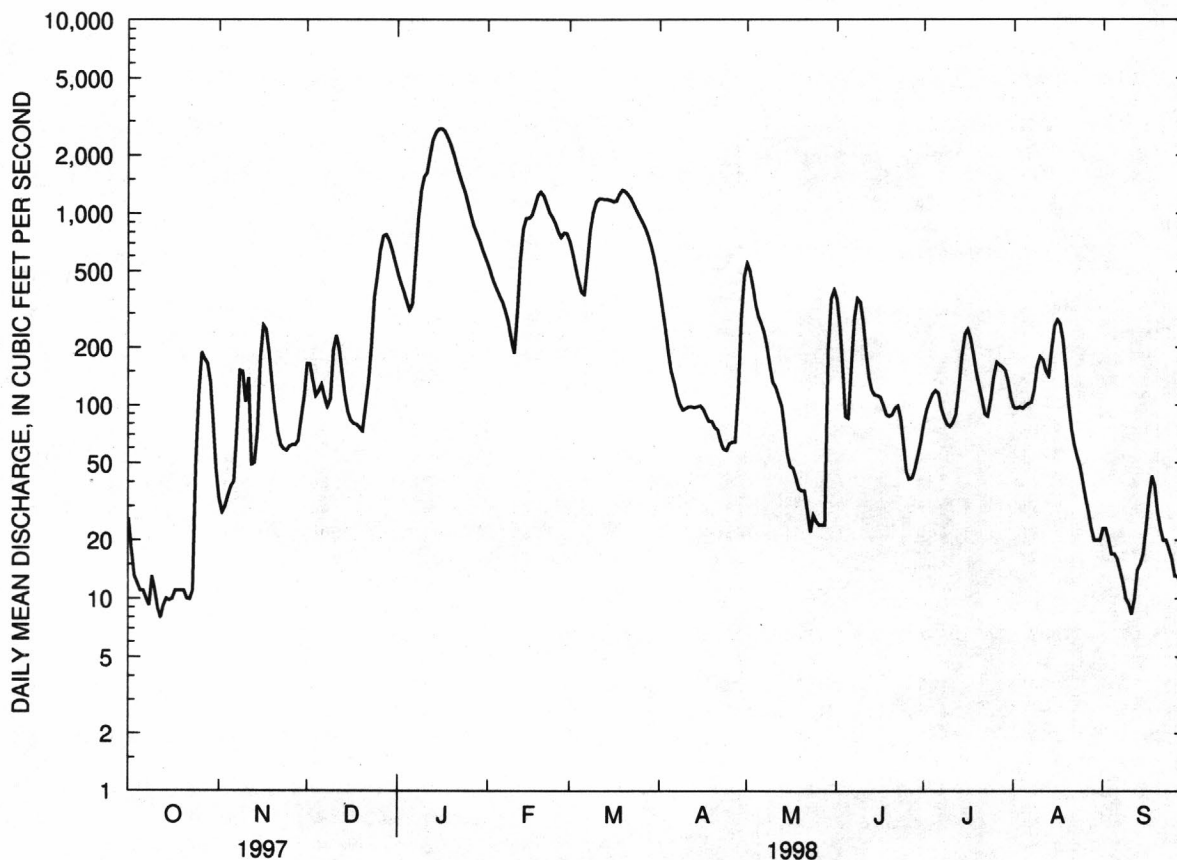
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1988 - 1998

ANNUAL TOTAL	313164.9		125420.6			
ANNUAL MEAN	858		344		574	
HIGHEST ANNUAL MEAN					966	1989
LOWEST ANNUAL MEAN					174	1996
HIGHEST DAILY MEAN	5210	Mar 7	2740	Jan 16	5210	Mar 7 1997
LOWEST DAILY MEAN	7.9	Oct 12	7.9	Oct 12	.25	Oct 21 1995
ANNUAL SEVEN-DAY MINIMUM	9.5	Oct 10	9.5	Oct 10	.27	Oct 20 1995
INSTANTANEOUS PEAK FLOW			2750	Jan 15	5220	Mar 7 1997
INSTANTANEOUS PEAK STAGE			16.51	Jan 15	22.22	Feb 10,11 1990
INSTANTANEOUS LOW FLOW			7.3	Oct 13	.24	Oct 21 1995
ANNUAL RUNOFF (AC-FT)	621200		248800		415700	
ANNUAL RUNOFF (CFSM)	2.26		.90		1.51	
ANNUAL RUNOFF (INCHES)	30.66		12.28		20.52	
10 PERCENT EXCEEDS	2630		1080		1670	
50 PERCENT EXCEEDS	261		122		215	
90 PERCENT EXCEEDS	38		17		17	



RED RIVER BASIN

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07364133 BAYOU BARTHOLOMEW NEAR GARRETT BRIDGE--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	
JUL 23...	1115	80513	81213	83	573	7.5	760	28.9	3.8	50	
DATE	TIME	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 AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
JUL 23...	130	88	270	200	52	18	34	26	1	3.1	
DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS N) (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)
JUL 23...	12	54	334	.190	.84	.010	.03	.200	.054	.07	
DATE	TIME	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- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
JUL 23...	.59	.64	.84	.150	.100	.100	.31	101	23	100	
DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)				
AUG											
31...	1130	80513	81213	--	--	--	--				
31...	1155	80513	80513	60.0	.20	.40	123.0				
31...	1156	80513	80513	60.0	.50	1.00	129.0				
31...	1157	80513	80513	60.0	.50	1.00	135.0				
31...	1159	80513	80513	60.0	.50	1.00	141.0				
31...	1200	80513	80513	60.0	.50	1.00	147.0				
31...	1201	80513	80513	60.0	.70	1.40	153.0				
31...	1202	80513	80513	60.0	.70	1.40	159.0				
31...	1203	80513	80513	60.0	.70	1.40	165.0				
31...	1204	80513	80513	60.0	.75	1.50	171.0				
31...	1205	80513	80513	60.0	.35	.70	177.0				

RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW NEAR GARRETT BRIDGE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
AUG							
31...	43	404	7.3	27.6	3.4	43	761
31...	--	404	7.3	27.7	3.4	44	761
31...	--	404	7.3	27.7	3.5	44	761
31...	--	404	7.3	27.7	3.4	43	761
31...	--	404	7.3	27.6	3.4	43	761
31...	--	404	7.3	27.6	3.4	43	761
31...	--	404	7.3	27.6	3.3	42	761
31...	--	404	7.3	27.6	3.3	42	761
31...	--	404	7.3	27.7	3.4	43	761
31...	--	404	7.4	27.7	3.4	44	761
31...	--	404	7.5	27.8	3.6	45	761

DATE	TIME	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOC- CI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL 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)
AUG									
31...	1130	K920	120	K37	17	4.4	1.4	5.7	41

DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	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)
AUG								
31...	.6	1.1	9.9	3.4	42	<.010	<.020	.026

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDE- D (MG/L (T/DAY) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE- D (MG/L (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG								
31...	.03	<.20	.040	.030	<.010	63	7.3	100

RED RIVER BASIN

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07364150 BAYOU BARTHOLOMEW NEAR MCGEEHEE

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

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 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	76	41	519	1190	1370	882	201	594	22	71	26
2	24	79	46	540	1080	1330	813	188	568	32	70	23
3	26	75	52	545	973	1270	752	199	527	30	68	21
4	26	66	63	534	874	1180	679	237	477	27	65	20
5	24	56	80	520	785	1090	603	283	425	27	59	18
6	21	48	96	549	707	999	522	318	378	31	53	17
7	17	37	102	794	634	922	440	347	339	34	51	17
8	15	28	107	1060	568	956	364	331	304	35	52	16
9	14	23	108	1200	509	953	311	308	275	38	55	15
10	13	20	105	1280	467	953	256	282	249	45	61	14
11	12	19	103	1380	447	986	208	254	231	75	68	13
12	11	20	96	1640	410	1040	173	226	223	92	74	15
13	11	34	89	1880	381	1100	147	195	216	100	80	17
14	12	60	85	2080	370	1150	128	161	205	100	96	17
15	13	73	94	2290	392	1170	114	132	184	92	122	19
16	14	74	107	2520	570	1190	105	109	155	87	136	19
17	14	66	112	2650	818	1250	100	91	125	83	135	18
18	15	57	109	2730	1010	1270	96	78	98	81	130	17
19	15	53	99	2750	1140	1290	98	66	77	87	136	16
20	15	66	87	2710	1240	1320	100	55	65	98	149	15
21	16	91	92	2630	1300	1340	100	47	58	104	162	14
22	16	107	112	2550	1340	1350	97	41	50	100	169	14
23	17	111	133	2420	1340	1360	93	35	45	106	163	15
24	23	105	245	2260	1320	1340	90	31	37	133	146	18
25	25	92	373	2080	1320	1310	85	27	31	113	124	21
26	27	76	430	1940	1350	1260	78	26	29	95	100	21
27	26	61	440	1850	1400	1200	73	24	26	83	79	21
28	26	47	435	1710	1400	1140	126	23	25	75	61	20
29	32	42	437	1570	---	1070	196	178	24	74	49	19
30	45	38	455	1430	---	1010	216	446	21	74	39	18
31	63	---	487	1310	---	945	---	574	---	74	31	---
TOTAL	650	1800	5420	51921	25335	36114	8045	5513	6061	2247	2854	534
MEAN	21.0	60.0	175	1675	905	1165	268	178	202	72.5	92.1	17.8
MAX	63	111	487	2750	1400	1370	882	574	594	133	169	26
MIN	11	19	41	519	370	922	73	23	21	22	31	13
AC-FT	1290	3570	10750	103000	50250	71630	15960	10940	12020	4460	5660	1060
CFSM	.04	.10	.30	2.91	1.57	2.02	.47	.31	.35	.13	.16	.03
IN.	.04	.12	.35	3.35	1.64	2.33	.52	.36	.39	.15	.18	.03

RED RIVER BASIN

07364150 BAYOU BARTHOLOMEW NEAR MCGEEHEE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

MEAN	172	351	730	1035	1410	1404	1215	1078	467	218	155	154
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

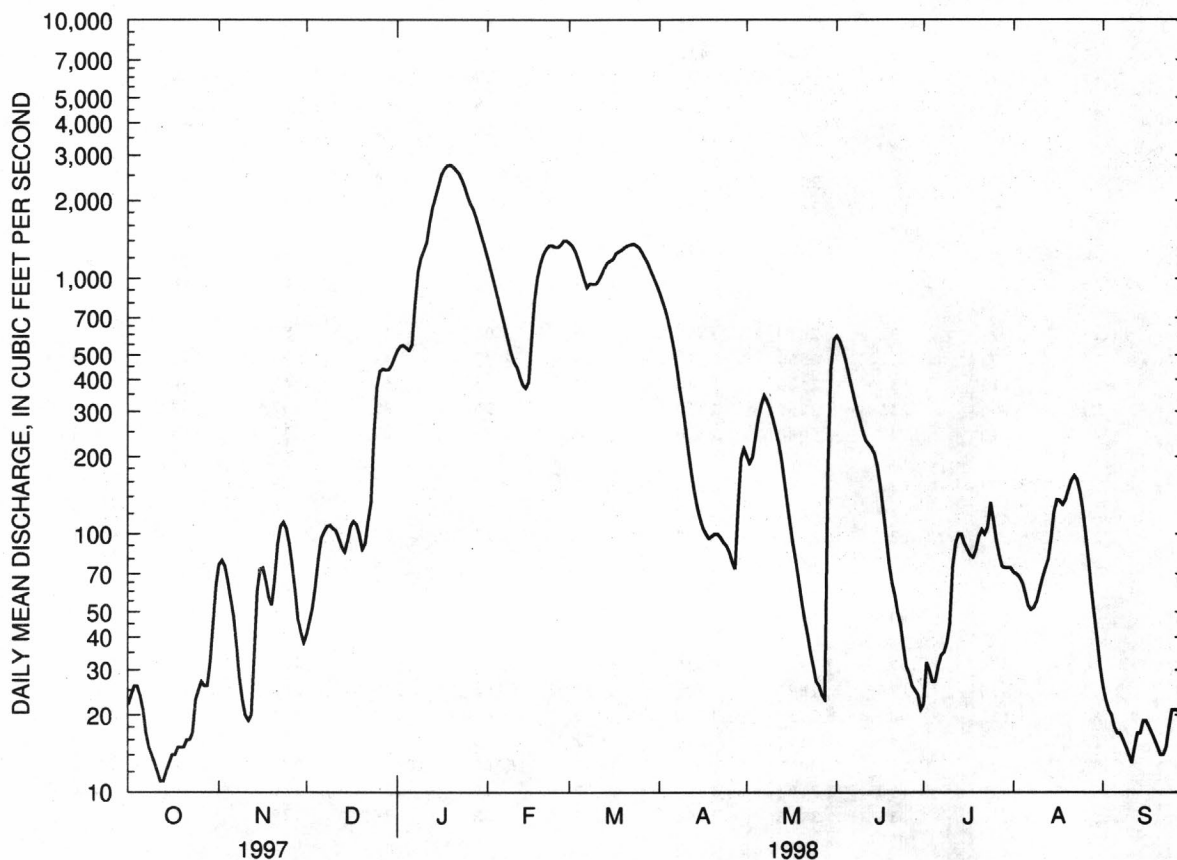
SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1939 - 1998

ANNUAL TOTAL	393355			146494								
ANNUAL MEAN	1078			401						695		
HIGHEST ANNUAL MEAN										1488		1973
LOWEST ANNUAL MEAN										149		1972
HIGHEST DAILY MEAN	5700	Mar 11		2750	Jan 19					6870		May 11 1958
LOWEST DAILY MEAN	11	Oct 12		11	Oct 12					.20		Aug 15 1956
ANNUAL SEVEN-DAY MINIMUM	12	Oct 9		12	Oct 9					.20		Aug 15 1956
INSTANTANEOUS PEAK FLOW				2750	Jan 19					6870		May 11 1958
INSTANTANEOUS PEAK STAGE				16.72	Jan 20					^a 25.49		May 11 1958
INSTANTANEOUS LOW FLOW				10	Oct 13					.20		Aug 15-23 1956
ANNUAL RUNOFF (AC-FT)	780200			290600						503800		
ANNUAL RUNOFF (CFSM)	1.87			.70						1.21		
ANNUAL RUNOFF (INCHES)	25.40			9.46						16.40		
10 PERCENT EXCEEDS	3160			1300						2010		
50 PERCENT EXCEEDS	487			100						252		
90 PERCENT EXCEEDS	27			19						32		

^aAt present datum

RED RIVER BASIN

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07364150 BAYOU BARTHOLOMEW NEAR MCGEEHEE--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 1997 TO SEPTEMBER 1998

		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 18...	1130	80513	81213	102	254	7.5	767	7.3	7.6	63	
JAN 20...	1315	80513	81213	2410	58	7.3	770	8.4	7.4	62	
FEB 24...	1115	80513	81213	1310	64	7.4	770	11.3	9.2	83	
APR 21...	1140	80513	81213	126	92	7.4	764	17.1	5.5	57	
JUN 17...	1140	80513	81213	129	236	7.1	764	28.0	3.8	48	
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 AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
NOV 18...	<1	K38	K210	75	18	7.2	17	31	.9	6.3	
JAN 20...	<1	<2	260	18	4.4	1.8	2.8	21	.3	3.1	
FEB 24...	<1	<1	120	19	4.7	1.8	3.4	25	.3	2.4	
APR 21...	170	140	130	28	6.8	2.6	4.9	25	.4	2.8	
JUN 17...	77	K91	K120	72	18	6.5	15	30	.8	4.2	
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)
NOV 18...	16	28	156	--	--	<.010	--	.280	<.010	--	
JAN 20...	4.3	3.0	64	--	--	<.010	--	.040	.016	.02	
FEB 24...	6.7	3.2	54	--	--	<.010	--	.140	.022	.03	
APR 21...	6.9	5.0	44	--	--	<.010	--	.270	.058	.07	
JUN 17...	11	26	154	1.07	4.8	.026	.09	1.10	.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 PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .0625 MM (70331)
NOV 18...	--	.46	.74	.100	.050	.040	.12	47	13	91	
JAN 20...	.86	.88	.92	.190	.070	.060	.18	99	644	97	
FEB 24...	.61	.63	.77	.140	.050	.060	.18	49	173	100	
APR 21...	.75	.81	1.1	.260	.040	.050	.15	77	26	97	
JUN 17...	.55	.59	1.7	.180	.060	.040	.12	80	28	98	

RED RIVER BASIN

07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

		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)			
AUG										
31...	1316	80513	80513	70.0	1.25	2.50	104			
31...	1317	80513	80513	70.0	2.00	4.00	111			
31...	1318	80513	80513	70.0	2.50	5.00	118			
31...	1319	80513	80513	70.0	2.50	5.00	125			
31...	1320	80513	80513	70.0	2.50	5.00	132			
31...	1321	80513	80513	70.0	2.50	5.00	139			
31...	1322	80513	80513	70.0	2.00	4.00	146			
31...	1323	80513	80513	70.0	2.00	4.00	153			
31...	1324	80513	80513	70.0	1.50	3.00	160			
31...	1325	80513	80513	70.0	1.00	2.00	167			
31...	1345	80513	81213	--	--	--	--			
DATE		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)		
AUG										
31...	--	486	7.6	28.6	4.8	62	761			
31...	--	484	7.6	28.4	4.6	59	761			
31...	--	484	7.6	28.4	4.6	59	761			
31...	--	483	7.6	28.4	4.5	58	761			
31...	--	482	7.6	28.4	4.5	58	761			
31...	--	481	7.6	28.4	4.5	58	761			
31...	--	480	7.6	28.4	4.6	59	761			
31...	--	480	7.7	28.5	4.6	59	761			
31...	--	477	7.7	28.6	4.7	61	761			
31...	--	474	7.9	28.7	4.7	61	761			
31...	31	482	7.6	28.4	4.5	58	761			
DATE	TIME	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)	
AUG										
31...	1345	250	K27	K30	160	41	14	26	25	
DATE		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
AUG										
31...	.9	5.1	8.1	51	272	<.010	.150	<.010	.71	
DATE		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)	
AUG										
31...	.86	.130	.100	.080	.25	69	5.8	98		

RED RIVER BASIN

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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 1997 TO SEPTEMBER 1998

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	60	94	199	280	233	e65	e110	2880	96	e130	111
2	53	57	87	192	475	162	e63	e85	2130	108	e125	111
3	54	58	97	188	358	133	e63	e75	1190	120	e120	108
4	54	58	240	185	263	122	e62	e65	495	137	91	103
5	53	62	261	307	223	193	e60	e55	321	123	95	98
6	53	58	257	526	206	382	e59	47	281	118	112	96
7	53	56	254	1640	194	533	e58	46	213	108	122	95
8	53	55	279	2050	188	2020	e57	46	154	103	135	95
9	53	62	276	1610	184	2100	e55	e46	142	101	132	e204
10	52	62	269	995	205	1690	e54	e50	138	89	128	e216
11	52	62	260	544	358	1230	e54	e50	109	88	126	e181
12	52	65	213	802	225	558	e56	e60	88	100	129	e159
13	61	69	182	681	155	324	e58	e90	77	433	139	e137
14	58	70	180	449	132	239	e60	87	74	e790	142	e127
15	54	68	178	444	138	185	e56	89	71	e710	141	e110
16	55	66	177	780	899	174	e53	90	71	e500	163	e105
17	56	65	176	526	1080	430	49	99	74	e360	164	e100
18	57	60	173	384	689	319	57	94	73	286	e150	e93
19	56	57	172	315	413	207	65	69	68	234	e135	85
20	56	65	166	264	303	162	51	62	70	200	e120	84
21	56	67	303	340	220	139	49	69	67	e170	116	e80
22	56	66	343	1360	236	e130	49	69	e64	e165	113	e78
23	57	66	310	1360	320	e110	e49	71	e60	e160	109	e90
24	72	66	1190	762	217	e100	e49	69	e55	e155	106	e160
25	60	64	1120	455	166	e90	e48	79	57	e150	108	e210
26	93	58	614	428	302	e85	e47	105	66	e145	107	e240
27	71	64	404	748	548	e85	e45	114	62	e140	108	e260
28	67	74	322	503	373	e80	e110	109	56	136	106	e240
29	64	186	270	365	---	e80	e150	1290	61	e150	102	e240
30	62	116	234	300	---	e75	e140	3270	66	e140	101	e210
31	60	---	212	253	---	e65	---	3250	---	e135	109	---
TOTAL	1806	2062	9313	19955	9350	12435	1891	9910	9333	6450	3784	4226
MEAN	58.3	68.7	300	644	334	401	63.0	320	311	208	122	141
MAX	93	186	1190	2050	1080	2100	150	3270	2880	790	164	260
MIN	52	55	87	185	132	65	45	46	55	88	91	78
AC-FT	3580	4090	18470	39580	18550	24660	3750	19660	18510	12790	7510	8380

RED RIVER BASIN

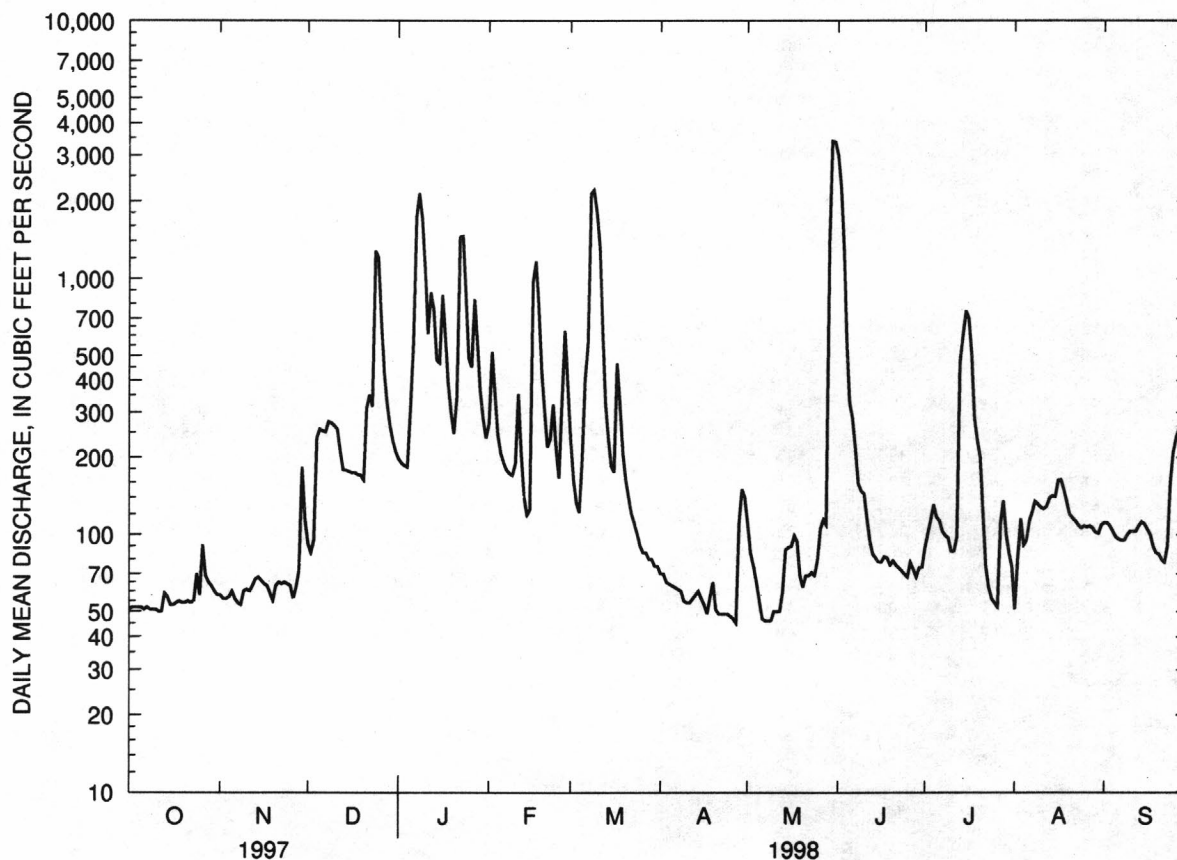
07369680 BAYOU MACON AT EUDORA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1998, BY WATER YEAR (WY)

MEAN	96.8	121	283	474	536	415	409	347	197	287	171	92.2
MAX	297	218	651	858	1174	858	1053	1510	330	847	425	150
(WY)	1995	1992	1991	1997	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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1989 - 1998	
ANNUAL TOTAL	108746		90515			
ANNUAL MEAN	298		248		285	
HIGHEST ANNUAL MEAN					493	1991
LOWEST ANNUAL MEAN					130	1996
HIGHEST DAILY MEAN	2970	Jan 25	3270	May 30	4170	Apr 23 1995
LOWEST DAILY MEAN	38	Aug 6	45	Apr 27	1.7	Sep 23 1988
ANNUAL SEVEN-DAY MINIMUM	48	Sep 17	48	Apr 21	34	Sep 28 1988
INSTANTANEOUS PEAK FLOW			3380	May 30	4280	Apr 23 1995
INSTANTANEOUS PEAK STAGE			21.13	May 30	24.41	Apr 29 1991
INSTANTANEOUS LOW FLOW					32	May 21-23 1995
ANNUAL RUNOFF (AC-FT)	215700		179500		206300	
10 PERCENT EXCEEDS	708		501		647	
50 PERCENT EXCEEDS	115		112		111	
90 PERCENT EXCEEDS	56		56		56	

eEstimated



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 1998 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								
07047820 Murray Creek near Jonesboro	Lat 35°51'50", long 90°38'30", in SW ¹ / ₄ SW ¹ / ₄ sec.2, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203, at culvert on U.S. Highway 49, 4.0 mi northeast of Jonesboro. Drainage area is 1.38 mi ² .	1960-98	2-16-98	8.93	a	05-27-73	14.20	1,330
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 .	1992-98	—	<15.48	--	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 .	1963-98	—	<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 .	1990-98	—	<13.22	--	4-5-97	16.94	a
WHITE RIVER BASIN								
07048600 White River near Fayetteville	Lat 36°04'23", long 94°04'51", in NE ¹ / ₄ SW ¹ / 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 is 400 mi ² .	1963-94 ^f 1995-98	1-5-98	21.85	28,100	11-19-85	30.45	81,600
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 .	1960-98	1-5-98	8.13	300	07-25-60	17.60	1,410
07049000 War Eagle Creek near Hindsville	Lat 36°12'02", long 93°51'16", in SE ¹ / ₄ NE ¹ / 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. Drainage area is 263 mi ² .	1953-70 ^f 1971-77 1985-98	1-5-98	15.91	11,200	11-19-85	28.49	49,000
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 .	1989-98	1-5-98	7.89	3,300	05-03-90	14.91	a
07050500 Kings River near Berryville	Lat 36°25'36", long 93°37'15", in SE ¹ / ₄ NE ¹ / 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 is 527 mi ² .	1939-75 ^f 1976-92 1993-95 ^f 1996-98	1-5-98	19.76	18,000	11-19-85	38.91	66,000
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 .	1995-98	1-5-98 11-7-96	8.69 11.20	3,860 7,300	04-22-96	^b 14.03	12,000

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 1998 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								
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 .	1995-98	1-5-98	6.77 5,120	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 .	1962-98	2-11-98 4-5-97	8.18 7.68	10-13-68	15.30 2,480		
07055000 White River near Flippin	Lat 36°18'35", long 92°33'28", in NE ¹ / ₄ NW ¹ / 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 north-east of Flippin. Drainage area is 6,081 mi ² .	1928-80 ^f 1981-91 1992-98 ^g	2-19-20-98	13.09 --	04-17-45	39.82 215,000		
07055608 Crooked Creek at Yellville	Lat 33°13'23", long 92°40'47" in NW ¹ / ₄ NE ¹ / 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 ^f 1995-98	2-11-98	10.67 5,350	05-03-90	25.20 38,700		
07055646 Buffalo River near Boxley	Lat 35°56'43", long 91°59'42", in SW ¹ / ₄ SE ¹ / 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 is 57 mi ² .	1993-95 ^f 1996-98	1-5-98	8.54 5,900	9-26-96	^b 14.79 29,000		
07058980 Bennett's River at Vidette	Lat 36°25'19", long 92°07'07", in SW ¹ / ₄ SE ¹ / ₄ SE ¹ / 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 .	1995-98	5-7-98	10.68 a	11-05-94	10.99 a		
07059450 Big Creek near Elizabeth	Lat 36°21'25" long 92°06'48", in NE ¹ / ₄ SE ¹ / ₄ NW ¹ / 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.	1995-98	3-19-98	12.22 a	11-05-94	15.15 a		
07061000 White River at Batesville	Lat 35°45'35", long 91°38'28", in NE ¹ / ₄ NW ¹ / 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 ^f 1986-94 ^f 1995-98 ^g	3-20-98	14.40 --	04-16-45	29.43 324,000		
07064000 Black River near Corning	Lat 36°24'07", long 90°32'29", in SW ¹ / ₄ NE ¹ / 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 is 1,749 mi ² .	1938-95 ^f 1996-98	3-21-98	12.47 9,680	6-13-45	16.92 48,600		
07069000 Black River at Pocahontas	Lat 36°15'14", long 90°58'12", in SW ¹ / ₄ SW ¹ / 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 ^f 1971-78 1981-94 1995-98 ^g	3-25-98	20.10 --	12-07-82	25.22 66,300		
07069250 Brush Creek near Mammoth Spring	Lat 36°25'36", long 91°29'27", in SE ¹ / ₄ SE ¹ / 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 .	1961-98	--	<6.93 --	04-22-73	15.05 960		
07069410 Ferguson Creek near Ravenden Springs	Lat 36°17'29", long 91°14'29", in NE ¹ / ₄ SE ¹ / 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 .	1989-98	4-28-98	10.02 a	4-28-98	10.02 a		
07069500 Spring River at Imboden	Lat 36°12'19", long 91°10'19", in SE ¹ / ₄ NE ¹ / 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 ^f 1995-98	5-10-98	18.00 18,400	12-03-82	^b 38.12 244,000		

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 1998 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								
07072000 Eleven Point River near Ravenden Springs	Lat 36°20'48", long 91°06'48", in SE ¹ / ₄ SE ¹ / 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 ^f 1935-94 ^f 1995-98	3-20-98	10.05 5,940	12-03-82	^b 29.06 162,000		
07073500 Piney Fork near Evening Shade	Lat 36°04'50", long 91°36'39", in SE ¹ / ₄ NE ¹ / ₄ sec.34, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, on right bank, 20 ft upstream from bridge on U.S. Highway 167, 0.8 mi north of Evening Shade. Drainage area is 99.2 mi ² .	1939-84 ^f 1985-94 1995-98 ^g	7-12-98	12.84 --	12-03-82	30.32 50,400		
07074000 Strawberry River near Poughkeepsie	Lat 36°06'37", long 91°26'59", in SE ¹ / ₄ NW ¹ / 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 ^f 1995-98	3-8-98	13.14 9,780	12-03-82	^b 35.90 158,000		
07074420 Black River at Elgin Ferry	Lat 35°45'51", long 91°17'40", in NW ¹ / ₄ SE ¹ / 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 is 8,418 mi ² .	1979-94 1995-98 ^g	3-22-98	22.21 --	12-04-82	^b 27.7 a		
07074850 White River near Augusta	Lat 35°18'02", long 91°23'35", in SE ¹ / ₄ SE ¹ / 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 1995-98 ^g	3-28-98	31.96 --	12-07-82	38.31 250,000		
07074865 Glaise Creek near Bradford	Lat 35°27'45", long 91°32'49", in NW ¹ / ₄ SW ¹ / 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 .	1989-98	3-5-98	5.19 490	01-06-91	8.4 a		
07075000 Middle Fork of Little Red River at Shirley	Lat 35°39'25", long 92°17'34", in SW ¹ / 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 1995-98 ^g	1-5-98	20.13 --	12-03-82	37.53 241,000		
07075300 South Fork Little Red River at Clinton	Lat 35°35'29", long 92°27'20", in SW ¹ / 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 1995-98	1-5-98	16.18 13,500	12-03-82	^b 34.27 67,900		
07075600 Choctaw Creek Tributary near Choctaw	Lat 35°31'30", long 92°25'03", in SE ¹ / ₄ SW ¹ / 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 .	1964-98	--	<9.08 --	12-03-82	19.07 1,760		
07075800 Dill Branch Tributary near Ida	Lat 35°32'36", long 91°57'25", in SW ¹ / ₄ NE ¹ / 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 .	1964-98	--	<5.85 --	04-02-79	9.96 230		
07076630 Key Branch near Searcy	Lat 35°14'47", long 91°47'01", in NW ¹ / ₄ SW ¹ / 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 .	1961-98	3-8-98	4.99 52	11-24-73	7.79 573		
07076750 White River at Georgetown	Lat 35°07'45", long 91°27'00", in SW ¹ / ₄ SW ¹ / 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 .	1990-94 ^f 1995-98	3-24-98	21.18 61,800	3-8-97	22.93 80,900		

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 1998 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								
07076870 Pigeon Roost Creek at Butlerville	Lat 34°58'36", long 91°50'38", in NW ¹ / ₄ NE ¹ / ₄ sec.15, T.4 N., R.8 W., Lonoke County, Hydrologic Unit 08020301, at bridge on State Highway 38, 0.6 mi west of Butlerville. Drainage area is 23.0 mi ² .	1961-98	2-11-98	9.99 1,100	04-21-74	12.62 8,800		
07077100 Big Creek near Boydsville	Lat 36°22'12", long 90°19'50", in SE ¹ / ₄ NW ¹ / 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 1993-98	7-25-98 1-18-95	18.53 4,400 11.51 1,220	04-19-73	19.14 4,700 ^c		
07077200 Big Creek Tributary near Boydsville	Lat 36°22'32", long 90°19'56", in SE ¹ / ₄ SW ¹ / 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 .	1962-98	7-25-98	9.94 790	07-25-98	9.94 790		
07077430 Willow Ditch near Egypt	Lat 35°56'29", long 90°56'33", in SW ¹ / ₄ SW ¹ / 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 .	1963-98	4-28-98	5.92 a	12-21-91	6.37 112		
07077650 Big Creek near Jonesboro	Lat 35°51'11", long 90°45'00", in SE ¹ / ₄ SE ¹ / 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 .	1989-98	4-28-98 1-18-95	14.40 a 14.58 a	04-05-97	22.00 ^b a		
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 .	1993-98	5-26-98	10.80 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 .	1961-98	2-10-98	8.97 410	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 1993-98	2-17-98	13.10 1,150	4-5-97	16.11 2,050		
ARKANSAS RIVER BASIN								
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 ^f 1981-98	1-4-98	30.79 4,820	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 ^f 1992-98	1-5-98	5.16 165	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 .	1988-98	1-5-98	11.95 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 ^f 1971-98	1-5-98	11.93 13,200	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 .	1962-98	1-5-98	5.97 24	10-26-70	7.71 274		
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 ^f 1971-98	1-5-98	12.50 14,100	05-30-90	18.76 41,300		

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 1998 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								
07251790 Mulberry River near Oark	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 Oark. Drainage area is 70.2 mi ² .	1988-98	1-5-98	10.26 7,600	1-4-93	14.72 21,500		
07252000 Mulberry River near Mulberry	Lat 35°34'37", long 94°00'55", in SE ¹ / ₄ SW ¹ / 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 is 373 mi ² .	1938-94 ^f 1995-98	1-5-98	12.9 18,800	12-03-82	23.66 70,200		
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 .	1993-98	1-5-98	7.63 a	11-05-94	8.57 a		
*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 ^f 1971-98 ^d	1-5-98	11.32 5,390	06-05-74	19.93 27,400		
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 .	1989-98	1-5-98	16.51 14,200	05-03-90	19.11 a		
07257006 Big Piney Creek at Hwy 164 near Dover	Lat 35°30'48", long 93°10'24", in SE ¹ / ₄ NW ¹ / 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 is 297 mi ² .	1950-95 ^f 1996-98	1-5-98	12.46 18,300	12-3-82	33.87 111,000		
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 .	1962-98	1-5-98	4.31 43	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 .	1978-98	1-5-98	14.07 9,520	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 ^f 1971-98	1-5-98	17.30 22,700	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 ^f 1995-98	1-6-98	32.91 259,000	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 Hydrologic Unit 11110105, at culvert on U.S. Highway 71, 5.2 mi north of Waldron. Drainage area is 0.92 mi ² .	1961-98	1-5-98	3.53 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 ^f 1985-98	1-5-98	21.57 17,400	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 ^f 1976-98	1-5-98	15.78 8,100	07-26-69	22.38 24,500		

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 1998 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								
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 ^a 1991-94 1995-98 ^a	1-8-98	21.0 --	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 .	1978-98	1-5-98	20.04 6,910	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 .	1967-98	--	<5.74 --	12-03-82	8.24 102		
07261250 Cadron Creek near Conway	Lat 35°06'51", long 92°31'30", in NE ¹ / ₄ SE ¹ / ₄ sec.31, T.6 N., R.14 W., Faulkner County, Hydrologic Unit 11110205, about 600 ft downstream from bridge on U.S. Highway 64, 4.0 mi west of Conway. Drainage area is 752 mi ² .	1979-94 1995-98 ^a	1-7-98	18.28 --	05-07-90	25.80 a		
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 ^a 1995-98	1-5-98	21.27 23,800	12-03-82	b32.45 162,000		
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 .	1963-98	1-5-98	4.59 128	12-03-82	b10.65 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 ^a 1996-98	2-11-98	11.11 12,300	12-3-82	24.55 94,000		
07263012 Fourche LaFave River near Aplin	Lat 34°57'37", long 92°58'50", in E ¹ / ₂ NE 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 .	1980-98	2-11-98	25.24 12,600	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 .	1962-98	2-11-98	6.89 50	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 1995-98 ^a	1-8-98	29.35 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 1993-98	2-11-98	9.10 2,500	03-10-73	15.01 10,800		
07263590 Coleman Creek at Little Rock	Lat 34°45'07", long 92°20'02", in SE ¹ / ₄ NW ¹ / 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 .	1990-98	1-6-98 10-27-96 5-27-96 4-11-95 8-19-94 4-25-93 8-5-92 4-13-91 5-19-90	15.63 15.55 15.14 14.11 15.47 14.16 15.47 15.26 17.50	980 "960 "840 "570 "940 "580 "940 "870 "1,600	05-19-90 17.50 "1,600		

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 1998 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								
07264050 Bayou Two Prairie near Cabot	Lat 34°51'32", long 91°58'48" in SW ¹ / ₄ NW ¹ / 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 .	1988-98	2-11-98	8.98 960	12-28-87	^c 12.12 ^c 5,200		
RED RIVER BASIN								
07339500 Rolling Fork near DeQueen	Lat 34°02'51", long 94°24'47", in SW ¹ / ₄ SW ¹ / ₄ sec.21, T.8 S., R.32 W., Sevier County, Hydrologic Unit 11140109, near of 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 ^f 1981-98	1-16-98	8.30 1,790	12-10-71	24.23 71,000		
07340500 Cossatot River near DeQueen	Lat 34°02'45", long 94°12'42", in NE ¹ / ₄ NE ¹ / 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 ^f 1981-98	12-24-97	9.43 3,820	05-13-68	22.60 122,000		
07341000 Saline River near Dierks	Lat 34°05'45", long 94°05'04", in NW ¹ / ₄ SW ¹ / 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 ^f 1981-98	1-5-98	7.95 1,060	05-13-68	22.95 59,200		
07341260 Dillard Creek near Nashville	Lat 33°26'04", long 93°54'45", in NE ¹ / ₄ NE ¹ / 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 .	1989-98	5-28-98 4-26-97 5-8-95	9.63 8.16 ^c 9.07	5-28-98	9.63 1,110 ^h 600 ^h 940		
07344280 Nix Creek at E. 12th Street at Texarkana	Lat 33°26'04", long 95°01'33", in NW ¹ / ₄ SW ¹ / 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 .	1993-98	5-28-98 10-22-96 8-28-96 1-18-95 7-14-94 6-26-93	^b 20.50 15.04 14.85 ^c 16.76 14.82 16.19	5-28-98	^b 20.50 8,260 ^h 1,900 ^h 1,850 ^h 2,760 ^h 1,830 ^h 2,420		
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 .	1993-98	5-28-98	19.52 4,570	05-28-98	19.52 4,570		
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 .	1990-98	5-28-98	15.64 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 .	1961-98	10-10-97	3.23 138	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 .	1989-98	- 4-5-97	^a 4.06	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 .	1993-98	2-10-98	5.22 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 .	1989-98	2-10-98	8.13 1,900	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 .	1989-98	2-10-98	8.11 1,300	05-20-90	16.9 10,500		

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 1998 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						
07360100 L'Eau Fraix 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 .	1989-98	2-10-98	4.56 73	04-14-93	8.16 a
07360200 Little Missouri River near Langley	Lat 34°18'41", long 93°53'58", in NW ¹ / ₄ SW ¹ / 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 is 68.4 mi ² .	1989-98	4-27-98 11-24-96	10.14 11.51 c ^{10,000}	03-08-90	17.34 h ^{23,200}
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 .	1989-98	2-11-98	6.72 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 .	1963-98	5-28-98 4-26-97 4-11-95 12-3-93 10-8-90 3-8-90 7-19-89	22.92 c ^{19.46} 18.77 21.902 0.31 23.72 24.62	h ^{2,050} h ^{1,750} h ^{3,900} c ^{2,300} c ^{6,000} c ^{7,300}	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 .	1988-98	2-11-98	8.50 a	12-26-87	14.0 a
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 .	1989-98	1-12-98 10-29-91 4-13-91 3-8-90	10.25 8.06 11.99 13.07	260 98 h ⁵⁰⁰ h ^{1,100}	4-5-97 14.47 h ^{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 .	1962-98	1-6-98	6.43 375	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 ^f 1984-98	1-12-98	11.76 3,010	05-02-58	16.47 26,800
07362715 Big Creek near Crow	Lat 34°37'00", long 92°43'35", in NE ¹ / ₄ NW ¹ / 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 .	1988-98	2-11-98 3-3-97 7-27-96 4-10-95 12-15-92 3-8-92 10-9-90 11-19-88	8.43 6.58 8.11 6.69 8.02 8.15 8.63 9.26	2,800 c ⁷⁴⁰ c ^{2,300} c ⁸²⁰ c ^{2,200} c ^{2,350} c ^{3,100} c ^{4,300}	12-28-87 9.68 c ^{5,300}
07363000 Saline River at Benton	Lat 34°34'05", long 92°36'40", in SE ¹ / ₄ NE ¹ / ₄ sec.2, 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 ^f 1980-98	2-11-98	23.22 40,600	01-30-69	29.68 100,000
07363200 Saline River near Sheridan	Lat 34°06'56", long 92°24'21", in NE ¹ / ₄ NW ¹ / 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 ^f 1983-98	2-14-98	17.71 25,000	12-28-87	22.66 73,900
07363435 Derriusseaux Creek near Grapevine	Lat 34°08'44", long 92°14'38", in NE ¹ / ₄ NW ¹ / 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 .	1989-98	3-8-98	8.45 980	4-5-97	11.50 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 1998 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						
07364030 L'Aigle Creek Tributary near Hermitage	Lat 33°24'30", long 92°12'30", in SE ¹ / ₄ NW ¹ / 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 .	1963-98	3-7-98	3.89 14	04-14-91	7.06 260
07364110 Nevins Creek Tributary near Pine Bluff	Lat 34°10'08", long 92°05'12", in NW ¹ / ₄ SE ¹ / 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 .	1961-98	3-7-98	4.28 61	09-24-84	10.58 600
07364128 Deep Bayou near Grady	Lat 34°02'03", long 91°42'34", in NW ¹ / ₄ NW ¹ / 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 .	1989-98	1-8-98	13.00 1,100	07-18-89	18.1 2,350
07364140 Ables Creek near Tyro	Lat 33°49'29", long 91°44'06", in NE ¹ / ₄ SE ¹ / 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 .	1993-98	— 4-8-93	<8.41 13.25	04-05-97	14.28 ^h 13,700
07364550 Caney Creek Tributary near El Dorado	Lat 33°11'22", long 92°36'28", in NE ¹ / ₄ NW ¹ / 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 .	1961-98	1-6-98	6.84 34	06-08-74	12.40 978
07365800 Cornie Bayou near Three Creeks	Lat 33°02'21", long 92°56'15", in SW ¹ / ₄ NW ¹ / 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 ^f 1990-98	—	<9.05 —	06-08-74	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 publishedⁱ At site and datum then in use

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1998

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Measurements Discharge (ft ³ /s)
ST. FRANCIS RIVER BASIN						
07047520 St. Francis River at Coldwater	Mississippi River	Lat 35°21'52" long 90°34'37", in SE1/4NE1/4, sec.32 T.9 N., R.5 E., Cross County, Hydrologic Unit 08020203, at bridge on State Highway 42, 0.1 mi west of Coldwater.	a	--	8-5-97	^a 1,280
07047700 Tyronza River near Twist	St. Francis River	Lat 35°22'29" long 90°28'05", in SE1/4, sec.29 T.9 N., R. 6 E., Crittenden County, Hydrologic Unit 08020203, at bridge on State Highway 42, 2.0 mi east of Twist.	533	1964-67, ^c 1975, ^c 1988 ^c	8-5-97	^a 162
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	1986-97	10-29-96 2-25-97 8-21-97 10-9-97 2-2-98 5-15-98 9-2-98	^a 167 ^a 231 ^a 89.0 458 117 0 96.5
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	9-18-97 1-7-98 5-21-98 8-28-98	^a 6.93 638 7.21 ^b 0.05
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	1985-97	9-19-97 1-7-98 5-21-98 8-28-98	^a 14.4 1,110 11.4 0
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	11-13-97 3-27-98 6-23-98	17.5 224 11.3
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	11-14-97 3-11-98 6-23-98	83.2 428 10.9
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, 1983-97	11-12-97 3-9-98 7-2-98	7.33 344 56.9
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	1974-97	10-16-96 4-9-97 11-12-97 5-13-98 8-28-98	^a 53.6 ^a 661 20.0 320 34.8
07074660 Village Creek near Swifton	White River	Lat 35°49'10", long 91°05'05", in NW1/4SW1/4 sec.27, T.14 N., R.1 W., Jackson County, Hydrologic Unit 11010013, at bridge on county road, 2.4 mi east of Swifton.	a	1973-74, 1976-77	8-14-97	^a 166
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	1984-97	10-10-97 12-11-97 4-3-98 7-14-98	^b 10 96.5 0 0
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	10-8-97 1-29-98 5-14-98 9-3-98	3.96 12.4 115 ^b 0.1

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Discharge measurements made at special study and miscellaneous sites during water year 1998--Continued

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Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
WHITE RIVER BASIN--continued						
07077950 Big Creek at Poplar Grove	White River	Lat 34°33'20", long 90°50'44", in NE1/4NE1/4 sec.1, T.2 S., R.2 E., Phillips County, Hydrologic Unit 08020304, at bridge on U.S. Highway 49, at Poplar Grove.	448	1970-93 ^e	8-6-97	^d 224
07078040 LaGrue Bayou near DeWitt	White River	Lat 34°18'12", long 91°18'46", in NW1/4SW1/4 sec.35, T.4 S., R.3 W., Arkansas County, Hydrologic Unit 08020303, at bridge on State Highway 1, 1.1 mi northwest of DeWitt.	233	1988 ^c	8-7-97	^d 0
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 1987-97	3-22-96 4-23-98 6-22-98	^d 177 429 236
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	1986-97	10-15-97 2-5-98 5-28-98 9-17-98	0.91 506 61.5 0.10
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 1986-97	12-12-97 4-8-98 7-23-98 9-3-98	15.8 43.1 0 0
07265099 Bayou Meto near Bayou Meto	Arkansas River	Lat 34°12'05", long 91°31'45", in SE1/4NE1/4 sec.3, T.6 S., R.5 W., at Arkansas-Jefferson County line, Hydrologic Unit 08020402, at bridge on State Highway 11, 1.6 mi southwest of Bayou Meto.	794	--	8-7-97	^d 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 1986-97	10-17-97 2-9-98 7-30-98	94.3 101 467
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	10-22-97 5-28-98 9-17-98	19.7 122 2,450
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	1973-96	10-20-97 2-9-98 5-26-98 9-14-98	464 16.5 10.6 30.4
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	10-20-97 2-23-98 5-26-98 9-14-98	0 1,080 1.03 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	1987-97	4-9-98 7-22-98	404 31.6
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 1974-97	8-14-97 10-9-97 2-2-98 5-21-98	^d b1.0 0 670 1.0
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	1974-96	1-17-97 12-8-97 3-30-98	^d 80.3 218 55.1

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at special study and miscellaneous sites during water year 1998--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
RED RIVER BASIN--continued						
07364115 Bayou Bartholomew near Ladd	Ouachita River	Lat 34°06'24", long 92°54'06", in NW ¹ / 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, 1974-97	10-7-97 7-14-98	0 40.1
07364143 Ables Creek north of Selma	Bayou Bartholo- mew	Lat 33°44'10", long 91°33'40", in NE ¹ / ₄ NE ¹ / 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	--	10-8-97	^b 0.02
07364600 Bayou DeLoutre near El Dorado	Ouachita River	Lat 33°05'55", long 92°35'32", in SE ¹ / ₄ NW ¹ / 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, 1990-96	1-15-97 1-28-98 7-16-98	71.6 258 13.3
073676595 Bayou Macon near Halley	Boeuf River	Lat 33°32'17", long 91°17'36", in NE ¹ / ₄ SW ¹ / ₄ sec.27, T.13 S., R.2 W., Desha County, Hydrologic Unit 08050001, at bridge on State Highway 208, 1.8 mi east of Halley.	a	--	7-30-97	^d 346

^aNot determined.^bEstimated.^cOperated as a low-flow partial-record station.^aNot previously published.^eOperated as a continuous-record station.^fOperated as a stage station by U.S. Army Corps of Engineers.

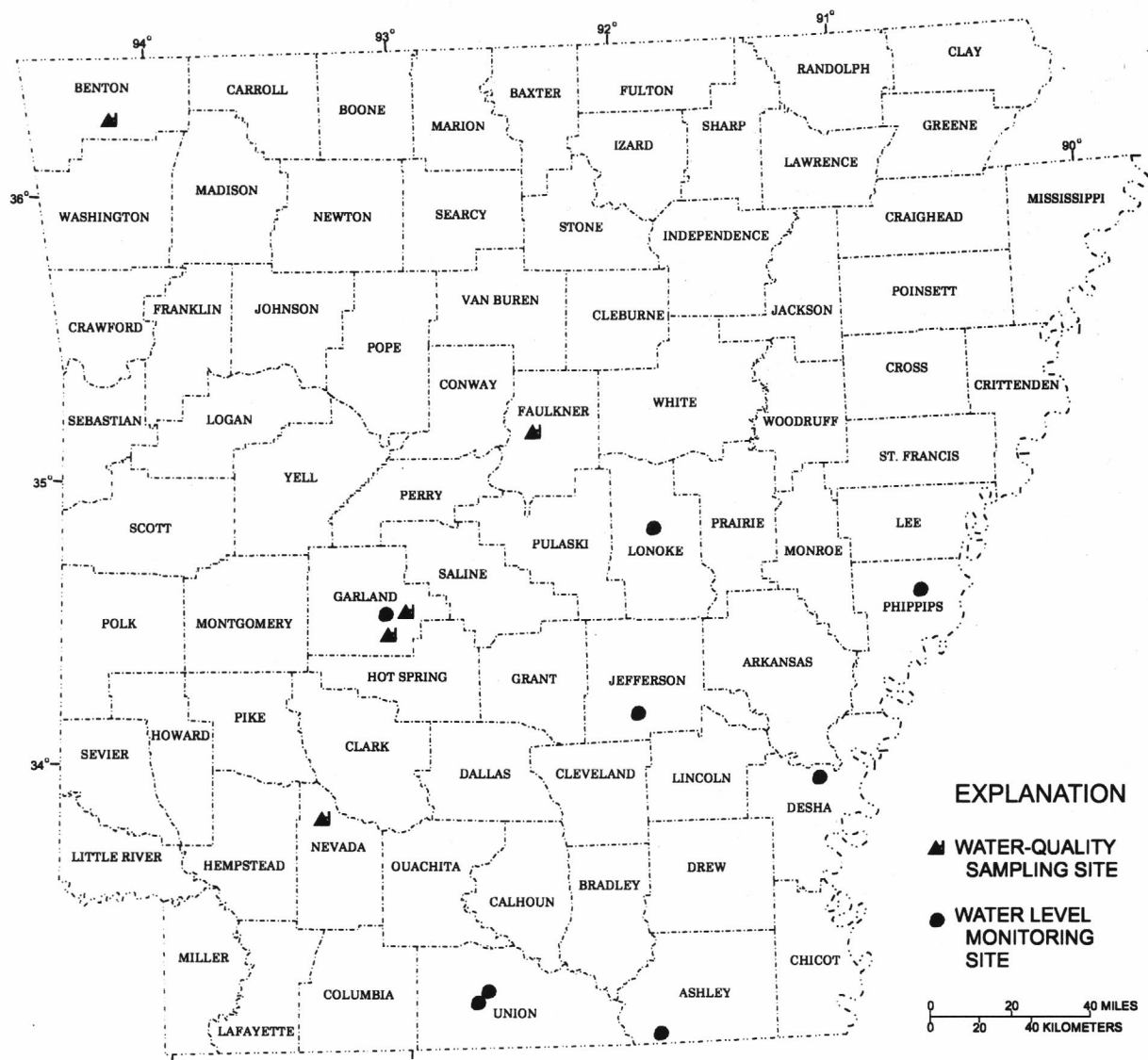


Figure 4. Locations of ground-water quality sampling sites and observation wells in Arkansas.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ARKANSAS COUNTY

342925091314701. Local number, 02S05W34ABC1.

LOCATION.--Lat 34°29'25", long 91°31'47", Hydrologic Unit 08020402, at Stuttgart.

Owner: Alfred Heien.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled irrigation well, diameter 12-8 in, depth 758 ft, cased 0-668 ft, screened 668-748 ft.

DATUM.--Land surface, 216 ft above sea level. Measuring point: Hole in pump, 2.00 ft above land surface.

REMARKS.--Water-quality records for August 1966, June 1969, July 1975, August 1979, August 1983, August 1988, August 1993, and August 1998 are available in files of District Office.

PERIOD OF RECORD.--July 1965 to November 1967 and April 1973.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 121.92 ft below land surface, Nov. 1, 1967; lowest, 145.36 ft below land surface, July 28, 1965.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	
AUG 1998 05...	0830	758.00	216	80513	80020	462	7.4	24.0	20	150	
DATE		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) (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)	
AUG 1998 05...	44	9.3	39	35	1	5.9	211	3.9	23	.18	
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)	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)
AUG 1998 05...	12	272	268	.37	<.010	<.020	.690	.72	.020	310	
DATE		BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG 1998 05...	<.50	95	<.50	<1.0	<1.0	<1.0	870	1.1	20	31	
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)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO- WATER DISS AS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)
AUG 1998 05...	<2.0	<1.0	<1.0	1500	<1	<1.0	11	<3.0	2.5	1.6	

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

343

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.--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 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
5	85.82	85.84	85.81	85.49	85.62	85.49	85.65	85.55	85.59	85.65	85.80
10	85.90	85.69	85.71	85.86	85.42	86.21	85.81	85.66	85.66	85.67	85.73
15	85.96	86.11	85.78	85.59	85.49	85.80	85.39	85.78	85.39	85.67	85.74
20	85.75	85.48	85.67	85.68	85.70	85.52	85.78	85.65	85.64	85.69	85.58
25	85.50	85.79	85.81	85.82	85.52	85.79	85.59	85.65	85.66	85.72	85.73
EOM	85.46	85.52	86.26	85.68	85.54	85.38	85.60	85.59	85.62	85.70	85.67
MAX	86.08	86.23	86.26	86.18	85.80	86.33	85.89	85.84	86.01	85.76	85.82
MIN	85.31	85.35	85.39	85.22	85.15	85.20	85.34	85.45	85.38	85.55	85.53

BENTON COUNTY

362548094123501. Local number, 20N30W06DCD1.

LOCATION.--Lat 36°25'48", long 94°12'35", Hydrologic Unit 11070208, near Bella Vista.

Owner: Deckard.

AQUIFER.--Boone Formation of Mississippian age.

WELL CHARACTERISTICS.--Drilled commercial water-supply well, diameter 7 in, depth 160 ft, screened 100-140 ft.

DATUM.--Land surface, 1,051.97 ft above sea level. Measuring point: Top of casing, 0.92 ft above land surface.

REMARKS.--Water-quality records for August 1998 are available in files of District Office.

PERIOD OF RECORD.--August 1998 to present.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	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 AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
JUL 1998 30...	1240	1047	80513	80020	332	7.5	15.2	<5	170	65
DATE		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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)
JUL 1998 30...	1.7	3.4	4	.1	1.4	145	3.8	4.9	<.10	11

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

BENTON COUNTY--continued

362548094123501. Local number, 20N30W06DCD1.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	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)
JUL 1998 30...	210	187	.29	<.010	2.00	<.010	<.20	.010	53	<.50

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
JUL 1998 30...	18	<.50	<1.0	<1.0	<1.0	15	<1.0	<4	2.9	<2.0

DATE	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)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO- WATER DISS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)
JUL 1998 30...	<1.0	<1.0	50	<1	61	<4.0	<3.0	2.7	1.2

362636094012602. Local number, 21N29W35DDB2.

LOCATION.--Lat 36°26'36", long 94°01'26", Hydrologic Unit 11070208, at Pea Ridge National Military Park.

Owner: National Park Service.

AQUIFER.--Gunter Sandstone of Ordovician age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 10 in, depth 1,769 ft, cased 0-416 ft, open hole 416-1,769 ft.

DATUM.--Land surface, 1,406 ft above sea level. Measuring point: Air hole in top of casing, 1.50 ft above land surface

REMARKS.--Water-quality records for November 1962, January 1965, June 1972, August 1977, July 1987, July 1992, October 1993, and August 1998 are available in files of District Office.

PERIOD OF RECORD.--October 1962, October 1965 to December 1975, May 1978, and current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.67 ft below land surface, July 6, 1992; lowest, 320.22 ft below land surface, June 8, 1967.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DEPTH OF WELL, TOTAL ABOVE (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. SAMPLE 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)
AUG 1998 04...	1220	1769.00	1406	80513	80020	340	7.5	23.3	5	110

DATE	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)
AUG 1998 04...	37	5.1	31	37	1	3.1	175	6.3	2.6	.49

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

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BENTON COUNTY--continued

362636094012602. Local number, 21N29W35DDB2.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	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)
AUG 1998 04...	8.2	198	199	.27	<.010	<.020	.170	.24	<.010	10
DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG 1998 04...	<.50	140	<.50	<1.0	<1.0	<1.0	38	<1.0	40	4.9
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)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)
AUG 1998 04...	<2.0	<1.0	<1.0	270	<1	13	4.5	4.1	2.7	1.1

CHICOT COUNTY

330640091154103. Local number, 18S02W25ABB3.

LOCATION.--Lat 33°06'40", long 91°15'41", Hydrologic Unit 08050001, at Eudora.

Owner: City of Eudora.

AQUIFER.--Cockfield Formation of Eocene age.

WELL CHARACTERISTICS.--Drilled public-supply artesian well, diameter 18 in, depth 332 ft, cased 0-280 ft, screened 280-330 ft.

DATUM.--Land surface, 135 ft above sea level. Measuring point: Top of hole in west side of turbine pump, 2.50 ft above land surface.

REMARKS.--Water-quality records for June 1970, June 1975, May 1979, June 1983, August 1993 and August 1998 are available in files of District Office.

PERIOD OF RECORD.--January 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.75 ft below land surface, Mar. 20, 1975; lowest, 47.65 ft below land surface, June 14, 1988.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 AS (00080)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1998 05...	1420	332.00	135	80513	80020	1300	7.5	27.2	400	330
DATE		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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
AUG 1998 05...	87	26	160	52	4	2.0	415	.30	200	.19

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

CHICOT COUNTY--continued

330640091154103. Local number, 18S02W25ABB3.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	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)
AUG 1998 05...	31	774	769	1.05	<.010	<.020	.540	.59	<.010	260
DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG 1998 05...	<.50	49	<.50	<1.0	<1.0	<1.0	12200	<1.0	8	240
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)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO- WATER DISS AS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)
AUG 1998 05...	<2.0	<1.0	<1.0	470	<1	1.5	7.2	12	6.8	4.5

332613091255101. Local number, 14S03W32DCB1.

LOCATION.--Lat 33°26'13", long 91°25'51", Hydrologic Unit 08050001, near Jerome.

Owner: James Roy Baugh.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16-10 in, depth 90 ft, cased 0-50 ft, screened 50-90 ft.

DATUM.--Land surface, 134 ft above sea level. Measuring point: Bottom edge of steel discharge pipe 4.0 ft above land surface.

REMARKS.--Water-quality records for July 1952, June 1982, June 1986, July 1991, and August 1998 are available in files of District Office.

PERIOD OF RECORD.--July 1952, March 1983 to May 1990, October 1991 to September 1992, and August 1998.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.08 ft below land surface, Mar. 29, 1984; lowest, 29.27 ft below land surface, May 2, 1990.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)
AUG 1998 05...	1200	90.00	134	80513	80020	425	7.0	18.8	400	180
DATE		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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
AUG 1998 05...	52	11	20	20	.7	1.3	192	10	23	.21

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

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CHICOT COUNTY--continued

330640091154103. Local number, 18S02W25ABB3.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	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)
AUG 1998 05...	36	298	287	.41	<.010	<.020	.690	.72	<.010	280
DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG 1998 05...	<.50	45	<.50	<1.0	<1.0	<1.0	16200	<1.0	5	670
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)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO- WATER DISS AS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)
AUG 1998 05...	<2.0	<1.0	<1.0	260	<1	<1.0	<4.0	<3.0	2.6	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.--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, 29.31 ft below land surface, Aug. 15, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.83	24.25	23.70	23.11	21.87	20.79	19.38	19.32	21.58	26.22	28.78	28.34
10	24.72	24.16	23.62	22.92	21.73	20.44	19.27	19.38	21.70	27.13	28.99	28.26
15	24.63	24.05	23.53	22.69	21.60	20.25	19.20	19.80	22.34	27.59	29.31	28.19
20	24.54	23.97	23.45	22.47	21.35	19.89	19.44	20.25	23.26	27.91	29.04	28.11
25	24.45	23.88	23.34	22.28	21.15	19.67	19.41	20.90	24.01	28.14	28.74	28.05
EOM	24.35	23.78	23.21	22.04	21.00	19.48	19.31	21.63	25.23	28.45	28.48	27.99
MAX	24.93	24.33	23.76	23.19	22.00	20.97	19.46	21.63	25.23	28.45	29.31	28.45
MIN	24.35	23.78	23.21	22.04	21.00	19.48	19.18	19.23	21.58	25.38	28.48	27.99

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

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.--February 1991 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 115.33 ft below land surface, Apr. 14, 1994; lowest, 117.21 ft below land surface, Feb. 20, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
5	96.22	96.54	96.89	96.78	96.34	95.88	95.28	95.41	93.89	94.08	93.64
10	96.22	96.58	96.83	96.25	96.23	95.66	95.46	95.46	93.93	94.12	93.59
15	96.21	96.50	96.91	96.12	95.71	95.65	95.41	93.93	93.91	93.70	93.52
20	96.22	96.62	96.93	96.39	95.70	95.16	95.46	93.95	93.96	93.62	93.64
25	96.22	96.77	96.60	96.45	95.91	95.27	95.45	93.96	94.03	93.59	93.68
EOM	96.53	96.80	96.86	96.24	95.82	95.35	95.38	93.79	94.05	93.61	93.75
MAX	96.62	96.80	96.94	96.84	96.40	95.91	95.48	95.46	94.05	94.12	93.75
MIN	96.21	96.41	96.58	96.02	95.52	95.11	95.17	93.78	93.80	93.58	93.76

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.--August 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.98 ft below land surface, Sept. 4, 1958; lowest, 251.70 ft below land surface, Aug. 31, 1998.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 29	245.50	JAN 30	246.70	MAR 27	245.20	MAY 25	245.00	JUL 29	249.40	SEP 25	249.50
NOV 10	245.80	FEB 26	245.60	APR 27	246.70	JUN 19	247.60	AUG 31	251.70		

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.--January 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.06 ft below land surface, Apr. 8, 1998; lowest, 47.70 ft below land surface, Aug. 3, 1998.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 12	43.30	MAR 06	38.38	MAY 04	40.41	JUL 07	45.98	SEP 28	47.11
FEB 19	43.20	APR 08	38.06	JUN 29	44.11	AUG 03	47.70		

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

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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.--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, 18.45 ft below land surface, Aug. 10, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.42	14.99	14.72	13.95	10.74	9.11	10.74	11.02	15.91	16.71	18.15	16.65
10	15.53	14.93	14.69	13.19	11.04	8.74	11.10	11.49	15.50	17.01	18.45	16.77
15	15.55	14.85	14.73	12.14	10.10	9.14	11.41	12.02	15.57	17.47	17.20	16.85
20	15.55	14.74	14.74	11.34	8.95	9.37	11.95	12.36	16.12	17.51	16.44	16.90
25	15.38	14.69	14.48	10.61	9.24	9.87	12.10	14.60	16.30	16.83	16.33	16.96
EOM	15.09	14.66	14.27	10.23	8.74	10.16	11.12	15.77	16.57	17.51	16.53	17.00
MAX	15.56	15.06	14.75	14.20	11.31	10.16	12.17	15.77	16.57	17.54	18.45	17.00
MIN	15.09	14.65	14.24	10.09	8.74	8.13	10.40	10.84	15.36	16.28	16.32	16.54

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.--March 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.80 ft below land surface, Apr. 22, 1998; lowest, 66.90 ft below land surface, Sept. 18, 1998.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 30	63.30	APR 22	60.80	MAY 27	66.30	JUN 16	66.58	SEP 18	66.90

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.--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 19	360.53	DEC 20	360.55	FEB 20	360.83	APR 20	360.55	JUN 20	362.16	AUG 21	360.93
NOV 20	360.48	JAN 20	360.54	MAR 20	360.74	MAY 19	360.59	JUL 20	363.02	SEP 19	359.82

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--continued

330855092505601. Local number, 18S17W22BDD1.

LOCATION.--Lat 33°08'55", long 92°50'56", Hydrologic Unit 08040206, near Shuler.

Owner: Monsanto Chemical Company.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in, depth 705 ft, cased 0-605 ft, screened 605-705 ft.

DATUM.--Land surface, 285 ft above sea level. Measuring point: Top of casing, 1.20 ft above land surface.

PERIOD OF RECORD.--April 1968 to September 1992, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 315.37 ft below land surface, Apr. 3, 1968; lowest, 365.60 ft below land surface, Sept. 23, 1996.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	365.70	365.64	365.60	365.50	365.40	365.20	365.42	365.36	365.62	366.30	366.48	366.64
10	365.80	365.64	365.46	365.50	365.31	365.40	365.48	365.33	365.79	366.30	366.50	366.70
15	365.80	365.66	365.60	365.40	365.31	365.36	365.34	365.50	365.70	366.30	366.40	366.39
20	365.80	365.59	365.55	365.46	365.30	365.22	365.50	365.60	365.92	366.40	366.53	366.40
25	365.48	365.68	365.37	365.50	365.24	365.40	365.46	365.63	366.10	366.40	366.50	366.50
EOM	365.55	365.41	365.66	365.46	365.20	365.30	365.43	365.60	366.20	366.48	366.60	366.51
MAX	365.80	365.76	365.66	365.65	365.44	365.48	365.52	365.66	366.20	366.48	366.60	366.70
MIN	365.48	365.40	365.23	365.28	365.07	365.00	365.30	365.30	365.60	366.20	366.40	366.38

CHEMICAL QUALITY OF PRECIPITATION

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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 August 1998.

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, (217) 333-2210. 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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