

TRENDS IN STREAM WATER-QUALITY DATA IN ARKANSAS DURING SEVERAL TIME PERIODS BETWEEN 1975 AND 1989

By James C. Petersen

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 92-4044



Little Rock, Arkansas

1992

U.S. DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
2301 Federal Office Building
700 West Capitol Ave.
Little Rock, Arkansas 72201

Copies of this report can
be purchased from:

U.S. Geological Survey
Books and Open-File Reports Section
Federal Center
Box 25425
Denver, Colorado 80225

CONTENTS

	<i>Page</i>
Abstract	1
Introduction	1
Purpose and scope	2
Previous investigations	7
Acknowledgments	8
Description of study area	8
Physiography and hydrology	8
Climate	10
Land use	10
Industry	14
Population	14
Methods of study	17
Selection of data	17
Trend analysis procedures	17
Reduction of seasonal variability.....	23
Reduction of flow-related variability.....	24
Censored and noncensored data methods.....	24
Estimating trend magnitude.....	25
Summary statistics	25
Water-quality trends	25
Streamflow	26
pH and alkalinity	26
Turbidity and related properties	26
Dissolved oxygen and biochemical oxygen demand	33
Bacteria	37
Dissolved ions and related properties	37
Nitrogen and phosphorus	46
Trace elements	56
Summary.....	60
References cited	61

ILLUSTRATIONS

Figure 1. Map showing location of trend-analysis stations.....	3
2. Map showing location of physiographic divisions and sections.....	9
3-7. Graphs showing:	
3. Farm acreage, 1975-89.....	11
4. Total fertilizer use, 1975-89.....	12
5. Hog and pig production, 1975-89.....	12
6. Broiler production, 1975-89.....	13
7. Cattle and calf production, 1975-89.....	13
8. Map showing population distribution, 1985.....	15
9. Map showing population change, by county, 1970-85.....	16

ILLUSTRATIONS (continued)

	<i>Page</i>
Figures 10-37. Maps showing trends in:	
10. Streamflow data.....	27
11. pH data.....	28
12. Total alkalinity data.....	29
13. Turbidity data.....	30
14. Total suspended solids data.....	31
15. Suspended sediment data.....	32
16. Percent of suspended sediment finer than 62 micrometers data.....	34
17. Dissolved oxygen data.....	35
18. Biochemical oxygen demand data.....	36
19. Fecal coliform bacteria data (using 0.45 micrometer pore-size filter).....	38
20. Fecal coliform bacteria data (using 0.70 micrometer pore-size filter).....	39
21. Fecal streptococcus bacteria data.....	40
22. Hardness data.....	41
23. Dissolved sulfate data.....	43
24. Dissolved chloride data.....	44
25. Residue on evaporation data.....	45
26. Specific conductance data.....	47
27. Dissolved calcium data.....	48
28. Dissolved magnesium data.....	49
29. Dissolved sodium data.....	50
30. Dissolved potassium data.....	51
31. Dissolved nitrite, dissolved nitrite plus nitrate, and total nitrite plus nitrate data	52
32. Total ammonia, total organic plus ammonia nitrogen, and total organic nitrogen data.....	53
33. Total nitrogen, total phosphorus, and dissolved phosphorus data.....	54
34. Total orthophosphate and dissolved orthophosphate data.....	55
35. Dissolved aluminum and dissolved barium data.....	57
36. Dissolved iron and dissolved manganese data.....	58
37. Dissolved nickel and dissolved strontium data.....	59

TABLES

Table 1. List of stations used in statistical analysis	4
2. Major Arkansas industries	14
3. Number of stations having statistically significant ($p < 0.1$) trends for analyzed properties and time periods.....	18
4. Statistical summary and trend results of selected water-quality data in Arkansas for the 1975-86 water years	64
5. Statistical summary and trend results of selected water-quality data in Arkansas for the 1975-89 water years or alternate period	105

CONVERSION FACTORS

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
inch (in.)	25,400	micrometer
inch (in.)	25.4	millimeter
mile (mi)	1.609	kilometer
acre	0.4047	hectare
square mile (mi ²)	2.590	square kilometer
cubic foot per second(ft ³ /s)	0.02832	cubic meter per second
ton, short	0.9072	megagram

Temperature in degrees Celsius (^oC) can be converted to degrees Fahrenheit (^oF) as follows:

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

TRENDS IN STREAM WATER-QUALITY DATA IN ARKANSAS DURING SEVERAL TIME PERIODS BETWEEN 1975 AND 1989

By James C. Petersen

ABSTRACT

Water-quality data for streams in Arkansas were analyzed for time trends using the Seasonal Kendall test. Data for 120 stations and approximately 40 water-quality properties and constituents were analyzed. Several time periods between October 1974 and September 1989 were investigated.

The Seasonal Kendall test is a nonparametric statistical test that is suitable for analysis of water-quality data, which generally are not normally distributed. The test also includes procedures that reduce the effects of variability in water quality caused by changes in season and streamflow.

Relatively few statistically significant trends were detected for most water-quality properties and constituents. Some trends, such as downward trends in dissolved chloride, total ammonia, and biochemical oxygen demand, occurred nearly statewide. However, geographic patterns in trends for some properties were detected. Except in southern Arkansas, dissolved sulfate concentrations increased at most stations during the 1978 through 1986 water years. Downward trends in dissolved oxygen concentrations occurred most frequently in northern Arkansas. Geographic patterns in trends also were detected in total phosphorus and total orthophosphate concentrations. Increases in total phosphorus concentrations occurred most frequently in southwestern and extreme northwestern Arkansas. Increases in total orthophosphate concentrations occurred most frequently in the northwestern half of Arkansas; many of these stations are on the Arkansas River upstream of Little Rock and in extreme northwestern and southwestern Arkansas.

Possible causes of some of these trend patterns are discussed. They include population growth, changes in wastewater-treatment methods, and changes in agricultural activities.

INTRODUCTION

More than 200 stations in Arkansas have at one time or another been a part of continuing water-quality sampling programs of either the U.S. Geological Survey (USGS) or the Arkansas Department of Pollution Control and Ecology (ADPCE). Much of these data has been summarized in reports by the ADPCE (1974, 1975, 1976, 1977, 1980, 1982, 1984, 1986, 1988, 1990) and Petersen (1988, 1990).

Much work has been done in the past 10 years by the USGS to develop methods and procedures for statistically detecting changes in the quality of water in streams and rivers (Hirsch and others, 1982; Smith and others, 1982). Smith and others (1987a, 1987b) presented the results of the application of trend-analysis methods on data for stations from two national sampling programs. One program, the National Stream Quality Accounting Network, was operated and funded by the USGS. The second program, the National Stream Quality Surveillance System, was

funded by the U.S. Environmental Protection Agency and operated by the USGS. The data represented nationally consistent, long-term sample collection and analysis from more than 300 major rivers in the United States. The size of the study area precluded detailed regional analysis of detected trends. The USGS water-quality data bases for the States of Texas, New Jersey, Connecticut, and Arkansas were selected for application of the trend detection methods to data bases for smaller geographic areas having denser station coverage.

Many changes have occurred in Arkansas in recent years that could cause changes in the water quality in Arkansas streams and rivers. Growth in population in many parts of the State increase the potential for discharge of industrial, municipal, and domestic wastes into Arkansas waters. Changes in municipal waste-treatment facilities may affect water quality. Changes in agricultural practices or intensity also may affect water quality.

The effects that these (or other changes have had upon the water quality of Arkansas streams and rivers are not completely understood. Trend analysis results will add to the information available for describing the relation between water quality and water-quality management practices.

Purpose and Scope

This report describes (1) trends in selected water-quality data for streams in Arkansas during selected periods of time and (2) briefly lists potential causes for some of these trends. The report describes the statistical procedures and assumptions used in the trend analysis.

The data used were collected by the USGS and ADPCE and are stored in the USGS's National Water Information System data base. Some data were not included in the trend analyses because of indications that the trend analyses might be affected by changes in field or laboratory procedures. Water-quality properties and constituents selected for analysis include physical properties, fecal bacteria, common ions, nutrients, and trace elements. Data for approximately 170 stations on streams in Arkansas sampled for at least 5 years between 1975 and 1989 by either the USGS or ADPCE were included in the data base used for trend analyses. Many of these stations eventually were eliminated from the list of stations for which results are reported because they were not sampled for a length of time sufficient to be used for a specific trend analysis. The 120 stations included in the final analysis are shown on figure 1 and listed in table 1.

Water-quality data for two primary and several secondary time periods also were analyzed. Water-quality data collected during the 1975 through 1986 water years (October 1, 1974-September 30, 1986) were analyzed for comparison with data collected for the same time period in streams in Texas, New Jersey, and Connecticut. Data collected during the 1975 through 1989 water years were analyzed so that more recent data would be included in the analysis. Several other shorter time periods were analyzed when data were available primarily during these shorter time periods, or because changes in laboratory or field procedures were considered likely to have affected the data.

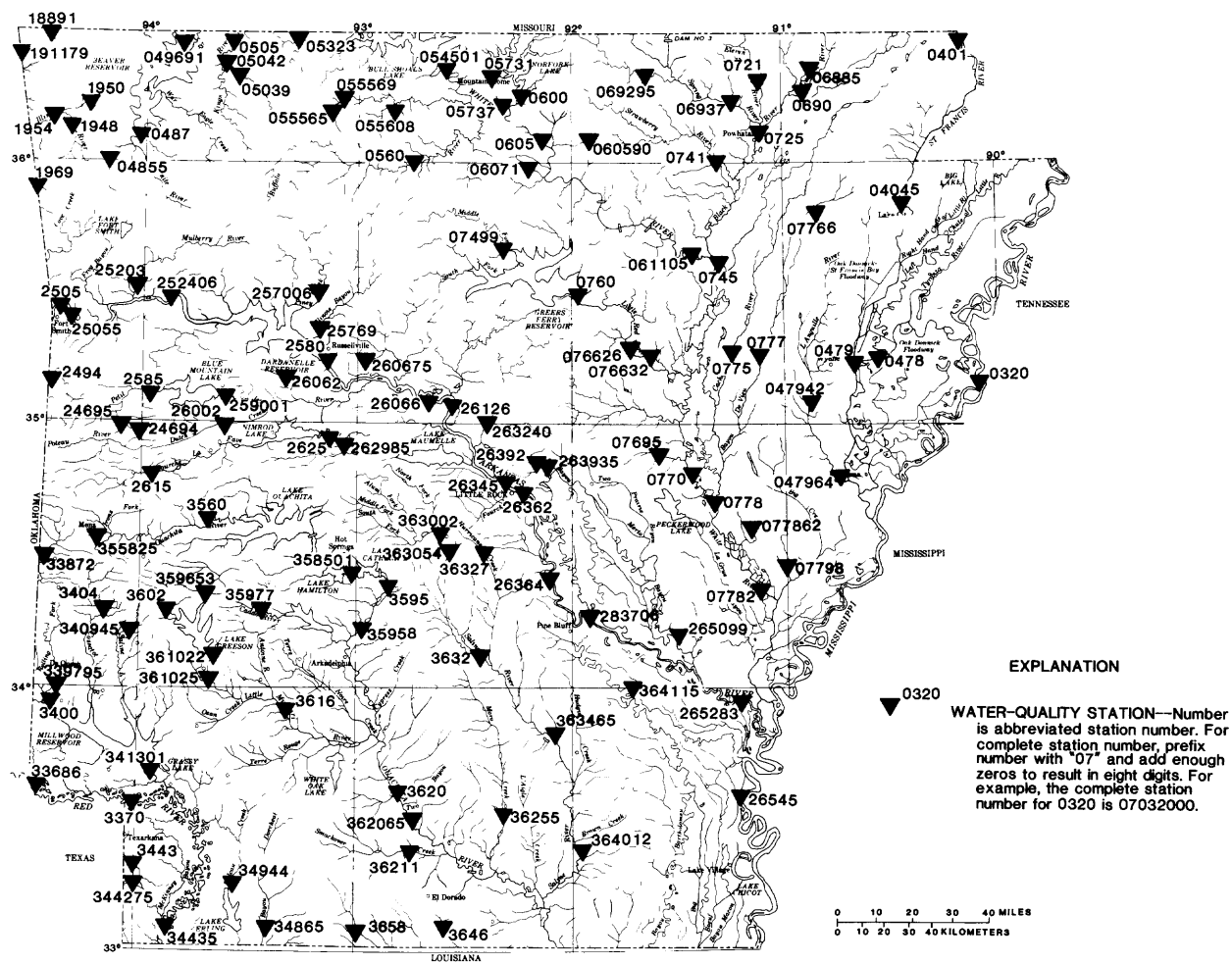


Figure 1.—Location of trend-analysis stations.

Table 1.--List of stations used in statistical analysis

[ADPCE, Arkansas Department of Pollution Control and Ecology; USGS, U.S. Geological Survey; (N), station is part of NASQAN network; S, U.S. Army Corps of Engineers sediment network; G, Arkansas Geological Commission cooperative network; (C), U.S. Army Corps of Engineers lake study network; (B), Hydrologic Bench-Mark network]

Station number	Station name	Sampling agency
07032000	Mississippi River at Memphis, Tenn.	USGS(N)
07040100	St. Francis River at St. Francis	ADPCE, USGS(S)
07040450	St. Francis River at Lake City	ADPCE, USGS(S)
07047800	St. Francis River at Parkin	USGS(N)
07047900	St. Francis Bay at Riverfront	USGS(N,S)
07047942	L'Anguille River near Colt	USGS(G,S)
07047964	L'Anguille River at Marianna	ADPCE
07048550	West Fork White River east of Fayetteville	ADPCE
07048700	White River near Goshen	ADPCE, USGS(C)
07049691	White River at Beaver Dam near Eureka Springs	USGS(C)
07050390	Osage Creek southwest of Berryville	ADPCE
07050420	Osage Creek west of Berryville	ADPCE
07050500	Kings River near Berryville	ADPCE
07053230	Long Creek near Denver	ADPCE
07054501	White River at Bull Shoals Dam near Flippin	ADPCE, USGS(C)
07055565	Crooked Creek at Harrison	ADPCE
07055569	Crooked Creek near Harrison	ADPCE
07055608	Crooked Creek at Yellville	ADPCE
07056000	Buffalo River near St. Joe	ADPCE
07057310	Hicks Creek near Mountain Home	ADPCE
07057370	White River near Norfork	ADPCE
07060000	North Fork River at Norfork Dam near Norfork	USGS(C)
07060500	White River at Calico Rock	USGS(G)
07060590	Mill Creek near Melbourne	ADPCE
07060710	North Sylamore Creek near Fifty Six	USGS(B)
07061105	White River at Oil Trough	ADPCE
07068850	Current River near Pocahontas	ADPCE
07069000	Black River at Pocahontas	ADPCE
07069295	South Fork Spring River at Saddle	ADPCE
07069370	Spring River at Ravenden	ADPCE
07072100	Eleven Point River near Pocahontas	ADPCE
07072500	Black River at Black Rock	USGS(G)
07074100	Strawberry River near Smithville	ADPCE
07074500	White River at Newport	USGS(N)
07074990	Middle Fork Little Red River near Shirley	ADPCE

Table 1.--List of stations used in statistical analysis--Continued

Station number	Station name	Sampling agency
07076000	Little Red River near Heber Springs	USGS(C)
07076626	Little Red River above Searcy	ADPCE
07076632	Little Red River below Searcy	ADPCE
07076950	Wattensaw Bayou near Hazen	ADPCE
07077000	White River at DeValls Bluff	ADPCE
07077500	Cache River at Patterson	USGS(G)
07077660	Bayou DeView near Gibson	ADPCE
07077700	Bayou DeView at Morton	USGS(G)
07077800	White River at Clarendon	USGS(N)
07077820	White River at St. Charles	ADPCE
07077862	Boat Gunwale Slash near Holly Grove	ADPCE
07077980	Prairie Cypress Creek near Cross Roads	ADPCE
07188910	Butler Creek near Sulphur Springs	ADPCE
07191179	Spavinaw Creek near Cherokee City	ADPCE
07194800	Illinois River at Savoy	ADPCE
07195000	Osage Creek near Elm Springs	ADPCE
07195400	Illinois River near Siloam Springs	ADPCE
07196900	Baron Fork at Dutch Mills	ADPCE
07246940	Poteau River east of Waldron	ADPCE
07246950	Poteau River northwest of Waldron	ADPCE
07249400	James Fork near Hackett	ADPCE
07250500	Arkansas River at Van Buren	ADPCE
07250550	Arkansas River at Dam No. 13 near Van Buren	USGS(N)
07252030	Mulberry River at I-40 near Mulberry	ADPCE
07252406	Arkansas River at Ozark Dam at Ozark	ADPCE
07257006	Big Piney Creek at Highway 164 near Dover	ADPCE
07257690	Illinois Bayou near Dover	ADPCE
07258000	Arkansas River at Dardanelle	ADPCE
07258500	Petit Jean River near Booneville	ADPCE
07259001	Petit Jean River near Waveland	USGS(C)
07260020	Dutch Creek at Shark	ADPCE
07260620	Chickalah Creek near Chickalah	ADPCE
07260660	Arkansas River at Dam No. 9 near Oppelo	ADPCE
07260675	White Oak Creek near Atkins	ADPCE
07261260	Arkansas River at Toad Suck Ferry Dam near Conway	ADPCE

Table 1.--List of stations used in statistical analysis--Continued

Station number	Station name	Sampling agency
07261500	Fourche LaFave River near Gravelly	ADPCE
07262500	Fourche LaFave River near Nimrod	USGS(C)
07262985	South Fourche LaFave River at Hollis	ADPCE
07263240	Stone Dam Creek near Conway	ADPCE
07263450	Arkansas River at Murray Dam at Little Rock	ADPCE
07263620	Arkansas River at David D. Terry Lock and Dam below Little Rock	USGS(N)
07263640	Arkansas River at Lock and Dam 5 near Wright	ADPCE
07263706	Arkansas River at Lock and Dam 4 near Pine Bluff	ADPCE
07263920	Bayou Meto near North Little Rock	ADPCE
07263935	Bayou Meto near Jacksonville	ADPCE
07265099	Bayou Meto near Bayou Meto	ADPCE
07265283	Arkansas River at Dam No. 2 near Gillett	USGS(N), ADPCE
07265450	Mississippi River near Arkansas City	USGS(N)
07336860	Red River near Foreman	ADPCE
07337000	Red River at Index	USGS(N)
07338720	Mountain Fork near Hatfield	ADPCE
07339795	Bear Creek near Horatio	ADPCE
07340000	Little River near Horatio	ADPCE
07340400	Cossatot River near Umpire	ADPCE
07340945	Saline River near Burg	ADPCE
07341301	Little River at Millwood Dam near Ashdown	USGS(N,C)
07344275	Sulphur River south of Texarkana	ADPCE, USGS(N)
07344300	Days Creek southeast of Texarkana	ADPCE
07344350	Red River near Spring Bank	ADPCE
07348650	Bayou Dorcheat near Taylor	ADPCE
07349440	Bodcau Creek near Lewisville	ADPCE
07355825	Prairie Creek near Mena	ADPCE
07356000	Ouachita River near Mount Ida	ADPCE
07358501	Ouachita River at Carpenter Dam near Hot Springs	ADPCE
07359500	Ouachita River near Malvern	ADPCE
07359580	Ouachita River near Donaldson	ADPCE
07359653	South Fork Caddo River at Fancy Hill	ADPCE
07359770	Caddo River near Amity	ADPCE
07360200	Little Missouri River near Langley	ADPCE
07361022	Prairie Creek at Murfreesboro	ADPCE

Table 1.--List of stations used in statistical analysis--Continued

Station number	Station name	Sampling agency
07361025	Prairie Creek near Murfreesboro	ADPCE
07361600	Little Missouri River near Boughton	ADPCE
07362000	Ouachita River at Camden	USGS(N)
07362065	Ouachita River below Camden	ADPCE
07362110	Smackover Creek north of Smackover	ADPCE
07362550	Moro Creek near Banks	ADPCE
07363002	Saline River west of Benton	ADPCE
07363054	Saline River near Shaw	ADPCE
07363200	Saline River near Sheridan	ADPCE
07363270	Hurricane Creek near Sardis	ADPCE
07363465	Big Creek near Pansy	ADPCE
07364012	Saline River near Fountain Hill	ADPCE
07364115	Bayou Bartholomew near Ladd	ADPCE
07364600	Bayou de L'Outre near El Dorado	ADPCE
07365800	Cornie Bayou near Three Creek	ADPCE

Previous Investigations

Trend analysis of USGS water-quality data using the nonparametric Kendall's Tau test was first done in a study by Steele and others (1974). The study examined stream temperature, nitrate, chloride, dissolved solids, and specific-conductance data from 88 stations located throughout the United States for evidence of significant trends.

Hirsch and others (1982) discussed in more detail the use of the nonparametric tests for trend analysis of data with the unique characteristics of water-quality data. Crawford and others (1983) discussed the use of the trend methods as determined by a statistical software package.

Results of the trend analysis of data for New Jersey and Texas using the Seasonal Kendall trend test also are available (Hay and Campbell, 1990; Schertz, 1990). The software and related methods used for the USGS studies in New Jersey, Texas, Connecticut, and Arkansas are described by Schertz and others (1991).

Trends in water quality in Arkansas streams have previously been investigated by the ADPCE (1980, 1984, 1986) and Petersen (1990). The ADPCE compared arithmetic means or used linear regression (concentration and date) to compare data collected in the spring or summer of various years. Petersen used the Seasonal Kendall test to analyze data for seven water-quality properties of streams in northeastern Arkansas.

Acknowledgments

The assistance of Richard Thompson of the Arkansas Department of Pollution Control and Ecology in identifying dates of methodology changes for selected water-quality properties and characteristics is gratefully acknowledged.

DESCRIPTION OF STUDY AREA

Arkansas is located just west of the lower Mississippi River and has an area of 53,104 mi². It lies in parts of two physiographic divisions, which are characterized by marked differences in topography. The northwestern half of the State is in the Interior Highlands physiographic division, and is characterized by a mixture of steep topography, rugged mountains, steep ridges, plateaus and lowlands. The southeastern half of the State is in the Atlantic Plain physiographic division and is characterized by gently rolling hills and flat topography (Fenneman, 1938).

Physiography and Hydrology

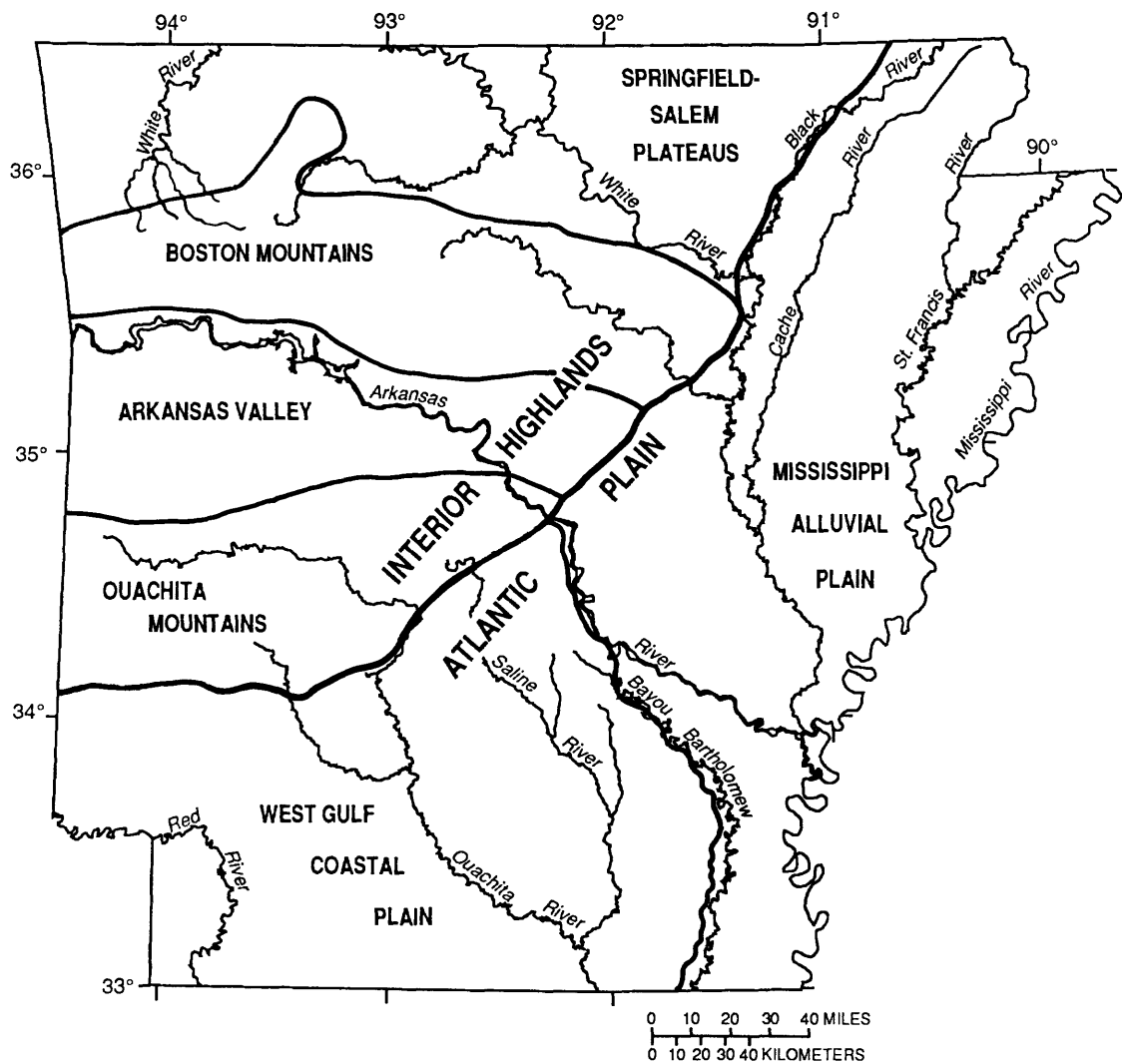
The Interior Highlands and Atlantic Plain physiographic divisions are divided into six physiographic sections (Fenneman, 1938) which differ geologically and hydrologically (fig. 2). These sections correspond almost exactly to ecoregions identified by Giese and others (1987). Typical quality of stream and river water in each section is described by Petersen (1988). Hunrichs (1983) identified perennial streams of Arkansas. The following discussions are based primarily upon information from these four references.

The Springfield-Salem Plateaus section, an area of plateaus and steep ridges, is underlain by limestone and dolomite and surface water generally is harder and more alkaline than in other sections. Nutrient and fecal coliform bacteria concentrations often are some of the lowest in the State but can be relatively high in some streams in the western part of the section. Solution channels in the limestone and dolomite affect the volume of streamflow in the section (Freiwald, 1987) and many of the streams are perennial.

The Boston Mountains section is the most rugged of the physiographic sections. It is underlain primarily by shale and sandstone and the surface water is much softer and less alkaline than water in the Springfield-Salem Plateaus. Nutrient and fecal coliform bacteria concentrations are some of the lowest in the State. Streams in the section are not perennial except where augmented by reservoirs.

The Arkansas Valley section includes mountains, ridges, and lowlands. It is underlain by sandstone and shale, and the surface water is similar to that of the Boston Mountains in hardness and alkalinity. Nutrient and fecal coliform bacteria concentrations are relatively low but often somewhat higher than concentrations in the Boston Mountains. Few streams in the section are perennial.

The Ouachita Mountains section has steep topography characterized by east-west trending mountain ridges. The section is underlain primarily by shale and sandstone, although limestone and other rocks are present. Alkalinity and hardness of surface water are similar to that of the Arkansas Valley and Boston Mountains sections. Nutrient and fecal coliform bacteria concentrations often are some of the lowest in the State. Most of the streams in the central part of the section are perennial, but few are perennial in the northern and southern parts of the section.



EXPLANATION

- PHYSIOGRAPHIC DIVISION BOUNDARY
- APPROXIMATE BOUNDARY OF SECTION

Figure 2.--Location of physiographic divisions and sections (modified from Fenneman, 1938).

The West Gulf Coastal Plain section is characterized by gently rolling, sandy hills. Alkalinity and hardness of surface water in the section may be similar to that of the Ouachita Mountains or may be slightly harder and more alkaline. Nutrient and fecal coliform bacteria concentrations generally are similar to concentrations in the Arkansas Valley section. Chloride concentrations in river water often considerably exceed typical concentrations in other sections of the State, except the Arkansas and Red Rivers. Streams in some parts of the section are perennial.

The Mississippi Alluvial Plain section is characterized by flat topography. It is underlain by silt, clay, and sand. Surface water in much of the section is harder and more alkaline than water in any other section except the Springfield-Salem Plateaus; a substantial part of the water in many streams of this section has flowed into the section from the Springfield-Salem Plateaus. Nutrient and fecal coliform bacteria concentrations often exceed concentrations in other physiographic sections. Some streams in the section are perennial.

Climate

In general, precipitation increases from northwestern Arkansas to southeastern Arkansas. However, because of orographic effects, the Ouachita and Boston Mountains receive the largest quantities of precipitation. Average annual precipitation ranges from about 40 inches at the western end of the Arkansas Valley to about 59 inches in the Ouachita Mountains (Freiwald, 1985). Much of the precipitation is associated with air movement from the Gulf of Mexico (Neely and others, 1991). Average monthly precipitation generally is greatest in April and May and lowest in January and February (northwestern Arkansas) or October (Freiwald, 1985).

Average temperature in Arkansas primarily is affected by season, altitude, and latitude (Neely and others, 1991). Average January temperature ranges from about 36° F in the Boston Mountains and areas of northwestern Arkansas, to about 48° F in southern Arkansas. Average July temperature ranges from about 76° F in the Boston Mountains to about 84° F in southern Arkansas.

Land Use

Most of Arkansas is forested, and silviculture is a major land use. In 1988, approximately 17.7 million acres (53 percent of the State) was forest land (Hines and Vissage, 1988). Counties with the largest numbers of acres of forest land are in a band extending from the south-central part of the West Gulf Coastal Plain, to the western Ouachita Mountains and Arkansas Valley, to the central Boston Mountains and Springfield-Salem Plateaus. Substantially fewer acres of forest land occur in the Mississippi Alluvial Plain. More than 5 million acres of timberland (land capable of commercial yields) was harvested between 1978 and 1988 (Leister and others, 1989). The amount of timberland in Arkansas increased by about 3 percent between 1978 and 1988 (Leister and others, 1989).

Agriculture is another major land use in Arkansas. (The following agricultural statistics were provided by the Arkansas Agricultural Statistics Service (1990)). In 1989, approximately 15.7 million acres (46 percent of the State) was being farmed. The primary field crops (in terms of acreage) were soybeans, wheat, rice, and cotton. Most of this acreage was in the Mississippi Alluvial Plain or in the Arkansas Valley. In 1989, Arkansas ranked first and fourth nationally in production of broilers and turkeys, respectively. Broiler production is

greatest in extreme northwestern and in southwestern Arkansas. Turkey production is greatest in northwestern Arkansas. Production of cattle and calves and hogs and pigs also is important in Arkansas; the greatest number are raised in western Arkansas.

Several measures of changes in agricultural land use in Arkansas exist. Between 1975 and 1989, the number of acres in farms (fig. 3) has consistently decreased from 17.0 million acres in 1975 to 15.7 million acres in 1989 (Arkansas Agricultural Statistics Service, 1990). Tons of total fertilizer consumed (fig. 4) generally has increased annually from a minimum of 578,000 in 1975 to a maximum of 897,000 in 1989 (Arkansas Crop and Livestock Reporting Service, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985; Arkansas Agricultural Statistics Service, 1986, 1987, 1988, 1989, 1990). The number of hogs and pigs has fluctuated, although the number of hogs and pigs was consistently lowest in the early years of the study period (fig. 5). The pounds of broilers have increased substantially during the study period (fig. 6). Cattle and calf production has decreased (fig. 7).

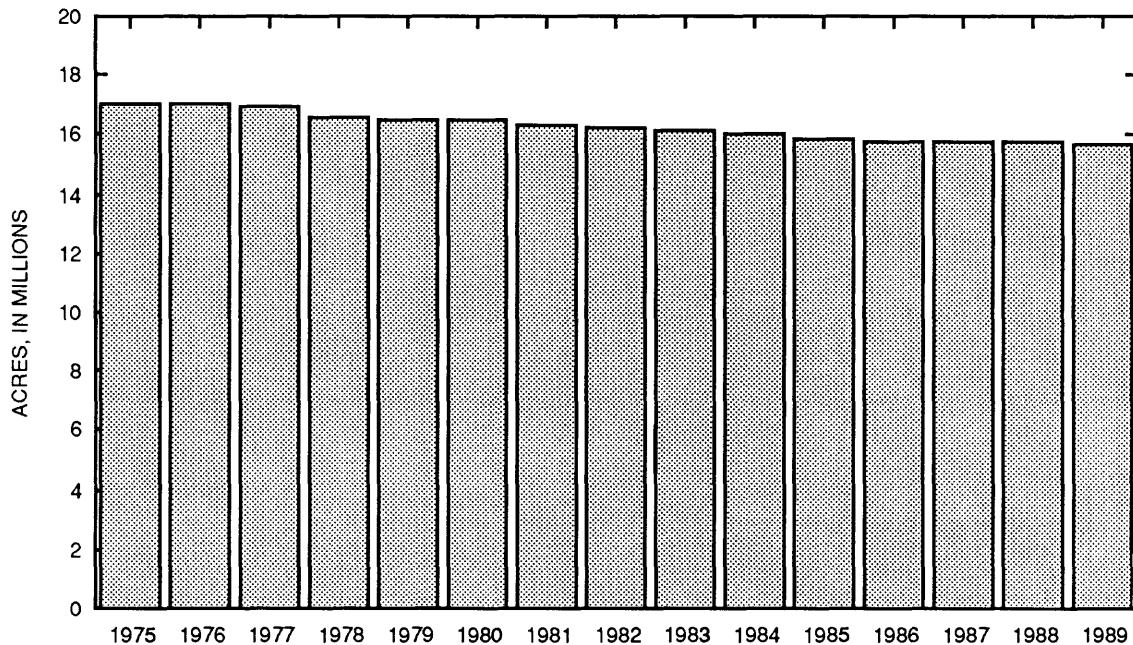


Figure 3.--Farm acreage, 1975-89.

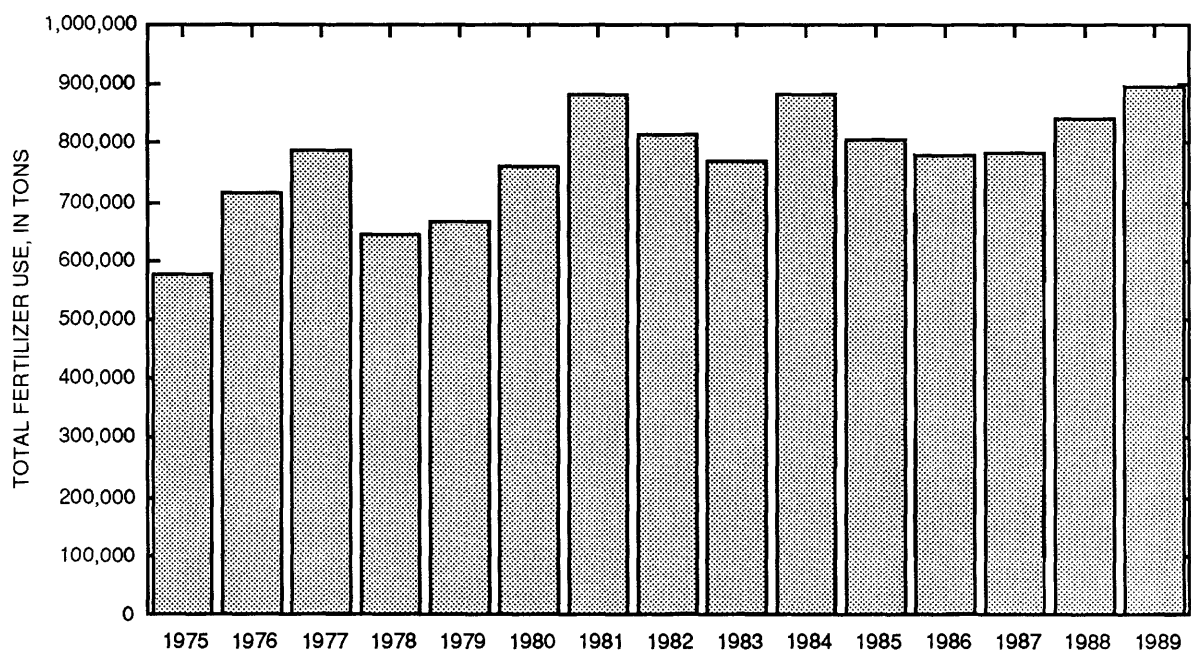


Figure 4.--Total fertilizer use, 1975-89.

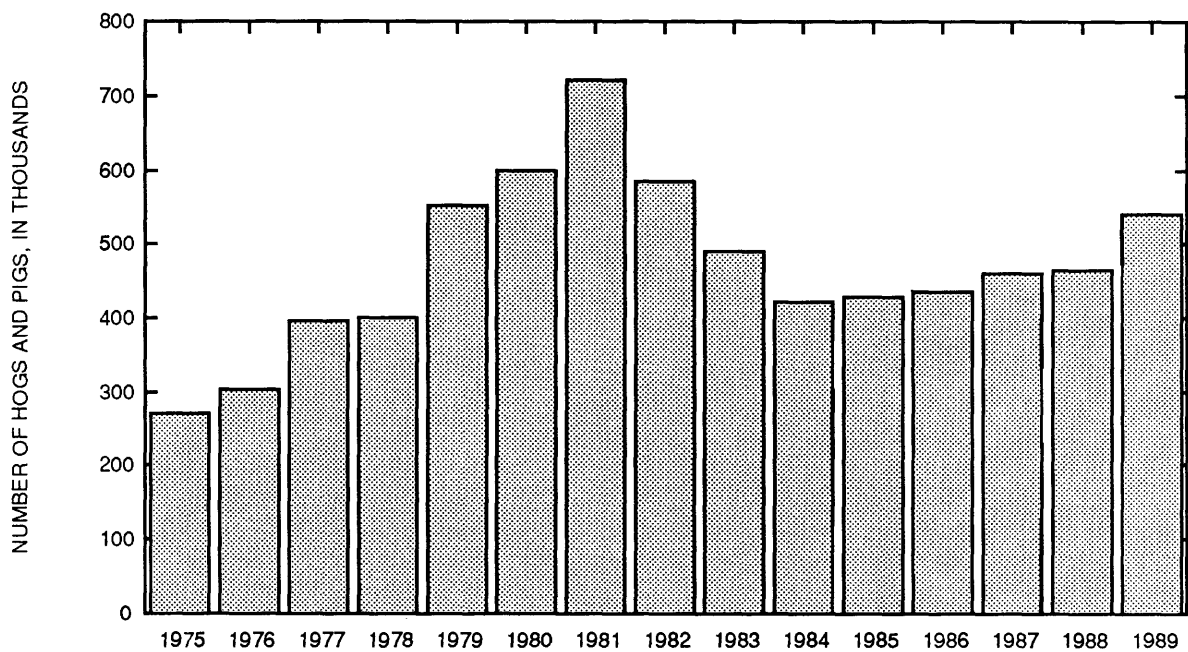


Figure 5.--Hog and pig production, 1975-89.

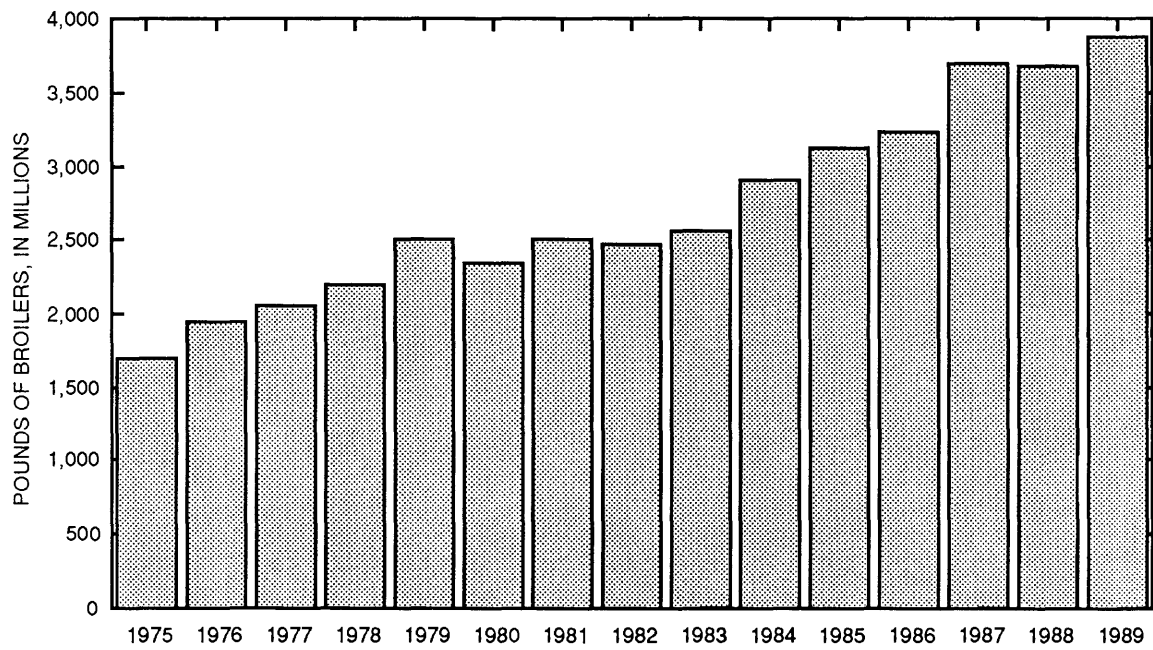


Figure 6.--Broiler production, 1975-89.

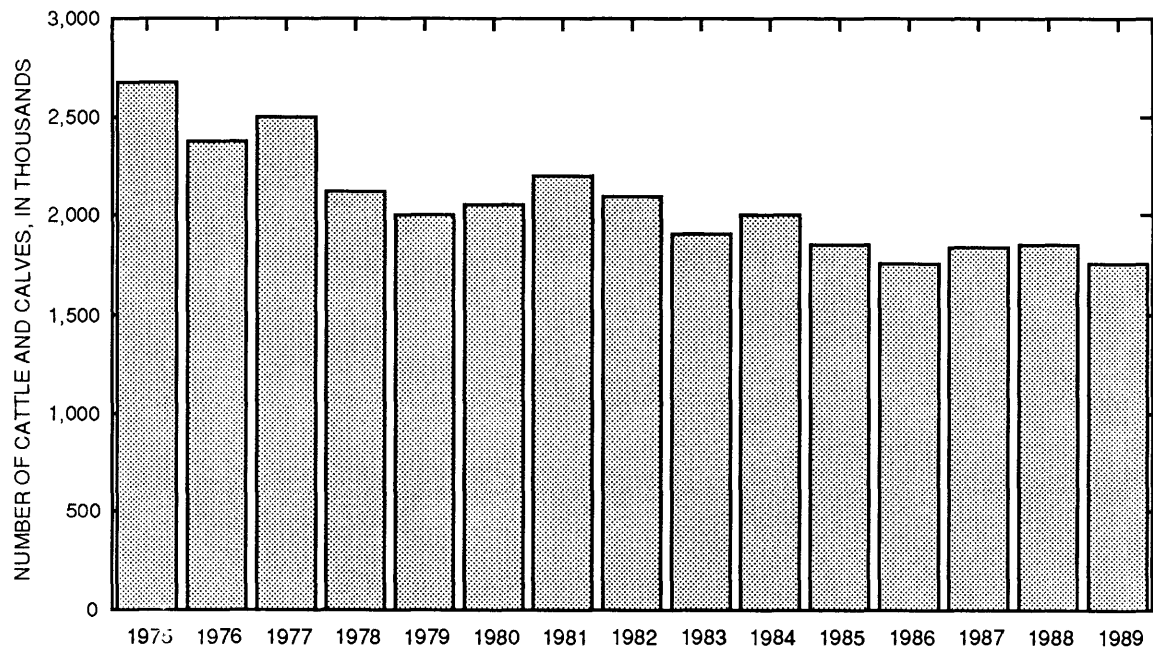


Figure 7.--Cattle and calf production, 1975-89.

Industry

Much of the industry in Arkansas is related to the agricultural and forestry land use (table 2). Manufacturing of various products and industries related to petroleum refining also are important. The number employed by the food and kindred products industry has increased by nearly 50 percent since 1978, but the rank and number employed for most other industries is similar to that during 1978 (Arkansas Department of Economic Development, 1980).

Table 2.--Major Arkansas industries

[Listed are the ten industrial classifications having the greatest average employment in 1988 (Arkansas Industrial Development Commission, 1990)]

<u>Rank</u>	<u>Industry</u>	<u>Average employment</u>
1	Food and kindred products	44,933
2	Electronic and other electrical equipment	21,886
3	Lumber and wood products	20,622
4	Machinery, except electrical	17,266
5	Fabricated metal products	15,178
6	Paper and allied products	13,405
7	Printing and publishing	12,163
8	Petroleum refining and related industries	11,599
9	Apparel and other textile products	11,575
10	Transportation equipment	11,267

Population

The estimated 1990 population of Arkansas is approximately 2,421,000 (M.E. McGehee, University of Arkansas at Little Rock, Division of Demographic Research, oral commun., 1990), which is approximately 6 percent greater than in 1980. Most of the population centers are along the Arkansas River or in northwestern Arkansas (fig. 8). The largest increases (percent) between 1970 and 1985 occurred in northwestern Arkansas (fig. 9). The largest of these increases occurred in north-central Arkansas. The largest decreases occurred in the central part of extreme eastern Arkansas.

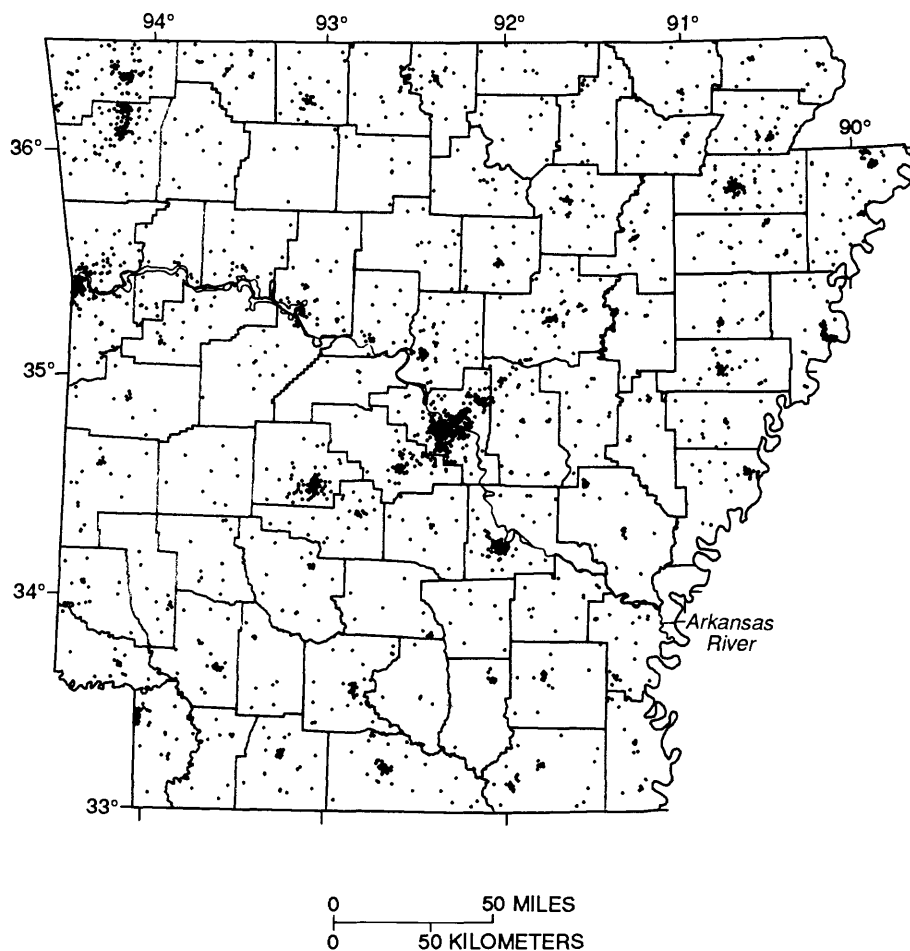
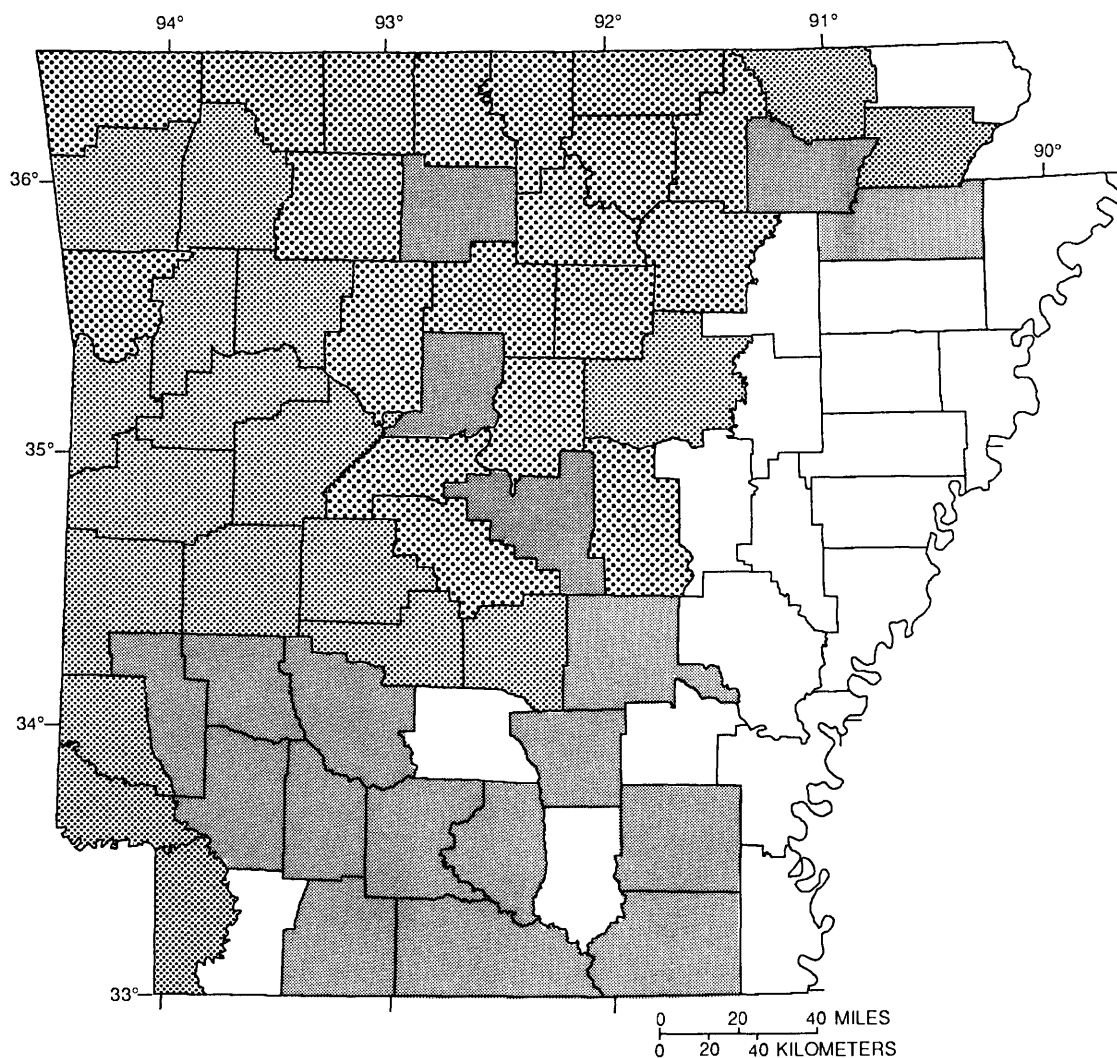


Figure 8.--Population distribution, 1985. Each dot on the map represents 1,000 people (data from U.S. Bureau of the Census 1980 decennial census files, adjusted to the 1985 U.S. Bureau of the Census data for county populations; modified from Baker and others, 1990).



EXPLANATION





-  FIRST QUARTILE (39 TO 95 PERCENT INCREASE)
-  SECOND QUARTILE (23 TO 38 PERCENT INCREASE)
-  THIRD QUARTILE (5 TO 23 PERCENT INCREASE)
-  FOURTH QUARTILE (5 PERCENT INCREASE TO 19 PERCENT DECREASE)

Figure 9.--Population change in Arkansas by county, 1970-85 (data from U.S. Bureau of the Census files).

METHODS OF STUDY

Methods for selection of representative data and for testing for time trends are discussed in this section. An existing computerized system of trend detection procedures (Schertz and others, 1991) was an important part of these methods.

Selection of Data

Water-quality data collected by the ADPCE and USGS were retrieved from the USGS's National Water Information System data base. Data were retrieved for samples collected at 174 stations between October 1, 1974, and September 30, 1989. Stations having adequate data for trend testing for the time periods selected for this study are listed in table 1. Properties and constituents for which data were retrieved and trend-analysis results are reported, are listed in table 3.

Trend analysis was performed for several time periods. The period October 1, 1974, through September 30, 1986, was selected so that results could be compared with results reported for the same period for Texas (Schertz, 1990), New Jersey (Hay and Campbell, 1990), and Connecticut. The period October 1, 1974, through October 30, 1989, was selected to include most or all data available for the greatest number of stations. Other time periods were selected for some properties (table 3). These time periods were selected if data for the longer time periods were insufficient because of data density or changes in field or laboratory methods that might affect the trend-analysis results.

Trend Analysis Procedures

The Seasonal Kendall test (Hirsch and others, 1982; Smith and others, 1982) was used to test for trends in the quality of water in Arkansas streams. The test is a generalization of the Mann-Kendall test (Mann, 1945; Kendall, 1975). The test is a distribution-free or nonparametric test and was described in Smith and others (1982) as follows:

Distribution-free tests typically ignore the magnitudes of the data in favor of the relative values or ranks of the data. This test compares all possible pairs of data values. If the later value in time is larger, a plus is assigned to the comparison. If the later value in time is smaller, a minus is assigned to the comparison. In the absence of a trend, the number of pluses should be about the same as the number of minuses. If there are many more pluses than minuses, the values later in the series are more frequently larger than those earlier in the series, and so an uptrend is likely. Similarly, if there are many more minuses than pluses, a downtrend is likely.

Because the test assumes only that the values of the random variable are independent and from the same statistical distribution, the test is more applicable to water-quality data than are parametric tests, such as regression analysis.

Table 3.--*Number of stations having statistically significant ($p \leq 0.10$) trends for analyzed properties and constituents and time periods*

[The number of stations having trends is expressed as the number of stations with increases or decreases in the numerator and the number of stations for which a trend analysis was performed in the denominator. A water year is the 12-month period, October 1 through September 30 of the following year, and is designated by the year in which it ends. ft³/s, cubic feet per second; --, trend analysis not performed; μ S/cm, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; mg/L, milligrams per liter; BOD, biochemical oxygen demand; mL, milliliters; ROE, dissolved residue on evaporation at 180 degrees Celsius; TSS, total suspended residue at 105 degrees Celsius (total suspended solids); μ g/L, micrograms per liter. Dissolved fluoride, dissolved ammonia, dissolved arsenic, dissolved and total recoverable cadmium, dissolved and total recoverable copper, dissolved zinc, total recoverable lead, dissolved lead, and total recoverable zinc data were not analyzed for trends because of changes in field or laboratory methods or concerns about the reliability of the data. Data for several other trace metals and pesticides were not analyzed for trends because of the large percentage of values reported as less than the reporting limit]

STORET parameter code	Property or constituent	Number of stations having trends					
		1975-86 water years		1975-89 water years		Other periods	
		Upward	Downward	Upward	Downward	Upward	Downward
00060 and 00061	Discharge, daily mean and instantaneous, ft ³ /s	8/65	0/65	3/65	2/65	--	--
00095	Specific conductance, μ S/cm (unadjusted) (flow adjusted)	4/35	4/35	3/21	2/21	--	--
		3/29	4/29	2/15	3/15	--	--
00400	pH (unadjusted) (flow adjusted)	13/72	14/72	21/70	8/70	--	--
		13/58	9/58	20/61	4/61	--	--
00076	Turbidity (unadjusted) (flow adjusted)	1	1	1	1	2	8/69
		--	--	--	--	2	18/54
00300	Oxygen dissolved, mg/L (unadjusted) (flow adjusted)	8/71	8/71	6/68	17/68	--	--
		6/57	9/57	5/57	10/57	--	--
00310	BOD, 5-day, mg/L (unadjusted) (flow adjusted)	6/56	21/56	3/56	37/56	--	--
		6/44	10/44	3/50	30/50	--	--

Table 3.--*Number of stations having statistically significant ($p \leq 0.10$) trends for analyzed properties and constituents and time periods--Continued*

STORET parameter code	Property or constituent	Number of stations having trends					
		1975-86 water years			1975-89 water years		
		Upward	Downward	Upward	Downward	Upward	Downward
31625	Fecal coliform, (0.70 micrometer pore-diameter filter), colonies/100 mL	1	1	1	1	3	3
	(unadjusted)	1	1	1	1	1	1
	(flow adjusted)	1	1	1	1	1	1
31616	Fecal coliform, (0.45 micrometer pore-diameter filter), colonies/100 mL	5/49	8/49	1	1	4	4
	(unadjusted)	1/39	12/39	1	1	5	5
	(flow adjusted)	1	1	1	1	1	1
31673	Fecal streptococci, colonies/100 mL	1	1	1	1	5	5
	(unadjusted)	1	1	1	1	4	4
	(flow adjusted)	1	1	1	1	5	5
00900	Hardness total, (mg/L)	3/59	7/59	15/67	6/67	--	--
	(unadjusted)	6/41	2/41	13/53	3/53	--	--
00915	Calcium dissolved, mg/L	0/14	3/14	1/12	2/12	--	--
	(unadjusted)	1/13	3/13	1/11	2/11	--	--
00925	Magnesium dissolved, mg/L	1/15	3/15	4/13	1/13	--	--
	(unadjusted)	2/13	2/13	4/12	0/12	--	--
00930	Sodium dissolved, mg/L	0/12	2/12	2/11	1/11	--	--
	(unadjusted)	0/11	2/11	3/11	0/11	--	--

Table 3.--Number of stations having statistically significant ($p \leq 0.10$) trends
for analyzed properties and constituents and time periods--Continued

STORET parameter code	Property or constituent	Number of stations having trends					
		1975-86 water years		1975-89 water years		Other periods	
		Upward	Downward	Upward	Downward	Upward	Downward
00935	Potassium dissolved, mg/L (unadjusted)	0/12	3/12	0/11	2/11	--	--
	(flow adjusted)	0/11	1/11	0/11	2/11	--	--
00410	Alkalinity total, mg/L (unadjusted)	0/21	2/21	1/11	2/11	--	--
	(flow adjusted)	0/14	1/14	0/4	0/4	--	--
00945	Sulfate dissolved, mg/L (unadjusted)	6	6	6	6	6, 7 8	6, 7 8
		--	--	--	--	18/110	3/52 5/110
00940	Chloride dissolved, mg/L (unadjusted)	2/65	27/65	1/62	35/62	--	--
	(flow adjusted)	2/51	19/51	4/56	30/56	--	--
70300	ROE, mg/L (unadjusted)	2/9	0/9	9	9	5 5	5 5
	(flow adjusted)	3/9	0/9	--	--	1/52 2/45	8/52 7/45
00530	TSS, mg/L (unadjusted)	0/50	16/50	0/50	24/50	--	--
	(flow adjusted)	0/41	20/41	0/46	29/46	--	--
00613	Nitrite dissolved, mg/L (unadjusted)	1	1	1	1	2	2
		--	--	--	--	0/3	0/3
00630	Nitrite + nitrate total, mg/L (unadjusted)	4/12	0/12	9	9	5	5
				--	--	4/59	9/59
00631	Nitrite + nitrate dissolved, mg/L (unadjusted)	1	1	1	1	10	10
		--	--	--	--	0/14	2/14
00610	Ammonia total, mg/L (unadjusted)	6	6	6	6	5, 6	5, 6
		--	--	--	--	1/54	27/54
00605	Organic nitrogen total, mg/L (unadjusted)	1	1	1	1	5	5
	(flow adjusted)	--	--	--	--	0/11	1/11
		--	--	--	--	5	5
		--	--	--	--	0/10	0/10

Table 3.--Number of stations having statistically significant ($p \leq 0.10$) trends
for analyzed properties and constituents and time periods--Continued

STORET parameter code	Property or constituent	Number of stations having trends									
		1975-86 water years					1975-89 water years				
		Upward	Downward	Upward	Downward	Other periods	Upward	Downward	Upward	Downward	
00623	Organic nitrogen + ammonia total, mg/L (unadjusted)	6	--	6	--	6	6	--	11	0/18	11 2/18
00600	Nitrogen total, mg/L (unadjusted) (flow adjusted)	9	--	9	--	9	9	--	12	1/12	12 0/12
		--	--	--	--	--	--	--	12	0/6	12 1/6
00665	Phosphorus total, mg/L (unadjusted)	6	--	6	--	6	6	--	11	11/74	11 3/74
00666	Phosphorus dissolved, mg/L (unadjusted)	6	--	6	--	6	6	--	11	1/14	11 3/14
70507	Orthophosphate total, mg/L (unadjusted)	1/5		1/5			9	9	2	19/58	2 2/58
00671	Orthophosphate dissolved, mg/L (unadjusted)	1	--	1	--	1	1	1	11	0/9	11 4/9
01106	Aluminum dissolved, µg/L (unadjusted)	1	--	1	--	1	1	1	8	3/9	8 0/9
01005	Barium dissolved, µg/L (unadjusted)	1	--	1	--	1	1	1	10,13	1/10	10,13 2/10
01046	Iron dissolved, µg/L (unadjusted)	1/9		1/9		0/8	0/8	0/8	--	--	--
01056	Manganese dissolved, µg/L (unadjusted)	0/8		1/8		0/8	0/8	0/8	--	--	--
01065	Nickel dissolved, µg/L (unadjusted)	1	--	1	--	1	1	1	10	0/9	10 2/9
01080	Strontium dissolved, µg/L (unadjusted) (flow adjusted)	1	--	1	--	1	1	1	8	0/10	8 0/10
		--	--	--	--	--	--	--	8	0/10	8 0/10

Table 3.--Number of stations having statistically significant ($p \leq 0.10$) trends
for analyzed properties and constituents and time periods--Continued

STORET parameter code	Property or constituent	Number of stations having trends				
		1975-86 water years		1975-89 water years		Other periods
		Upward	Downward	Upward	Downward	Upward Downward
80154	Sediment suspended, mg/L (unadjusted) (flow adjusted)	0/9 0/9	2/9 1/9	0/8 0/8	2/8 3/8	-- --
70331	Sediment suspended, percent finer than 62 micrometers in diameter (unadjusted) (flow adjusted)	0/8 0/8	4/8 4/8	0/7 0/7	5/7 4/7	-- --

¹ Samples for analysis of this property were infrequently or not collected during much or all of this period.

² 1981-89 water years.

³ 1977-89 water years.

⁴ 1975-87 water years.

⁵ 1978-89 water years.

⁶ Changes in field or laboratory methods during this period may have affected trend analysis results, and data for some or all stations were not included in trend analysis.

⁷ 1978-86 water years.

⁸ 1983-89 water years.

⁹ Different time period was selected to increase number of stations for trend analysis.

¹⁰ 1980-89 water years.

¹¹ 1982-89 water years.

¹² 1984-89 water years.

¹³ Time period was selected because of changes in reporting limits.

A computerized system for detection and analysis of trends in water quality known as ESTREND (Schertz and others, 1991) was used to perform the Seasonal Kendall test. Major features of ESTREND include procedures for selecting data, defining relations between flow and the water-quality property of interest, graphically displaying trend results on a map of a state, tabulating trend results by station or constituent, plotting water-quality values and time, graphically and statistically describing data distributions for a specific station, and tabulating information on detection limits by time period and station. Much of the following description of ESTREND capabilities is based upon Schertz and others (1991).

Reduction of Seasonal Variability

A facet of the Seasonal Kendall test that makes its use desirable is that seasonality of water-quality data is considered. Water-quality data often exhibit seasonal variability. This variability may have two effects upon trend detection; it increases the variability of the data and it could cause erroneous results if (for example) data were collected more often in the summer in the early part of the time period and more often in the winter in the later part of the time period. The Seasonal Kendall test attempts to minimize the effect of seasonality upon trend detection by only comparing values collected from the same "season" of the year.

To address seasonality, ESTREND requires the year to be divided into 2, 3, 4, 6, and 12 user-defined "seasons." ESTREND allows total flexibility in defining the length and dates of these seasons. For this study, the 12 season per year definition was set equal to months of the year (the first season being October) and the definitions for fewer seasons per year were set equal to multiples of months.

For trend analysis, the number of seasons per year was specified for individual stations and properties. Generally that number was the largest number of seasons per year meeting the following criteria:

- (1) sufficient data exist in a season to make 50 percent of the possible trend analysis comparisons (for example, comparison of the pH for June 1975 with the pH for June 1976),
- (2) at least 75 percent of the defined seasons meet the first criterion (for example, if 12 seasons per year were being examined at least 9 seasons must meet the first criterion), and
- (3) the selected number of seasons per year does not exceed 6 (to eliminate any serial correlation that might have been present in monthly water-quality data).

Often the frequency of water-quality sampling at a station changed between 1975 and 1989. Because gaps in the middle of a data record have less effect on the Seasonal Kendall test than do gaps in the beginning and end of the record, ESTREND calculates user-selected ratios for testing of the above criteria in the 40 percent of the record at the beginning (20 percent) and end (20 percent) of the record and in the middle 60 percent. If the season definition that meets the above criteria for the beginning-end period was different from the middle period, the beginning-end period definition was selected.

Reduction of Flow-Related Variability

Values of water-quality properties often are related to streamflow. As with seasonality, reduction of flow-related variability reduces the total variability in water quality. Reduction of this flow-related variability increases the likelihood of detecting changes in the human-caused inputs to the stream.

ESTREND can use two methods to mathematically describe the relation between flow and water quality. The first is regression using one of several models (Smith and others, 1982; Crawford and others, 1983). The second method is a LOWESS (Locally Weighted Scatterplot Smoothing) procedure (Cleveland, 1979) which fits a smoothed line to the data.

The LOWESS procedure using untransformed data was selected for describing the relation between flow and water quality. This eliminated the need to compare the regression models and select a "best" model for describing the relation. An f value (fraction of the total observations to be used in the LOWESS computations for any given streamflow) of 0.5 was used (Lanfear and Alexander, 1990).

The relation between flow and water quality can not always be described, and in these cases trend analyses of "flow adjusted" data can not be performed. To describe the relation, a substantial amount of streamflow data must have been collected in association with the water-quality samples. Therefore relations were not described for stations for which sufficient streamflow data were not available. The presence of censored data (values reported as estimates or less than a reporting limit) also affects the ability to accurately describe the relation between flow and water quality. Water-quality properties with a substantial number of stations having more than 5 percent censored data were not flow adjusted for trend analysis.

Flow-adjusted values were calculated by subtracting the value predicted by the LOWESS procedure from the actual value. Trends analyses of these flow-adjusted values were performed in the same manner that analyses of the unadjusted data (that is, the values that were not flow adjusted) were performed.

Censored and Noncensored Data Methods

Two of the three trend testing methods available in ESTREND were used to calculate the trend test results in this report. The third method (Tobit), which was not used, is a parametric method for use with data censored having one or more reporting limits (Cohen, 1976; Cohn, 1988).

The first method is a Seasonal Kendall test method applicable to water-quality records having little or no censoring (less than about 5 percent of the data censored). Any censored values are set equal to one half the reporting limit. The method accounts for seasonal and flow-related variations.

The second method is a Seasonal Kendall method most applicable to water-quality records having greater than about 5 percent censoring and that are censored at a single reporting limit. The method also is applicable to records censored at multiple reporting limits. All values (detected and nondetected) that are less than the specified reporting limit are considered tied for the Seasonal Kendall test. With more than one censoring limit, significant amounts of data may be "lost" because of this recoding. With large amounts of censored data, flow-related variability cannot be reliably removed. Estimates of trend magnitude also are less reliable. However, seasonal variability is accounted for as in the previous Seasonal Kendall test method.

Estimating Trend Magnitude

The rate of change over time (trend slope) is computed according to methods described by Sen (1968). The trend slope is expressed as a change in original units per year (usually milligrams per liter per year) and is the median of all pairwise comparison slopes. It also is expressed as a percent of the mean water-quality value. Trend slopes computed for data tested by the Seasonal Kendall test for censored data are less reliable than if data do not include censored data, because the actual values of the censored data are unknown.

Summary Statistics

Estimates of the 25th, 50th, and 75th percentiles and the mean are calculated by ESTREND and reported. These estimates are computed using all values (no seasonal selection is involved) for the selected time period.

WATER-QUALITY TRENDS

Trend results are shown for several time periods. These time periods may be categorized into two groups (table 3). Trend results for each property are summarized by time period in table 3. The first group is for water years 1975 through 1986 (October 1, 1974, through September 30, 1986) (table 4, located at end of report). The 1975 through 1986 time period closely agrees with the time period used for trend analysis for the States of Texas, New Jersey, and Connecticut. The second group is the time period of the longest period of usable data during water years 1975 through 1989 (table 5, located at end of report). Ideally, this period includes all of water years 1975 through 1989. However the actual period selected was dependent on several factors (table 3): the period of time that the property was frequently measured, changes in field or laboratory methods that may have affected the trend analysis results, and changes in reporting limits. The selected time period was chosen to maximize the length of the data record (subject to the above factors) for the largest number of stations.

Trend analysis is an explorative tool and, although trend identification is useful in itself, in many cases it is desirable to identify the factor or factors that caused the trend to occur. An attempt was made to list potential causes of the more consistent trends. However, identifying a cause and effect relation with statistical certainty is beyond the scope of this report and may require data that may not be available. For example, improvement (reductions in loadings of nutrients and total suspended solids) in the quality of effluents from wastewater treatment plants is listed as a potential cause of several downward trends. However, data to document these potential reductions at specific plants, or groups of plants, were not easily obtainable. Also, listing of a change in some condition as a potential cause of trend in water-quality data is not mean to imply that the change has actually occurred, only that the potential cause is plausible and that it may be worthy of further investigation. Ideally, annual or more frequent data that can accurately be aggregated into the drainage area of an individual station are required so that trends in these ancillary data (such as land use acreage, fertilizer application, human and livestock population, and concentrations in point-source discharges) can be correlated with the water-quality trends.

Streamflow

Few trends were detected in streamflow data (fig. 10). During the 1975-86 water years, all eight detected trends were upward. Most stations that had upward trends during this period are in east-central or extreme northeastern Arkansas. Trends were detected at only five stations during the 1975-89 water-year period. The number of upward and downward trends were nearly equal. Most stations having upward trends are in extreme northeastern Arkansas.

Trends in streamflow, even if not statistically significant, can affect trends in constituent concentrations. For example, an increase in streamflow during a period of interest can result in the decrease of a constituent, particularly if the major input of the constituent into the stream is not associated with the hydrologic events affecting streamflow. Changes usually were less than 5 percent per year for water years 1975-86, and usually less than 2 percent per year for 1975-89.

pH and Alkalinity

Trends in pH were detected at a substantial number of stations during water years 1975-86 and 1975-89 (fig. 11). Upward trends generally were more prevalent than downward trends, particularly during 1975-89. During this period, upward trends were detected in most areas of Arkansas. During both periods, downward trends in pH were most prevalent in extreme northern and southern Arkansas.

Few trends in alkalinity were detected (fig. 12). Of those, most were downward trends at stations in the Springfield-Salem Plateaus.

The prevalence of upward trends in pH (and for the limited number of stations, the downward trends in alkalinity) is similar to the prevalence of upward trends for pH and downward trends for alkalinity in the eastern half of Texas for water years 1975-86 reported by Schertz (1990).

Potential causes of these trends include changes in the amount of instream biological photosynthesis or, particularly in areas of lower alkalinity, acid deposition. Because of the relatively high alkalinity (buffering capacity) of streams in the Springfield-Salem Plateaus and the northern Mississippi Alluvial Plain, changes in pH were not expected to occur as frequently in these areas as they did.

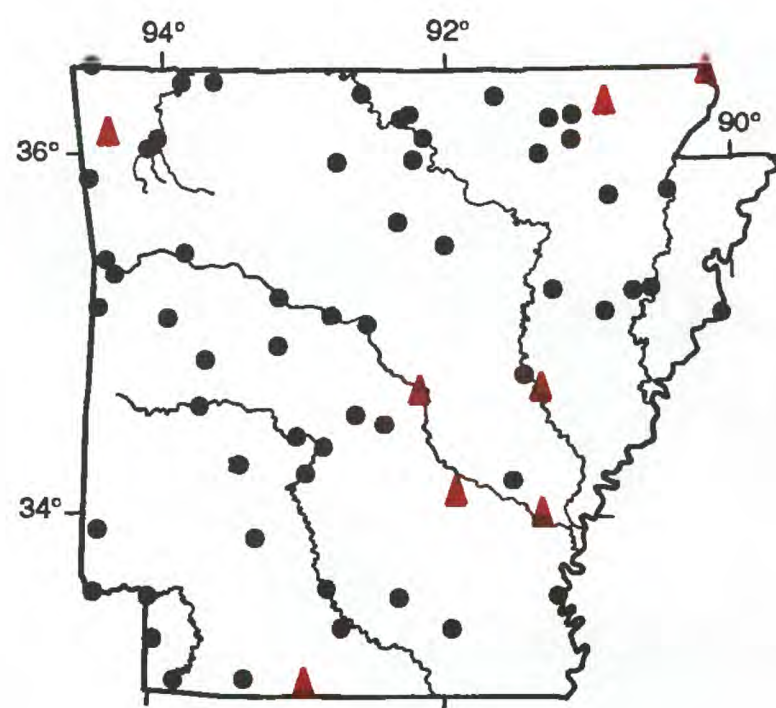
Turbidity and Related Properties

Relatively few trends were detected in unadjusted turbidity data collected for water years 1981-89. All these trends were downward (fig. 13) and most occurred at stations in the Springfield-Salem Plateaus and the Mississippi Alluvial Plain.

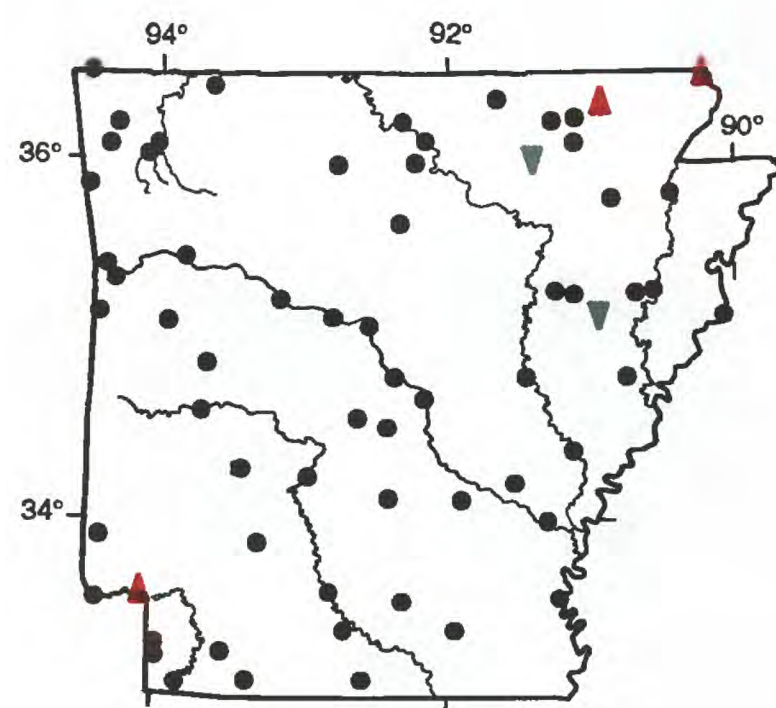
Downward trends were detected in flow-adjusted turbidity data at one-third of the stations (fig. 13). Most stations having downward trends are on the Arkansas River, in extreme southwestern Arkansas on the Red River and its tributaries, and in the Mississippi Alluvial Plain.

Downward trends in unadjusted and flow-adjusted total suspended-solids data were detected at approximately one-third to two-thirds of the tested stations during the 1975 through 1986 and 1975 through 1989 water years (fig. 14). Downward trends were more frequent in the longer period.

Fewer than 10 stations could be tested for trends in suspended sediment for the 1975 through 1986 and 1975 through 1989 water years (fig. 15). Downward trends in suspended sediment data were detected at some stations, and upward trends were detected at no stations.



Water years 1975 through 1986



Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

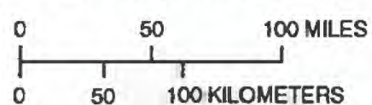
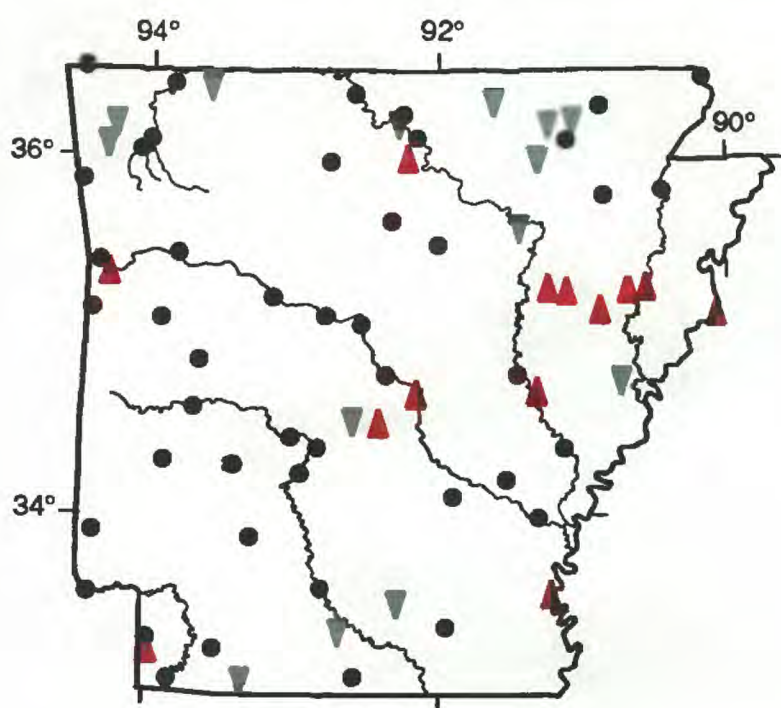
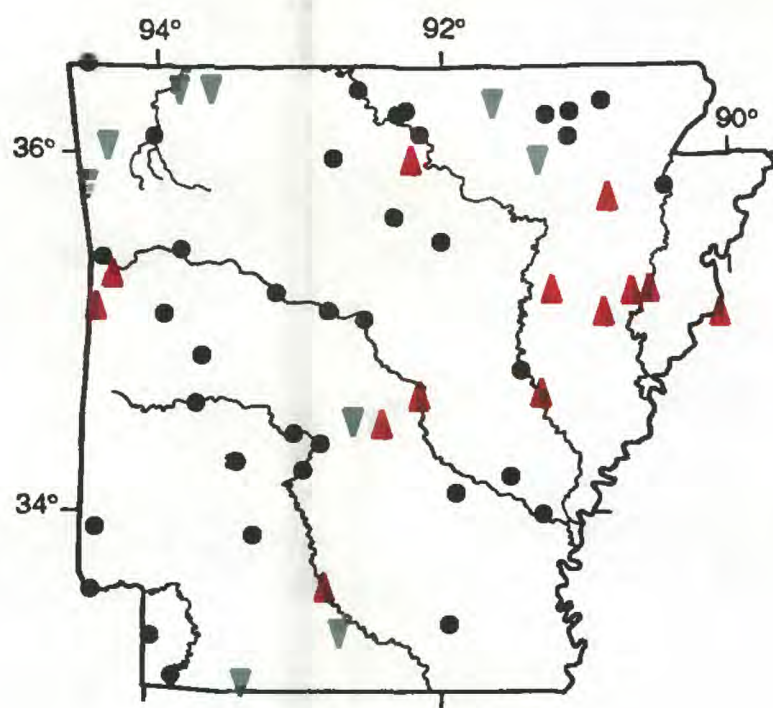


Figure 10.--Trends in streamflow data.

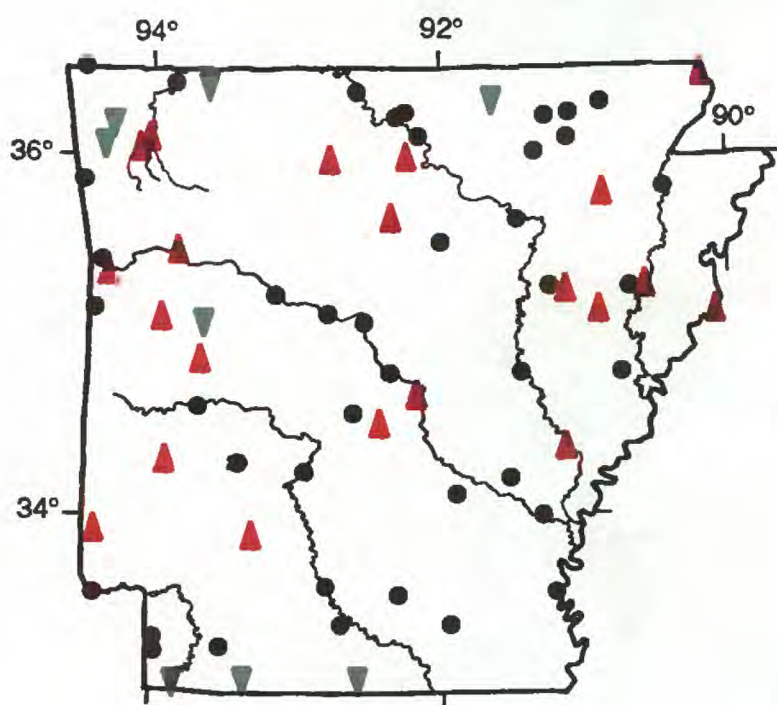


Unadjusted

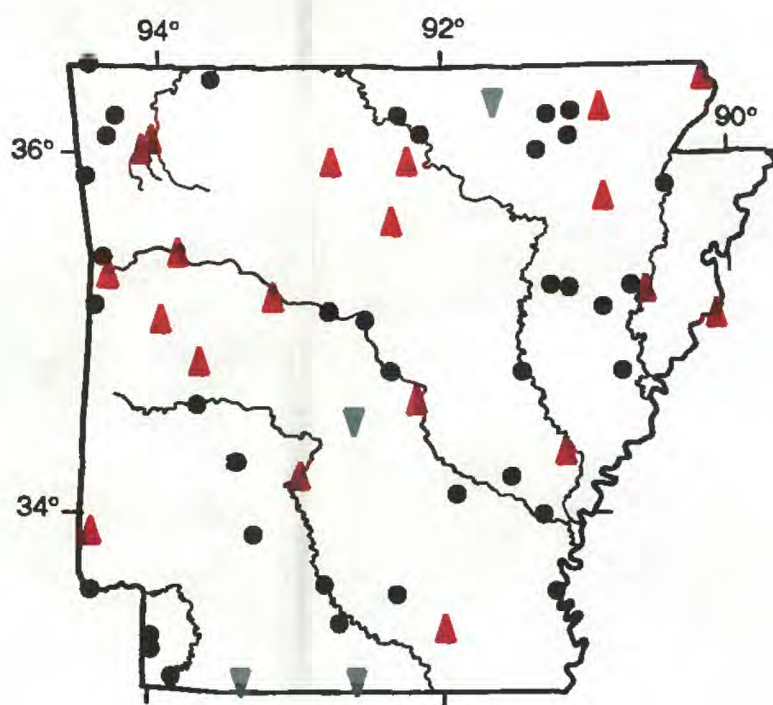


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

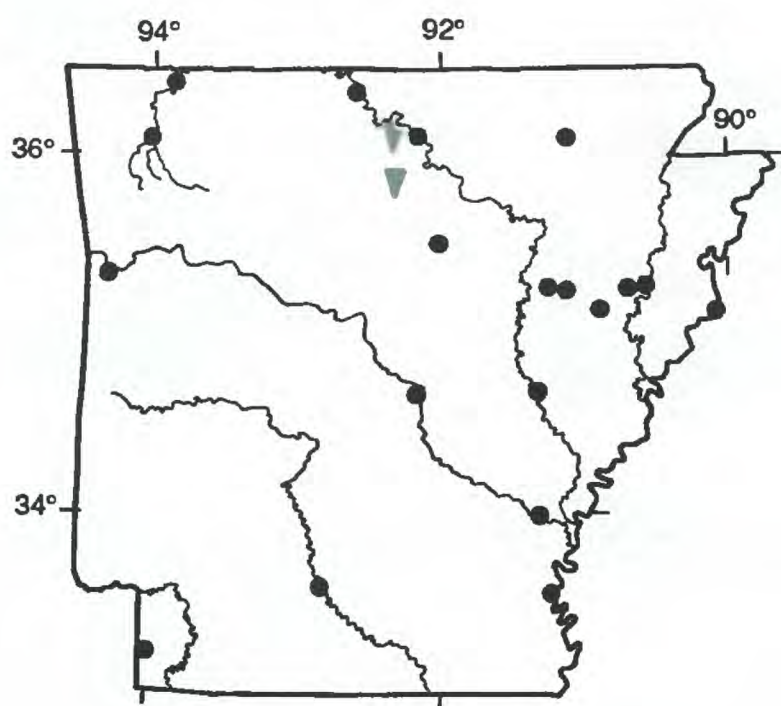
EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

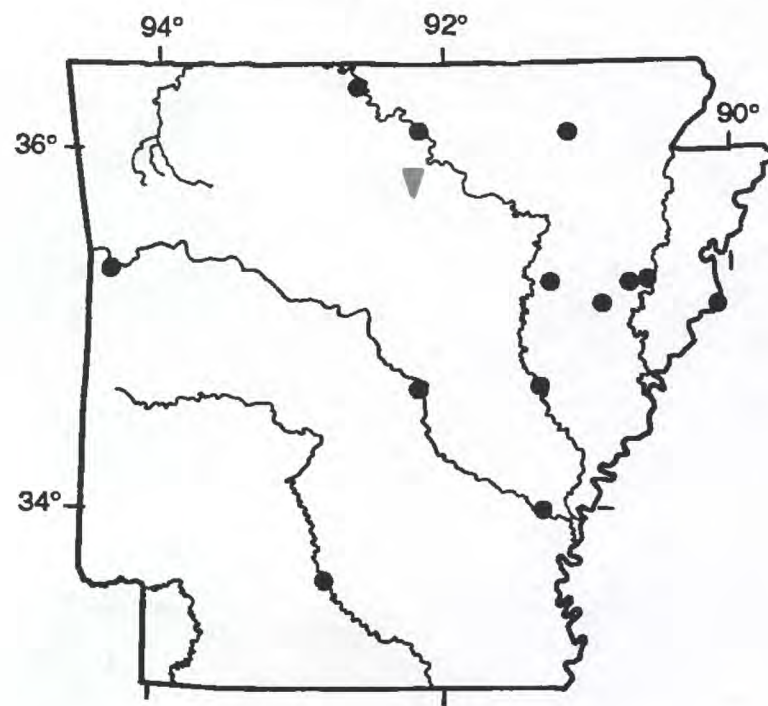
- ▲ Upward
- ▼ Downward
- No detectable trend

0 50 100 MILES
0 50 100 KILOMETERS

Figure 11.--Trends in pH data.

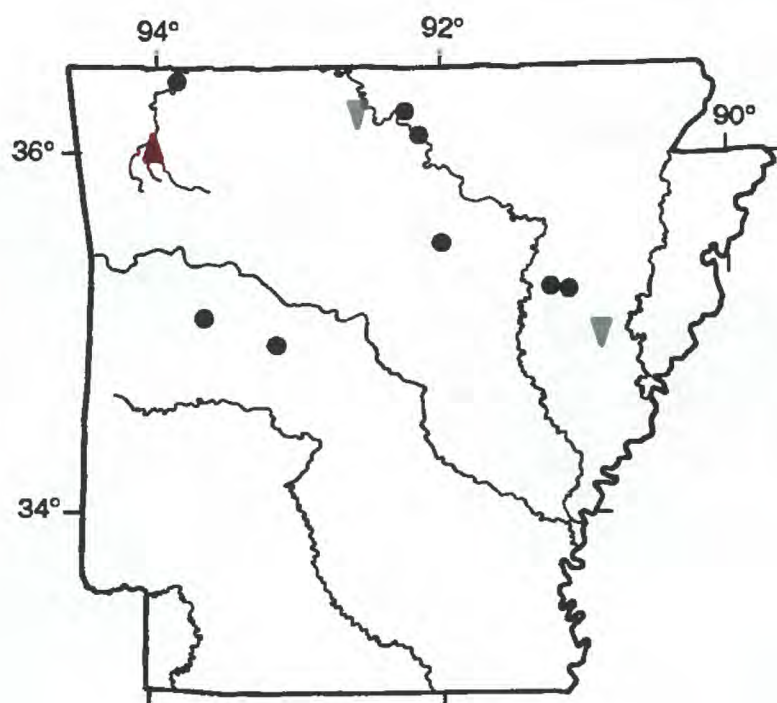


Unadjusted



Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

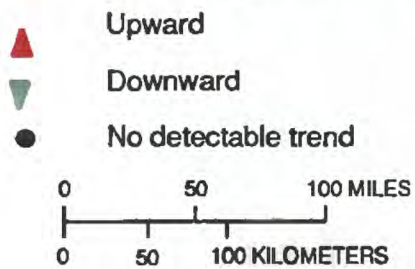
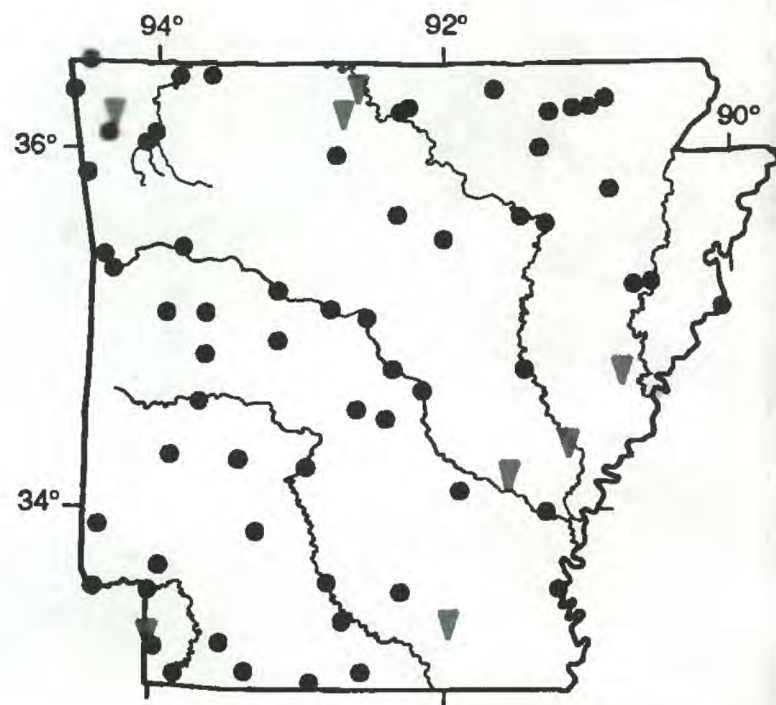
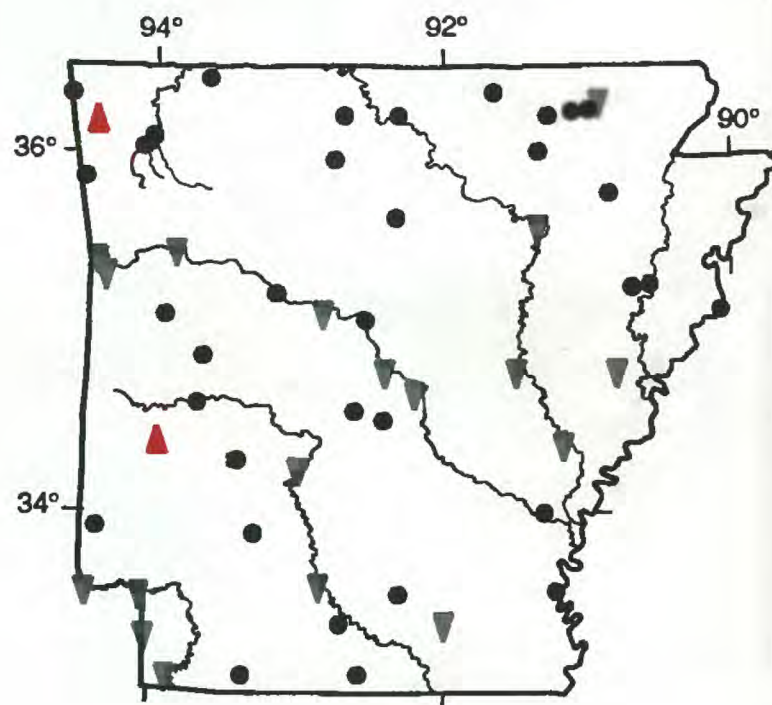


Figure 12.--Trends in total alkalinity data.



Unadjusted

Water years 1981 through 1989



Flow adjusted

Water years 1981 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

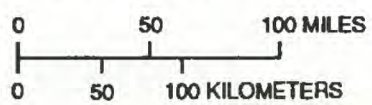
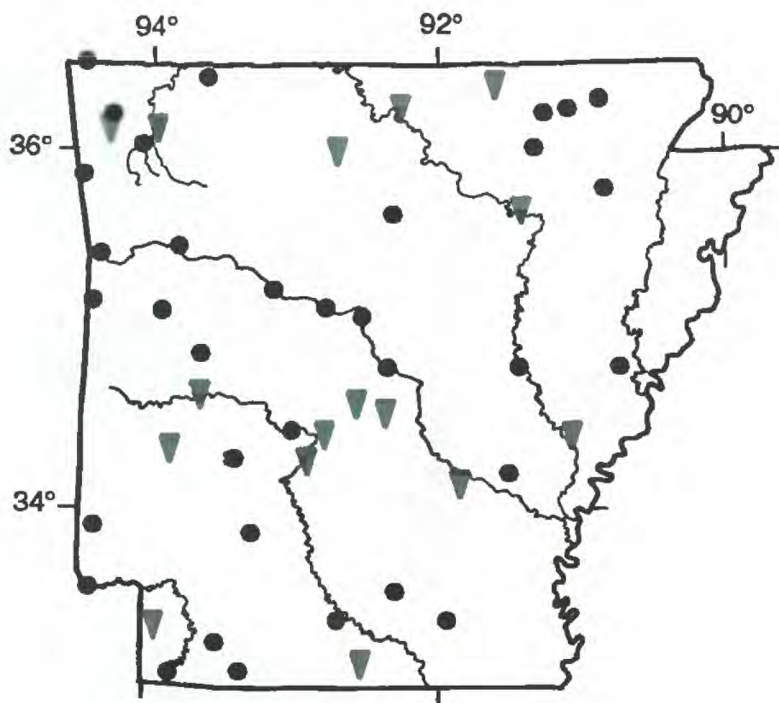
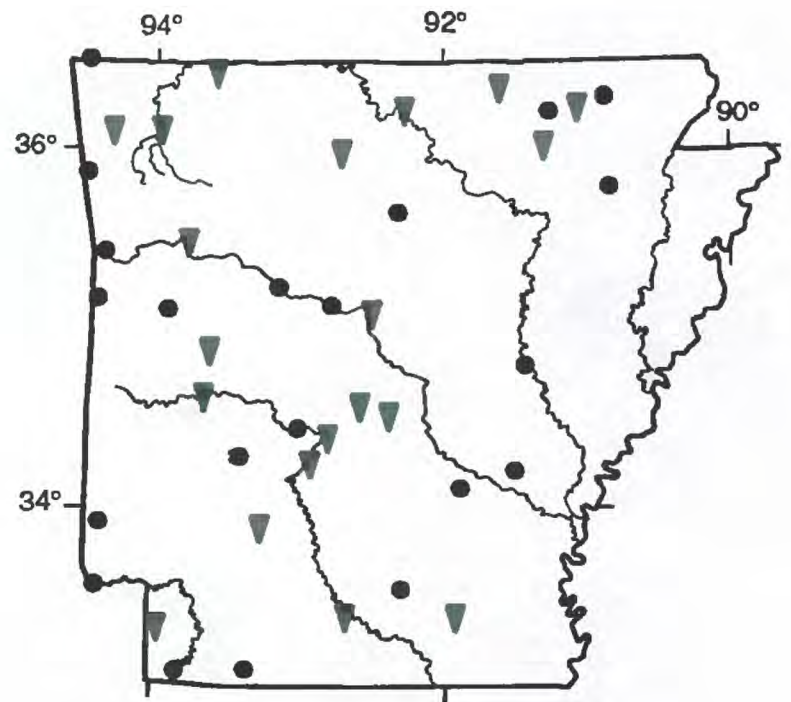


Figure 13.--Trends in turbidity data.

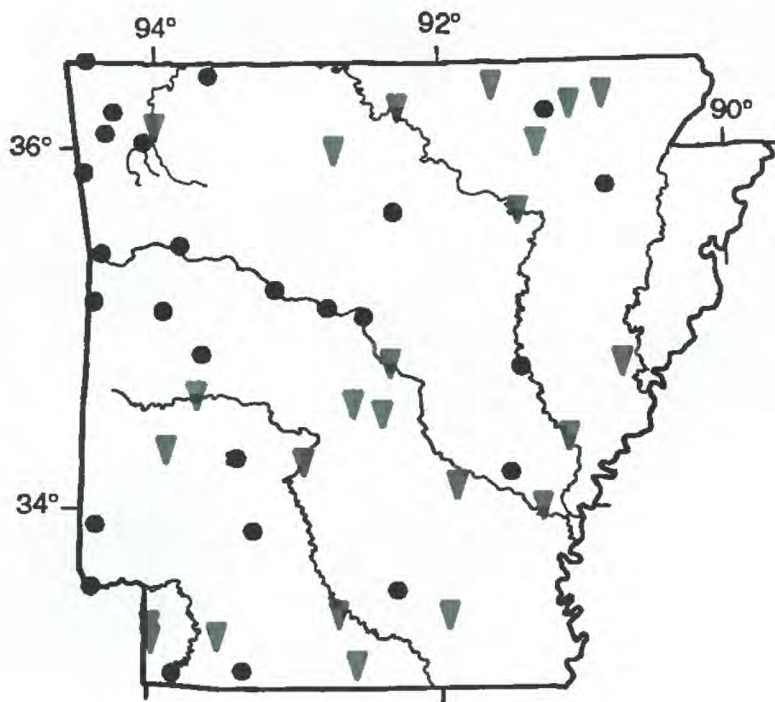


Unadjusted

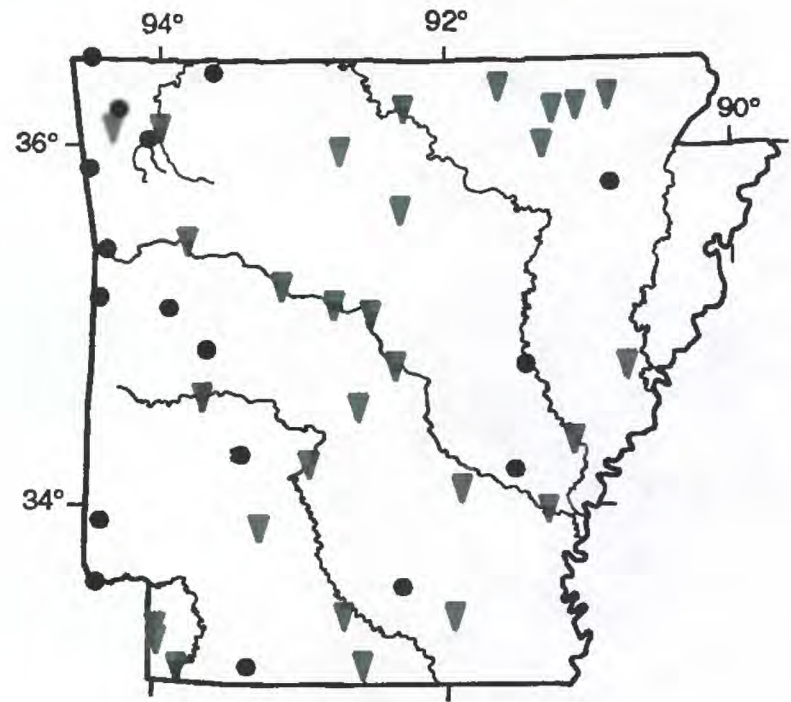


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS (Level of significance = 0.10)

- ▼ Downward
- No detectable trend

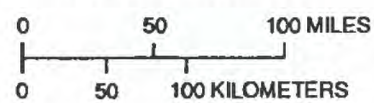
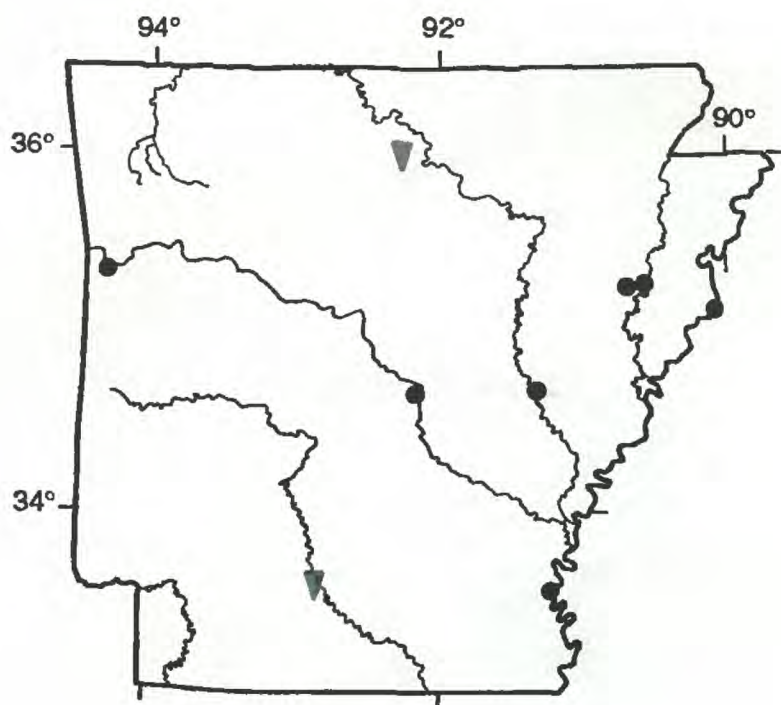


Figure 14.--Trends in total suspended solids data.

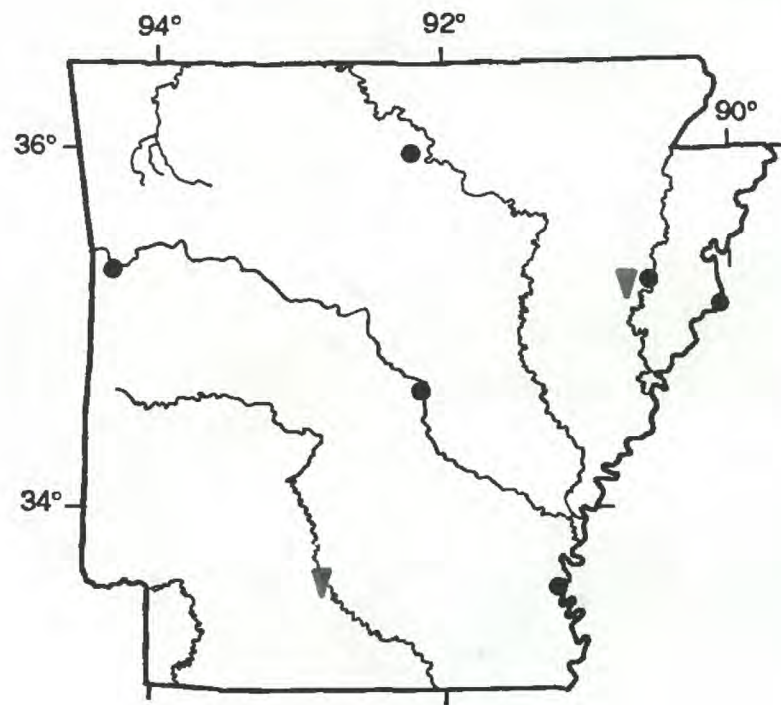


Unadjusted

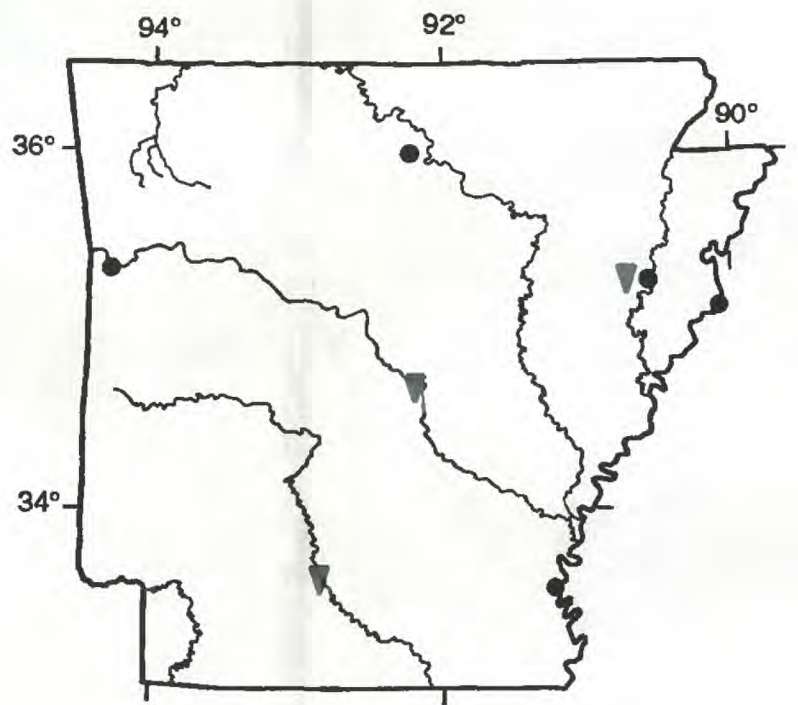


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Downward



No detectable trend

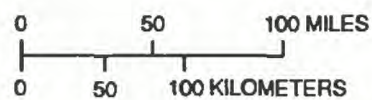


Figure 15.--Trends in suspended sediment data.

Turbidity, total suspended solids, and suspended sediment data all indicate that the amount of suspended material has decreased at a substantial number of stations during the 1975-89 water-year period. Possible causes include reduction of loads of solids from wastewater treatment plants and reduction of soil loss from nonpoint sources, such as construction and agricultural activities.

Fewer than 10 stations could be tested for trends in the percent of suspended sediment finer than 62 micrometers in diameter. However, downward trends were detected at more than one-half the stations for both the 1975 through 1986 and 1975 through 1989 water-year periods (fig. 16). This indicates that the percentage of silt and clay in the samples from these stations is decreasing. Upward trends were not detected at any stations.

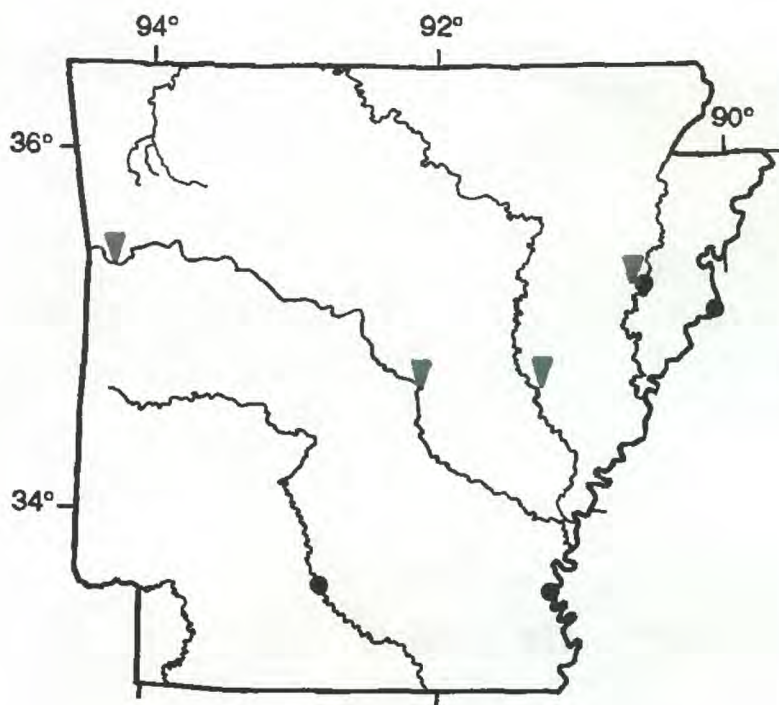
Dissolved Oxygen and Biochemical Oxygen Demand

No trends in dissolved-oxygen data were detected for about 75 percent of the tested stations in three of the four trend tests conducted (fig. 17). Downward trends in unadjusted dissolved oxygen were detected at 25 percent of the stations during water years 1975-89. Downward trends in flow-adjusted dissolved-oxygen data were detected at 18 percent of the stations during the same period. In all four tests, a substantial number of downward trends was detected at stations in the Springfield-Salem Plateaus. During the 1975-89 water-year period, downward trends were detected at about half of the stations in extreme northwestern Arkansas. The decreasing dissolved-oxygen data may have been affected by the poultry, cattle, and hogs raised in northwestern Arkansas and by the growing human population in much of the Springfield-Salem Plateaus. Downward trends also were detected frequently at stations in the Mississippi Alluvial Plain northeast of the White River and in south-central Arkansas. Most stations having upward trends are located in central and northeastern Arkansas. Some of these decreases may have been affected by the increase in total fertilizer use (fig. 4). At some stations statewide, changes in the time (hour) of collection may be substantial enough to cause trends in dissolved-oxygen data.

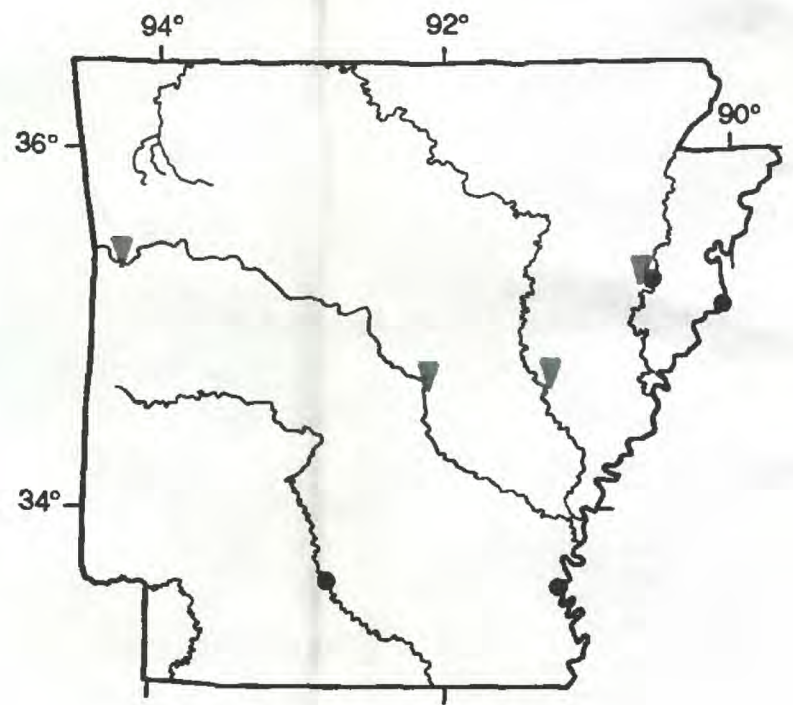
Dissolved-oxygen concentrations are affected by several physical and biological factors such as time of day, water temperature, reaeration, photosynthesis, respiration, biochemical degradation of organic matter, and oxidation of reduced forms of nitrogen. Other factors that may indirectly affect these factors include turbidity and stream canopy, and their effect on light intensity, and the effect of nutrient availability for photosynthesis and respiration.

Downward trends in 5-day biochemical oxygen demand data frequently were detected, particularly during water years 1975-89 when downward trends were detected at approximately two-thirds of the stations (fig. 18). These downward trends occurred statewide, but were somewhat less common in the Mississippi Alluvial Plain, particularly during water years 1975-86. These decreases suggest the possibility of widespread improvements in the quality of wastewater treatment plant effluents. The few stations where increases were detected are almost all in western Arkansas.

Biochemical oxygen demand (BOD) is a measure of the oxygen removed from water during the biochemical degradation of organic material and oxidation of reduced forms of nitrogen. Organic material and reduced forms of nitrogen (organic nitrogen, ammonia, and nitrite) from natural sources and other sources such as wastewater treatment plants and agricultural runoff add to the biochemical oxygen demand of a stream. The measured 5-day BOD does not include BOD exerted by the stream bed, only the BOD exerted by materials in the water column. The amount of demand exerted by the reduced forms of nitrogen partly is dependent on the abundance of nitrifying microorganisms in the sample (American Public Health Association, 1989, p. 5-3) and may not be a substantial part of the 5-day BOD.

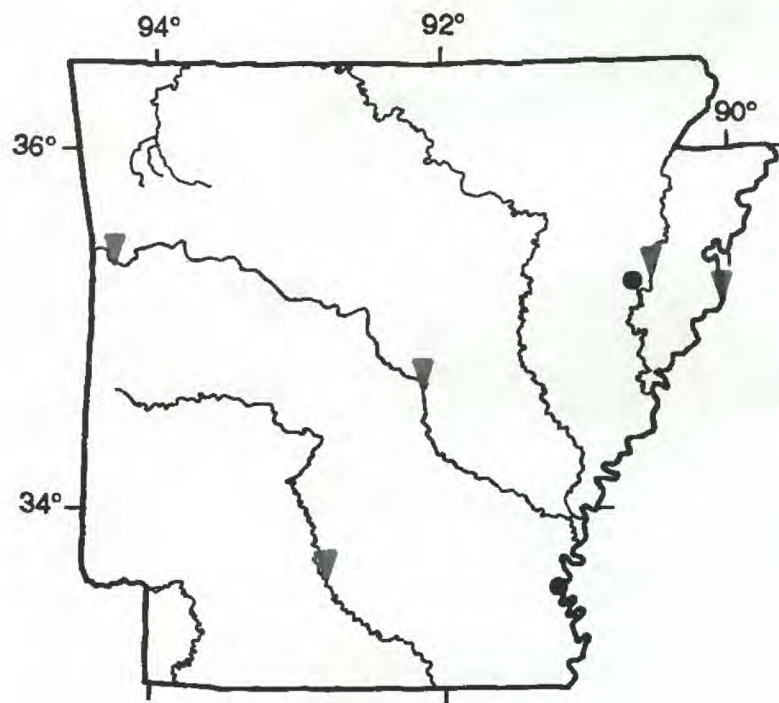


Unadjusted

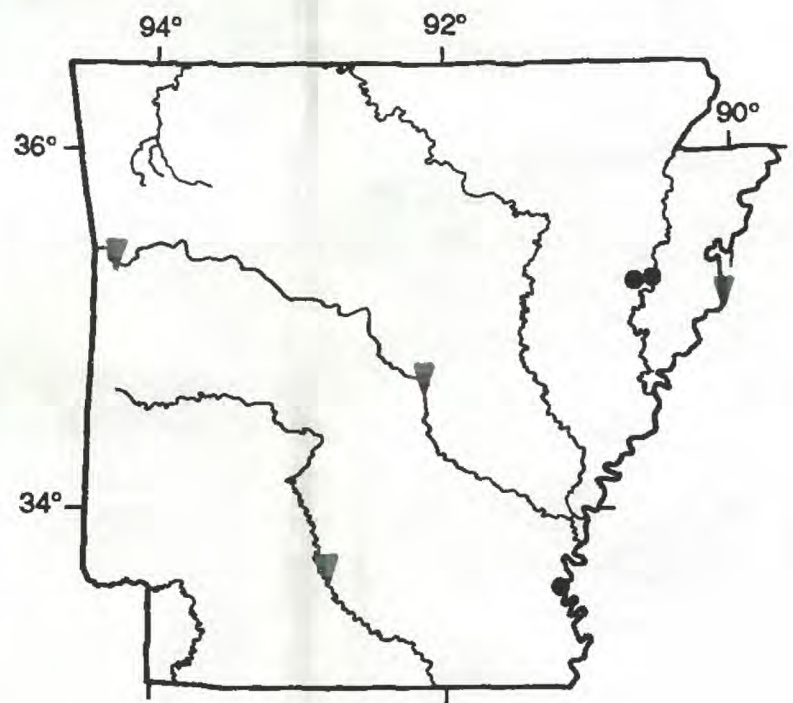


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Downward



No detectable trend

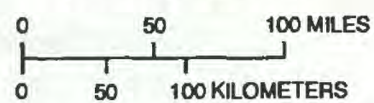
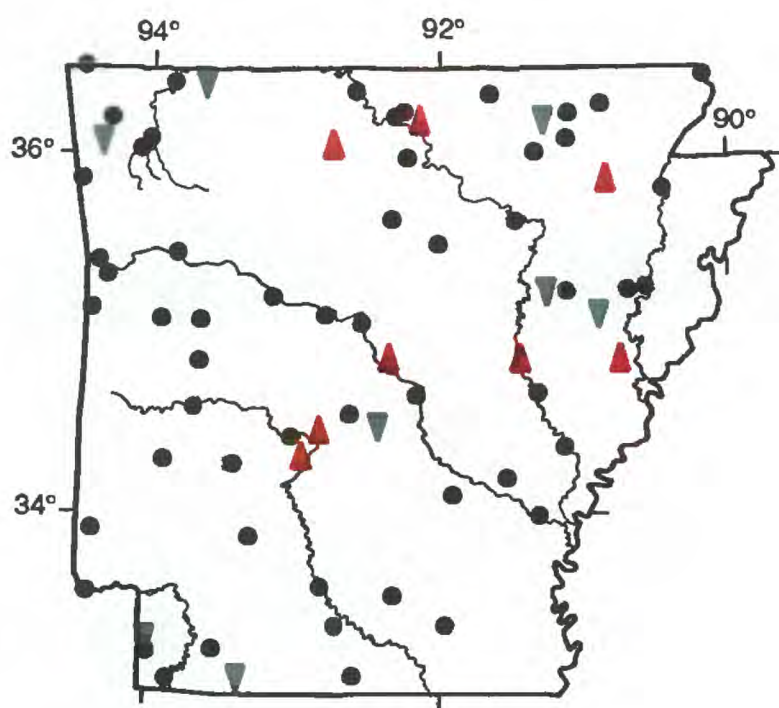
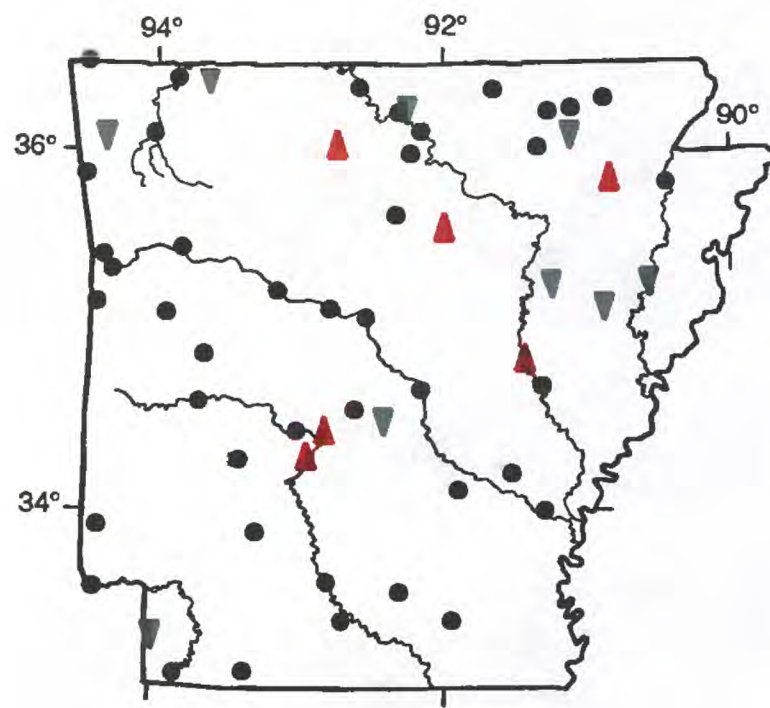


Figure 16.--Trends in percent of suspended sediment finer than 62 micrometers data.

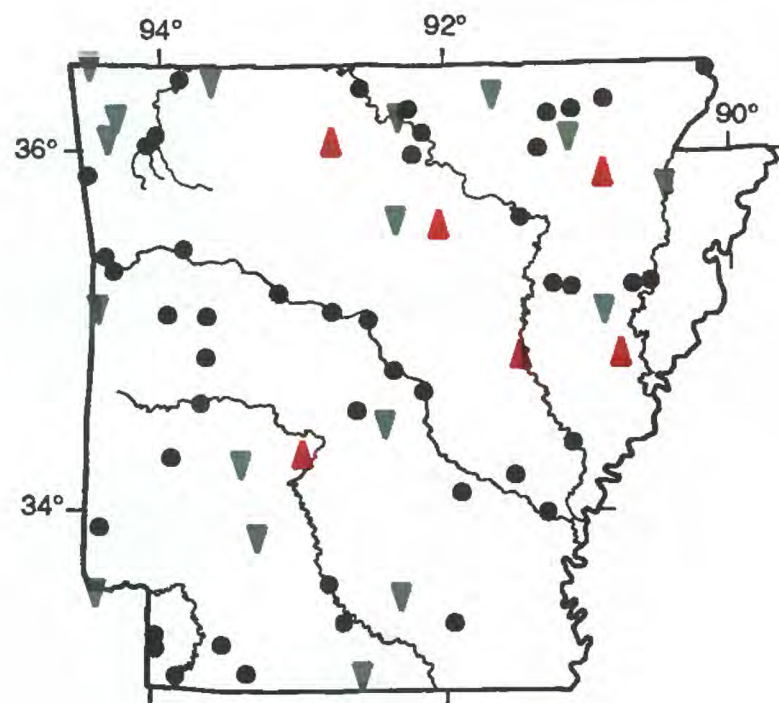


Unadjusted

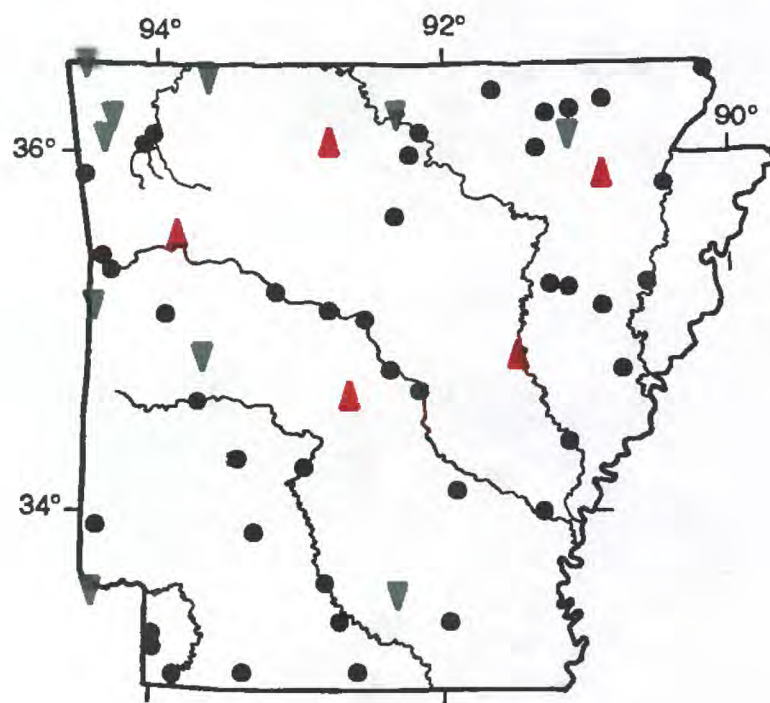


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

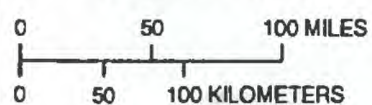
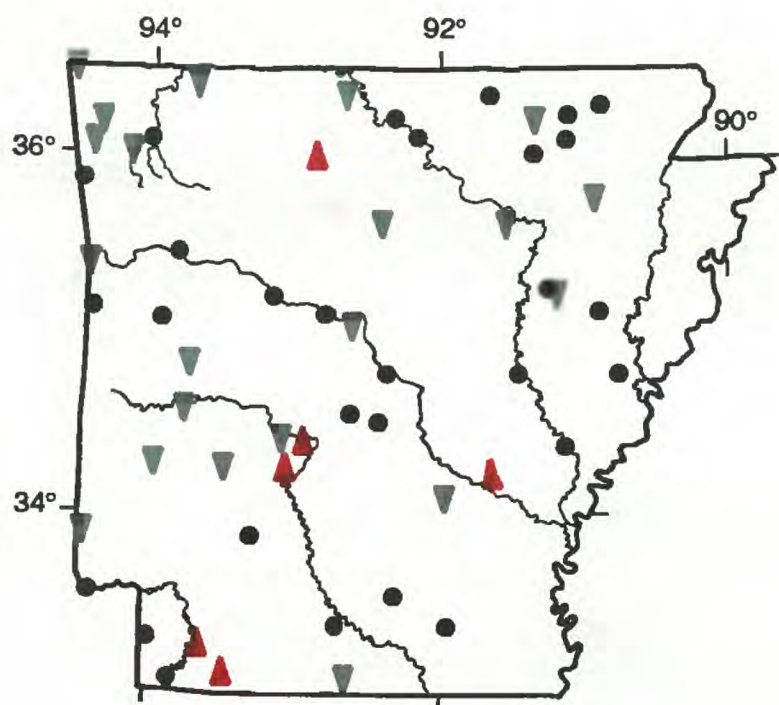
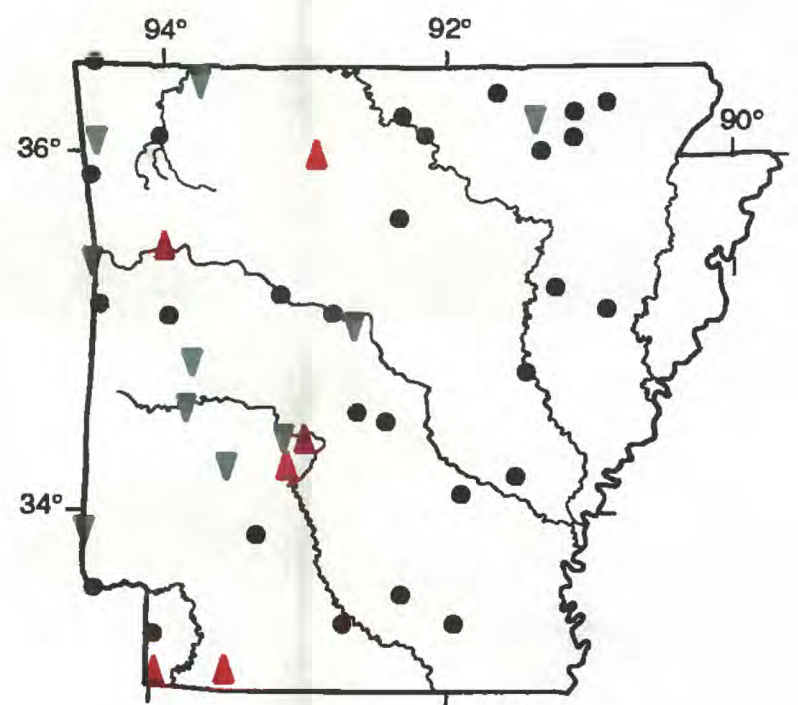


Figure 17.--Trends in dissolved oxygen data.

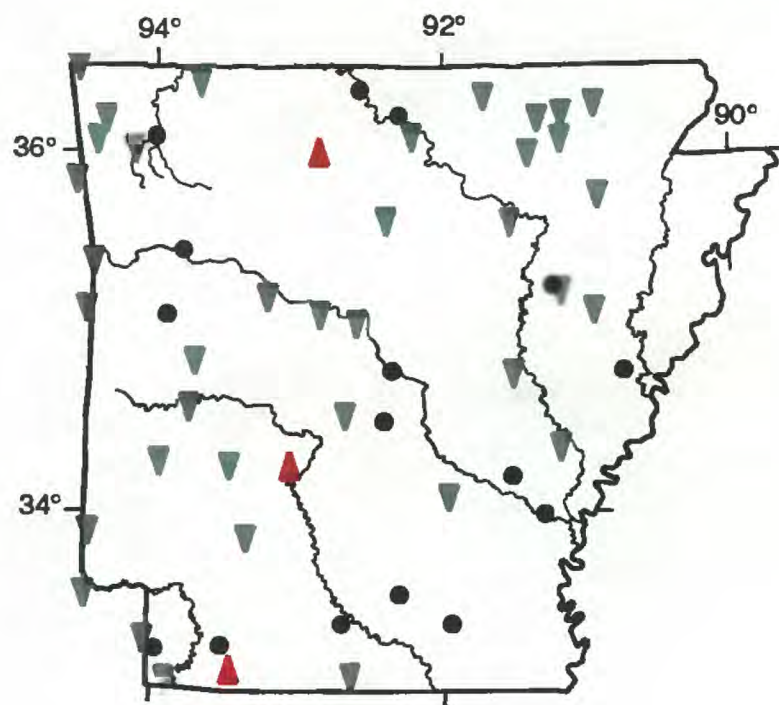


Unadjusted

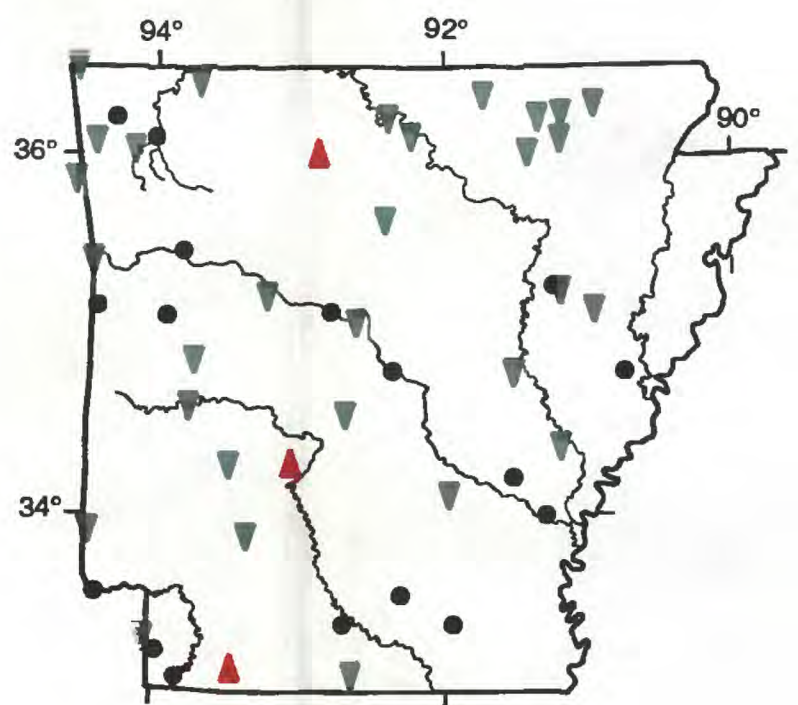


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

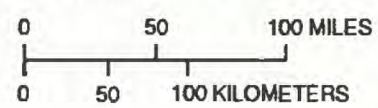


Figure 18.--Trends in biochemical oxygen demand data.

The expected inverse relation between trends in BOD and trends in dissolved oxygen was not observed. The dissolved oxygen and BOD trends (unadjusted and flow adjusted) for water years 1975-89 were compared. Where trends were detected in both dissolved oxygen and BOD, downward trends almost always occurred in both (12 of 16 unadjusted and 5 of 7 flow-adjusted comparisons). Statistically significant increases in dissolved oxygen did not occur at several stations where decreases occurred in BOD. These findings indicated that water-column BOD was not the major factor affecting downward trends in daytime dissolved oxygen data at the tested stations.

Bacteria

Data for fecal coliform and fecal streptococcal bacteria have been collected by the ADPCE and USGS. Both bacteria groups indicate fecal contamination. Fecal coliform bacteria data collected by the ADPCE (using a 0.45 micrometer pore-size filter) and USGS (using a 0.70 micrometer pore-size filter) were separated because of differences in analytical methods related to filter pore size and the length of time between sample collection and analysis.

Fecal coliform concentrations decreased at approximately 20 to 30 percent of the stations (figs. 19-20) during the analyzed periods (water years 1975-86, 1975-87, and 1977-89). Possible decreases in the amount of fecal coliform bacteria discharged from wastewater treatment plants are one likely cause of many of these decreases. Several of the stations that had downward trends were on the Arkansas River. The largest change in concentrations in the State occurred at station 07250550 (Arkansas River at Van Buren). Most of this decrease occurred after about January 1979. A wastewater treatment plant operated by the city of Fort Smith, and discharging just upstream of the station, was converted from primary to secondary treatment processes during 1976 through 1978 and a sanitary and storm sewer separation project was completed in the later part of 1977 (Steve Parke, city of Fort Smith Utility Department, written commun., 1991). Stations having downward trends occurred infrequently in the Mississippi Alluvial Plain.

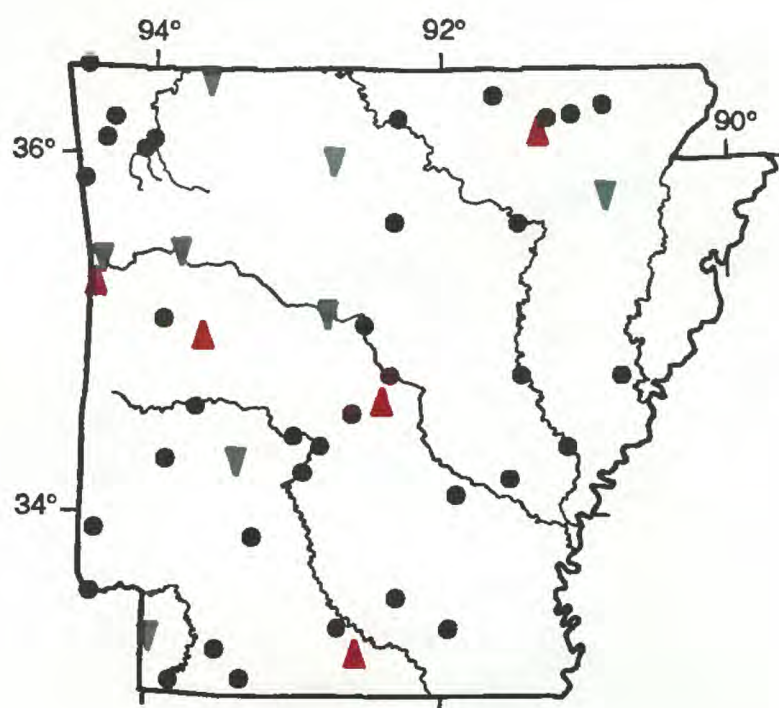
Upward trends in fecal coliform bacteria data were few, particularly when the data were flow adjusted. Most stations having upward trends were widely scattered throughout the southwestern half of the State and don't seem to be strongly associated with the major animal-production areas of Arkansas.

Upward trends in fecal streptococcal bacteria during water years 1978-89 were detected at approximately 30 percent of the stations tested (fig. 21). Most of these stations are located in east-central Arkansas; however, the majority of tested stations are in the northeastern quarter of the State.

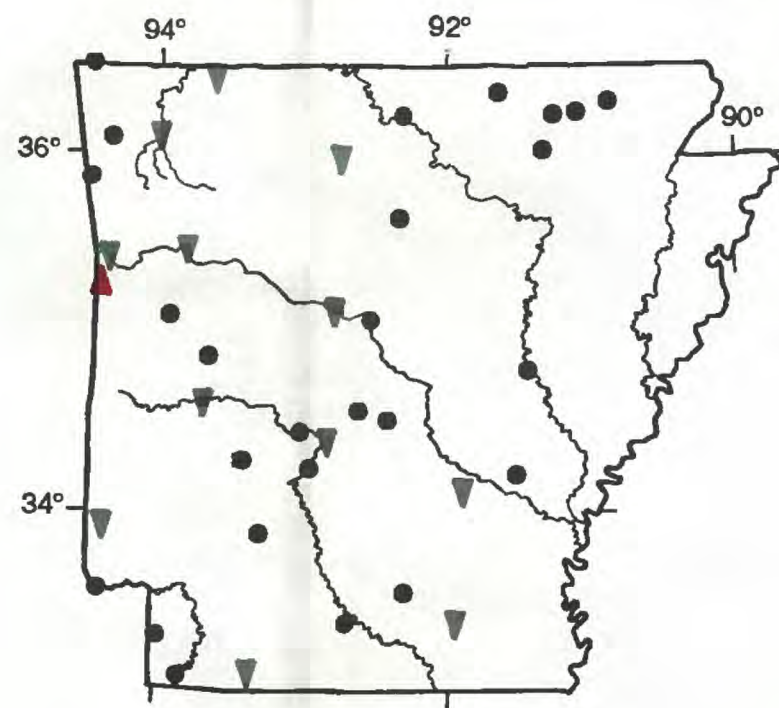
Dissolved Ions and Related Properties

For most of the major dissolved ions and related properties, trends were detected at few stations. The major dissolved ions tested were sulfate, chloride, calcium, magnesium, sodium, and potassium. Related properties tested include hardness, residue on evaporation (sometimes known as total dissolved solids), and specific conductance. Alkalinity is discussed with pH in a previous section. Trends most frequently were detected for hardness, sulfate, chloride, and residue on evaporation data.

Relatively few trends were detected in total hardness data except at stations on the Arkansas River (fig. 22). Upward trends in unadjusted and flow-adjusted data were detected at all but one tested station on the Arkansas River for water years 1975-89. Most of these increases occurred primarily after about 1987, often coinciding with elevated sulfate

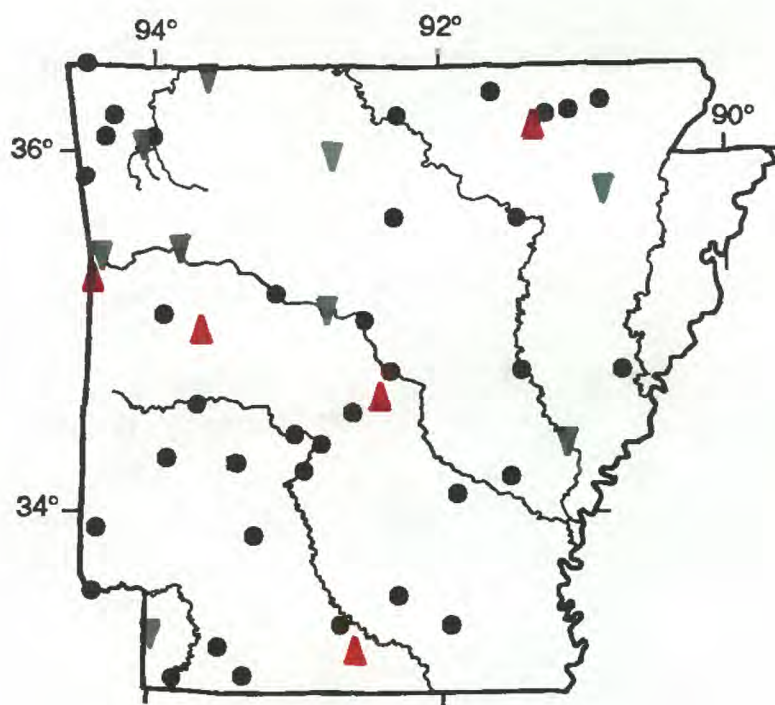


Unadjusted

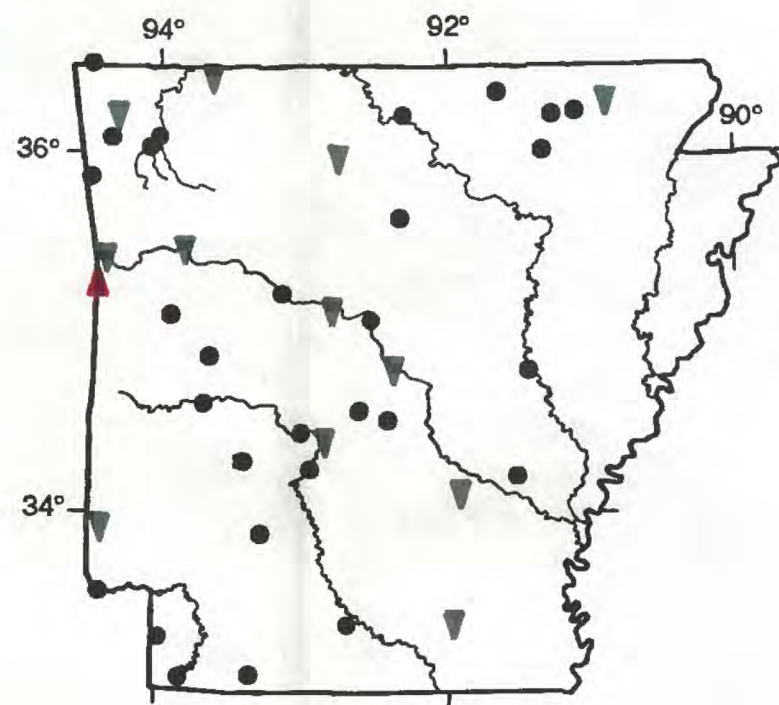


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1987

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



Downward



No detectable trend

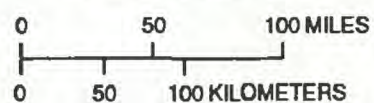
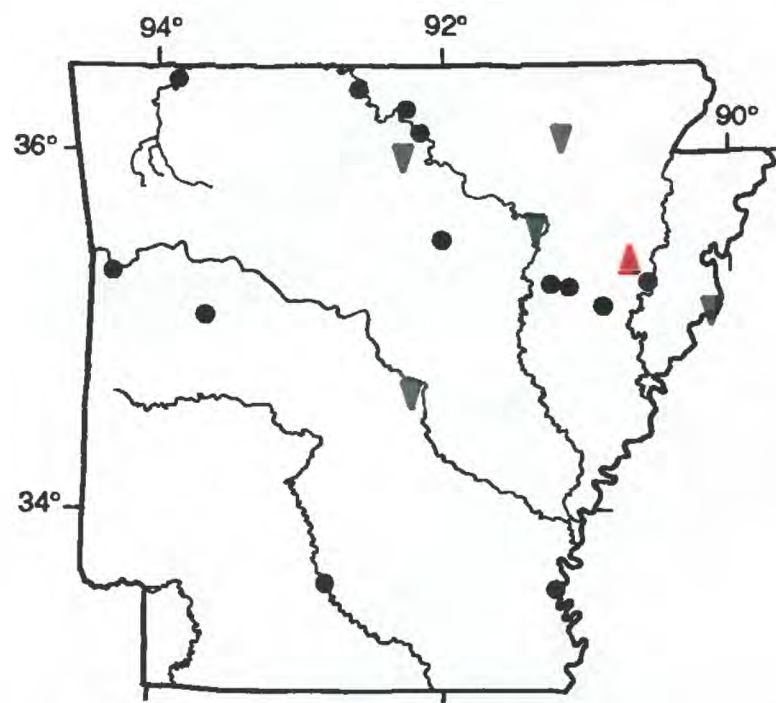
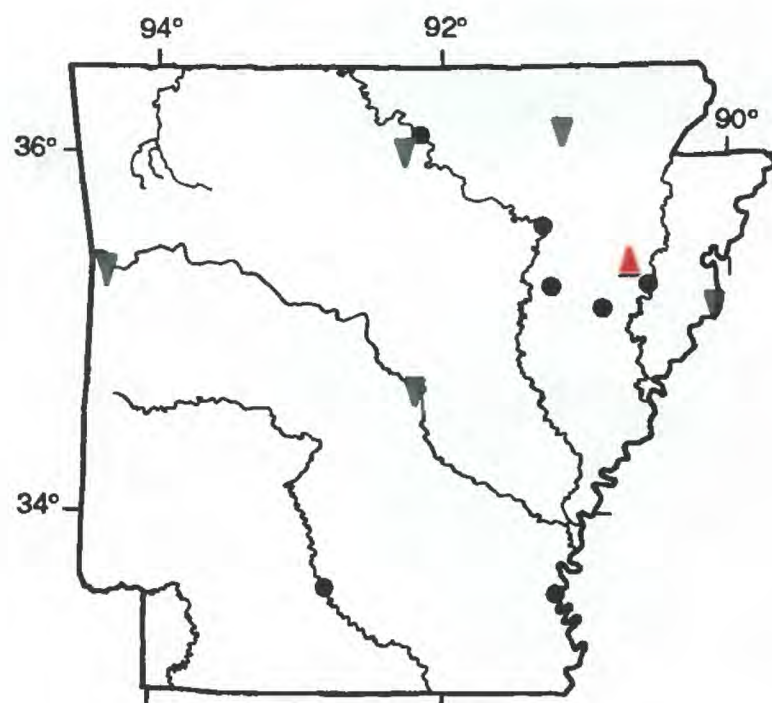


Figure 19.--Trends in fecal coliform bacteria data (using 0.45 micrometer pore-size filter).



Unadjusted

Water years 1977 through 1989



Flow adjusted

Water years 1977 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



Downward



No detectable trend

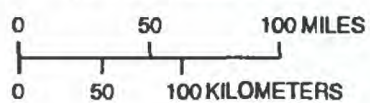
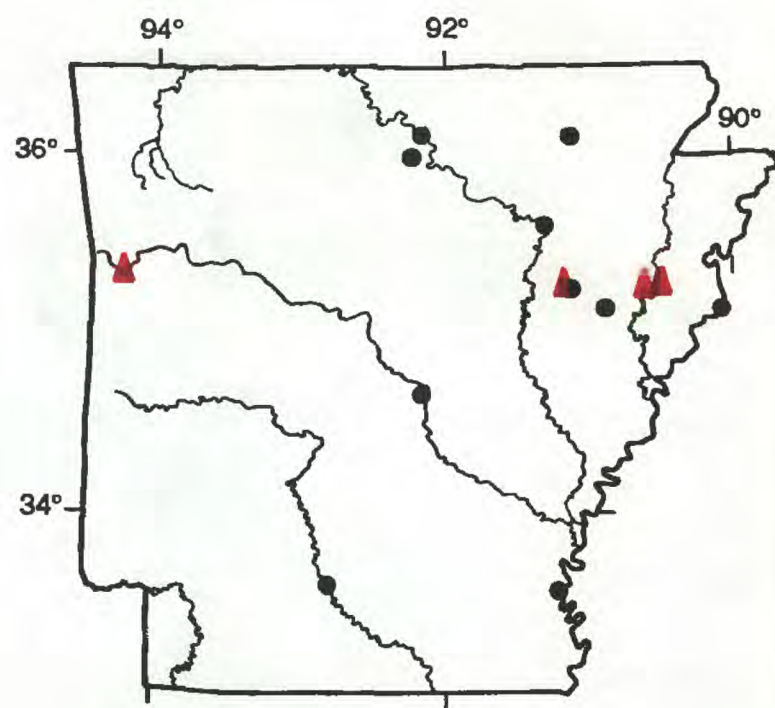
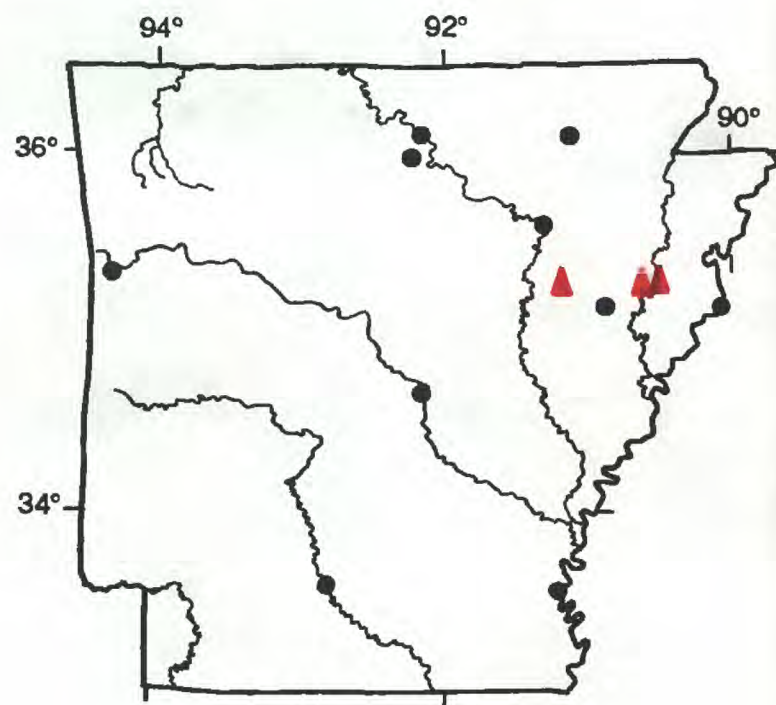


Figure 20.--Trends in fecal coliform bacteria data (using 0.70 micrometer pore-size filter).



Unadjusted

Water years 1978 through 1989



Flow adjusted

Water years 1978 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



No detectable trend

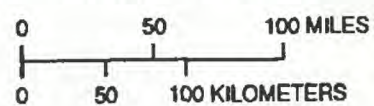
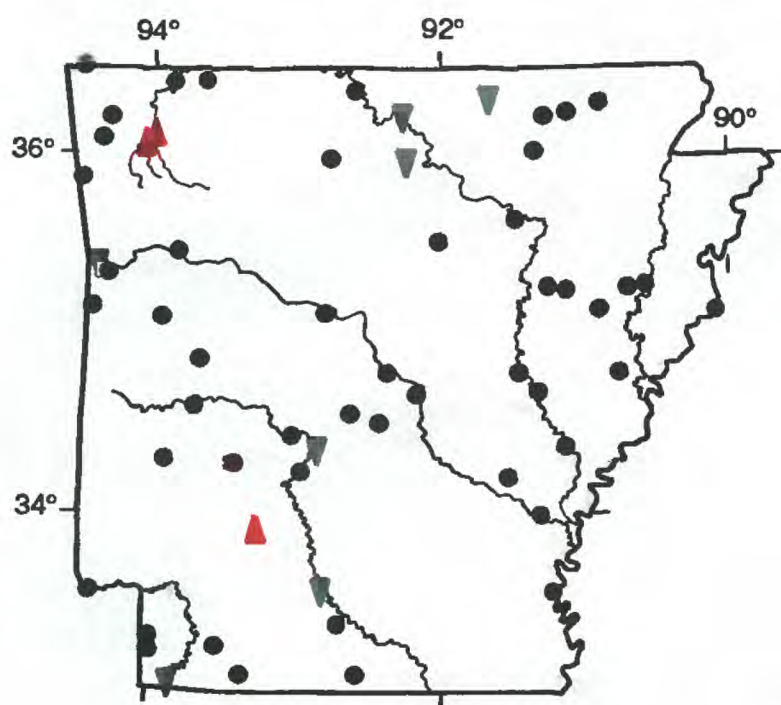
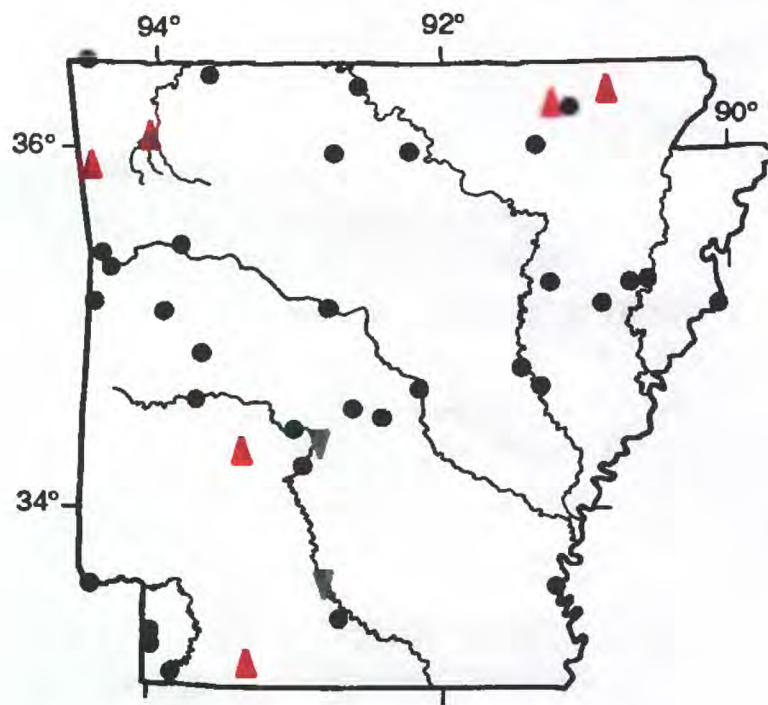


Figure 21.--Trends in fecal streptococcus bacteria data.

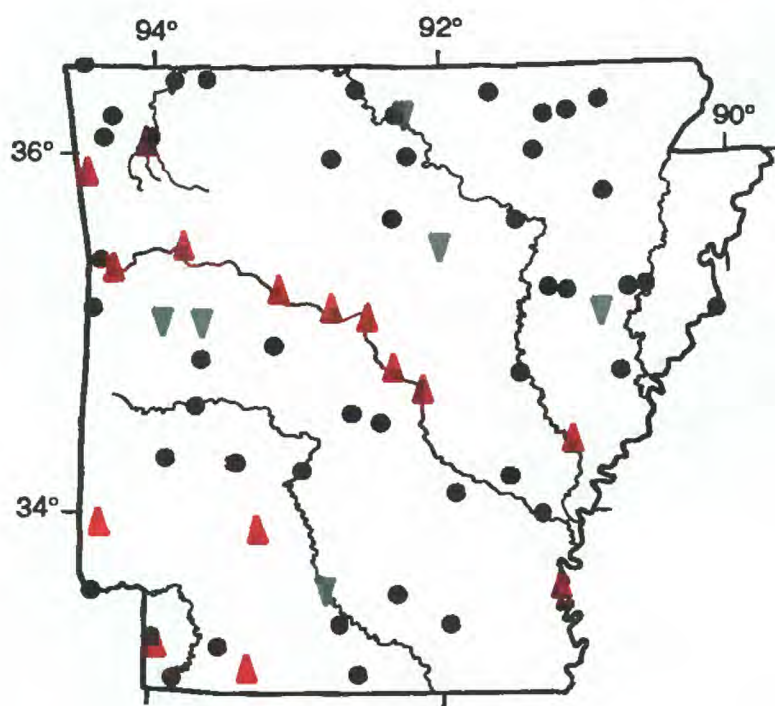


Unadjusted

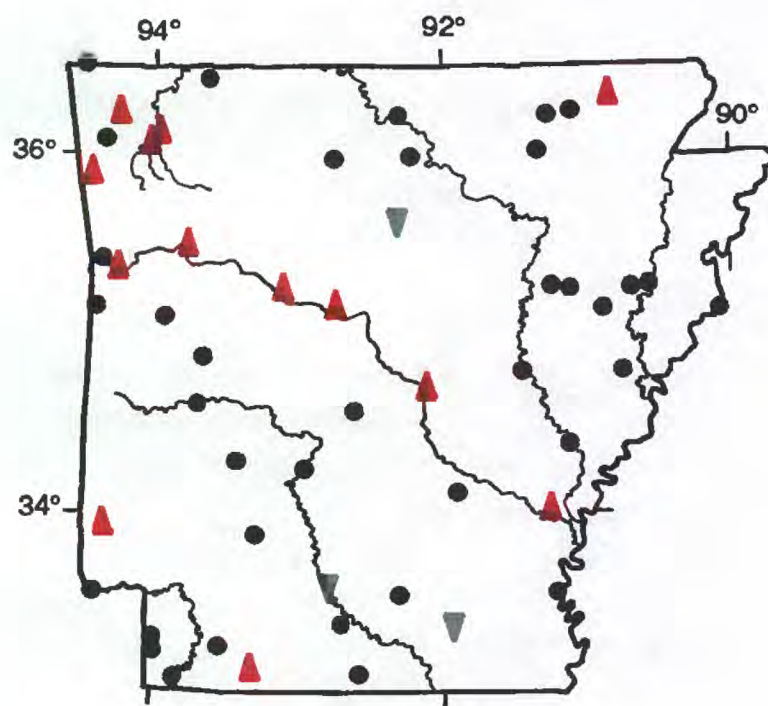


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

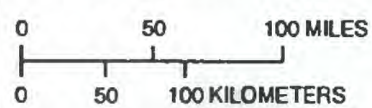


Figure 22.--Trends in hardness data.

concentrations. Upward trends also were detected somewhat consistently at stations in northwestern Arkansas. Other trend patterns are less consistent, except that most of the downward trends in unadjusted data for the 1975-89 water-year period were at USGS stations.

Two different patterns of trends in sulfate data occurred during the two time periods tested. For the period, water years 1978-86, upward trends were detected at 50 percent of the stations, and for the period, water year 1983-89, upward trends were detected at fewer than 20 percent of the stations (fig. 23). Only ADPCE data were analyzed for the period between 1978 and 1986. Data from the ADPCE and USGS were analyzed for the period between 1983 and 1989.

The upward trends in dissolved sulfate between water years 1978 and 1986 occurred statewide except in the Arkansas River and most of the southern quarter of Arkansas. Upward trends also occurred at about half of the stations in the eastern quarter of Texas between 1975 and 1986 (Schertz, 1990); some of the trends detected in Texas could have resulted from potentially biased USGS sulfate data (table 3). The upward trends between water years 1983 and 1989 occurred primarily at stations on the Arkansas River and in central Arkansas. The elevated concentrations at the Arkansas River stations occurred primarily in 1987 and 1988.

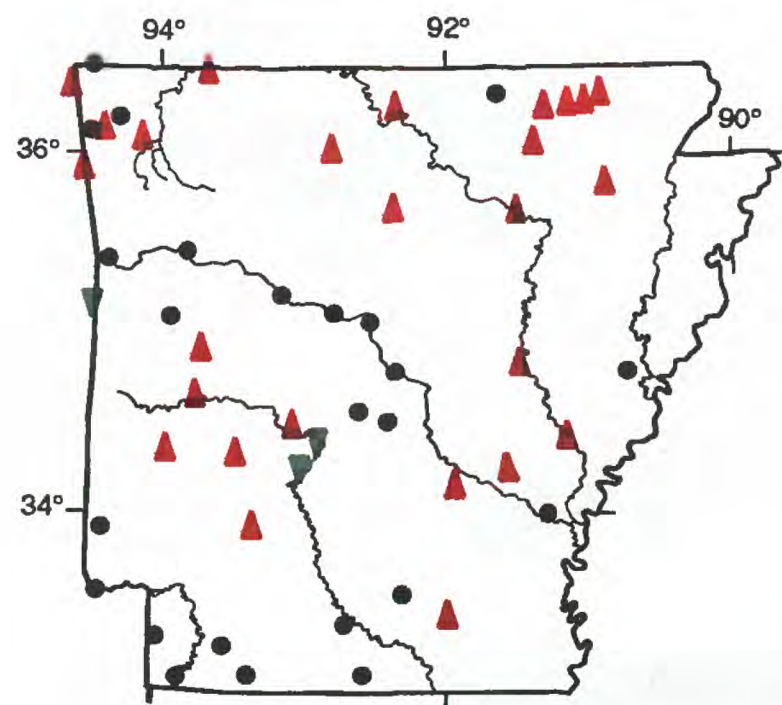
The causes of these trends in sulfate data are unknown. Possible contributing sources include atmospheric deposition, paper mills, wastewater treatment plants, and petrochemical plants.

Downward trends in chloride data were consistently detected during the water year 1975-86 and 1975-89 periods. Particularly during the longer period, these downward trends occurred statewide, except at stations on the Arkansas and Mississippi Rivers (fig. 24). Increases in flow-adjusted chloride data for the 1975-89 period were detected at four stations on the Arkansas River in central Arkansas. Few decreasing trends were detected at stations operated by the USGS during this period. For the flow-adjusted data, decreases were detected at approximately 7 percent of the USGS stations and 70 percent of the ADPCE stations. Part of this discrepancy may be related to the greater number of USGS stations on larger rivers; four of the USGS stations are located on the Arkansas and Mississippi Rivers. During the 1975-86 period, the downward trends are somewhat more limited to stations in the Springfield-Salem Plateaus, Boston Mountains, and Ouachita Mountains (fig. 24) where chloride concentrations typically are lower.

The cause of these decreasing trends in chloride data is unknown. Decreasing trends occur at stations in agricultural areas and forested areas, in sparsely populated areas and more densely populated areas, in areas not substantially affected by point-source discharges, and in areas that may be affected by one or more point-source discharges. Many stations having downward trends of the greatest magnitude (milligrams per liter per year) are in oil producing areas of southern Arkansas; this possibly indicates that decreasing oil production (Arkansas Oil and Gas Commission, 1990) has resulted in less oil brine production or that brine disposal measures have changed, or both.

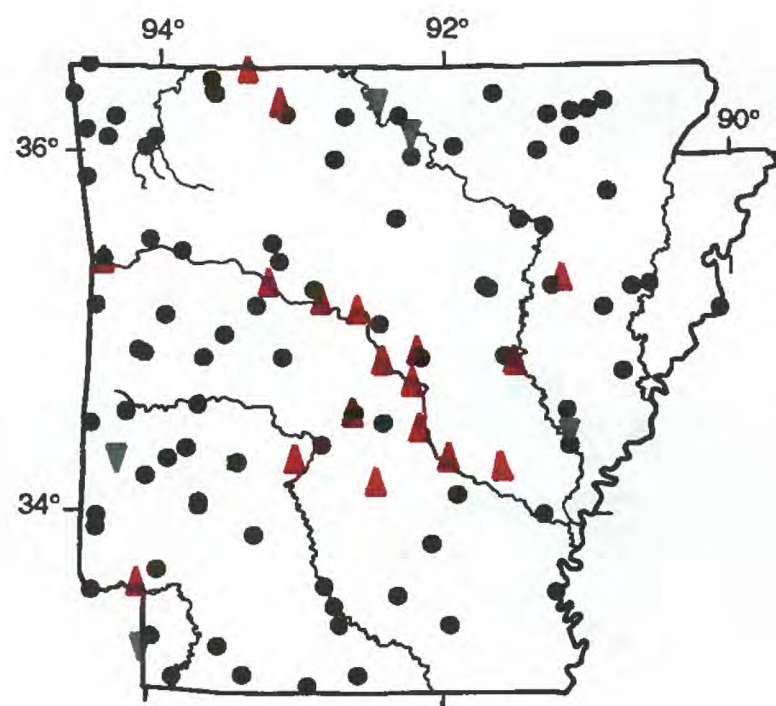
Downward trends in residue on evaporation between 1978 and 1989 occurred at approximately 15 percent of the stations. Most of these stations are in north-central, central, and south-central Arkansas (fig. 25). The largest decreases occurred at two stations in the south-central part of the State where petroleum refining and related industries are located. These decreases probably have causes similar to the causes of the decreasing chloride concentrations. Concentration decreased by approximately 20 to 100 mg/L per year at stations 07362110 and 07364600 (Smackover Creek north of Smackover and Bayou de L'Outre near El Dorado) (table 5).

Upward trends in residue on evaporation were detected at only two stations between 1978 and 1989 (fig. 25). Station 07263620 (Arkansas River at David D. Terry Lock and Dam below Little Rock) may be affected by a diverse set of sources emanating from the Little Rock metropolitan area. Station 07363270 (Hurricane Creek near Sardis) is downstream of a bauxite mining area (Arkansas Department of Pollution Control and Ecology, 1986).



Unadjusted

Water years 1978 through 1986



Unadjusted

Water years 1983 through 1989

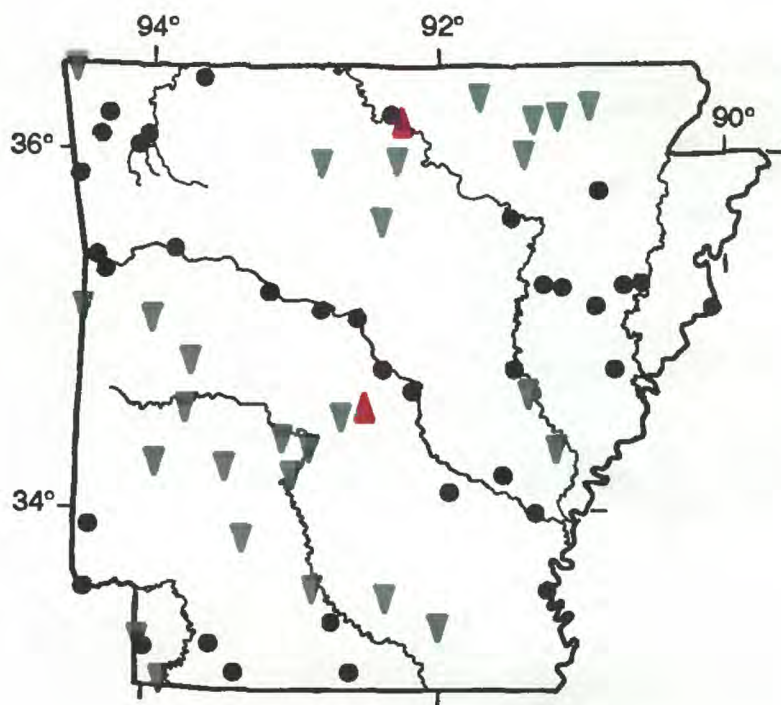
EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

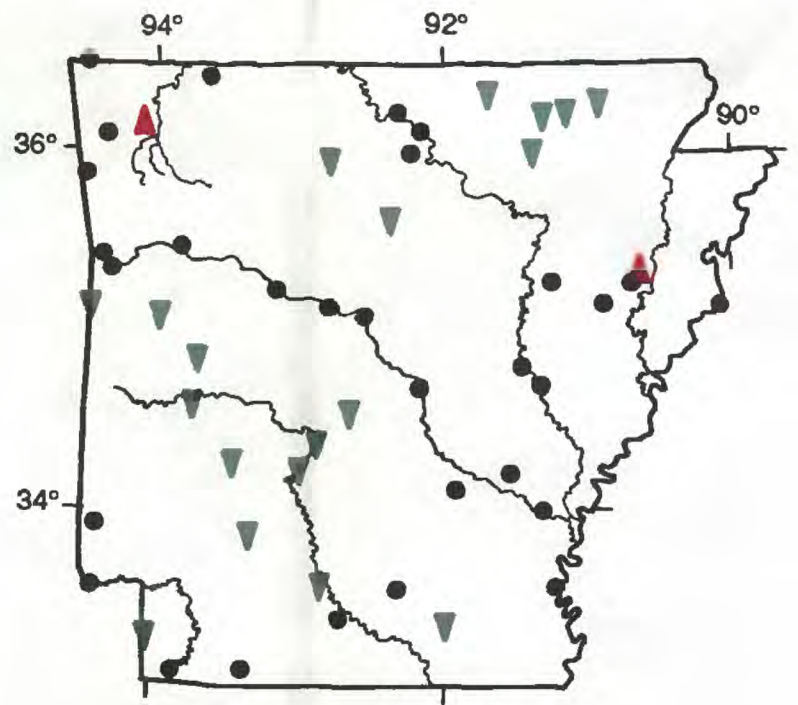
- ▲ Upward
- ▼ Downward
- No detectable trend

0 50 100 MILES
0 50 100 KILOMETERS

Figure 23.--Trends in dissolved sulfate data.

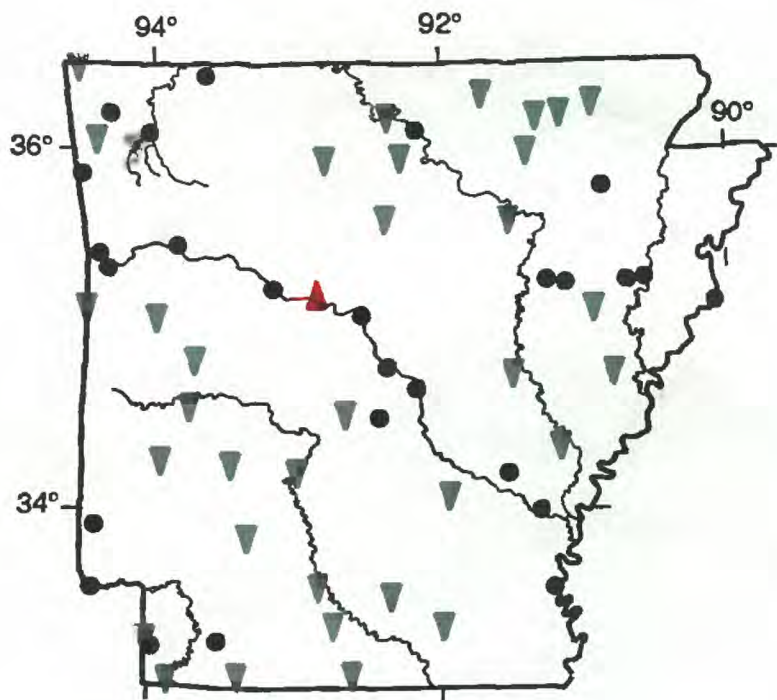


Unadjusted

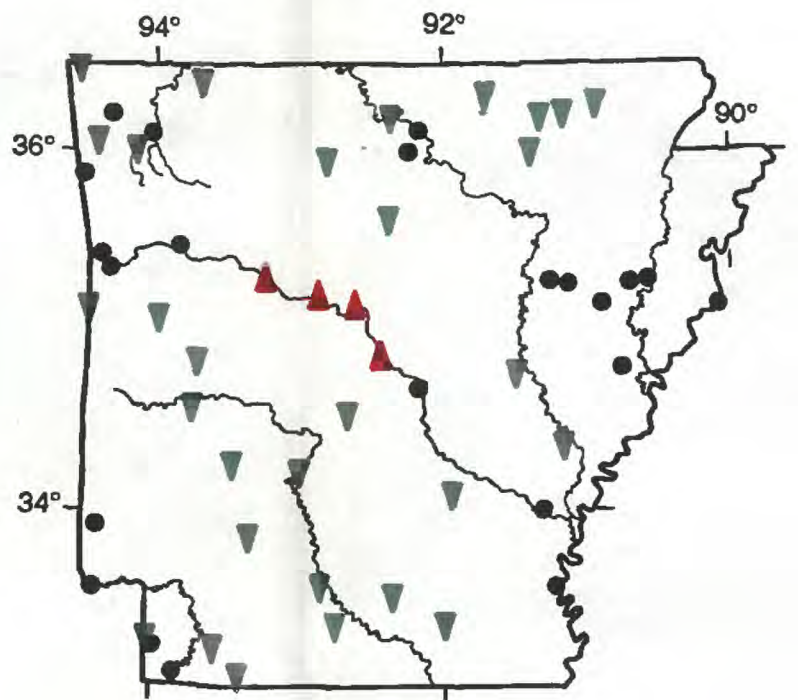


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

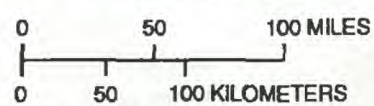
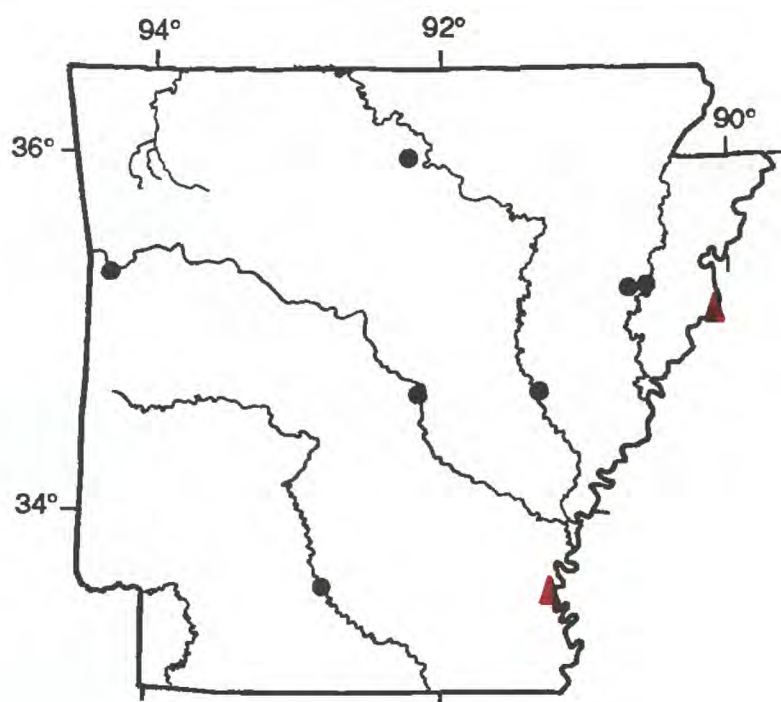
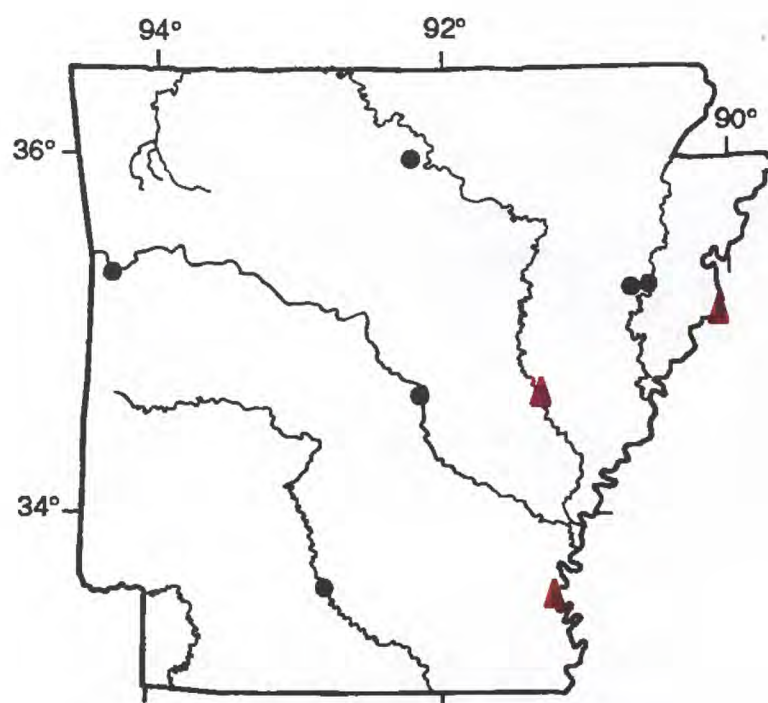


Figure 24.--Trends in dissolved chloride data.

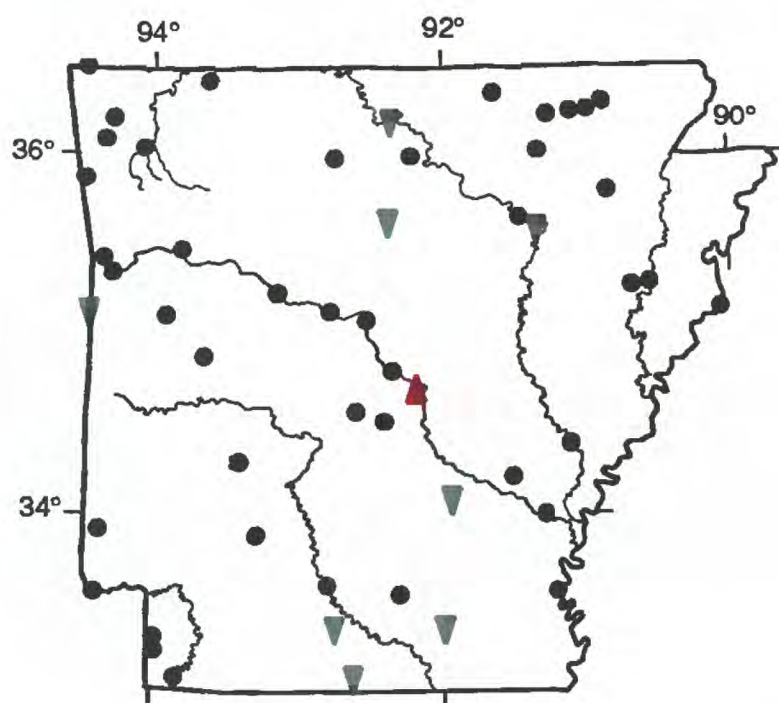


Unadjusted

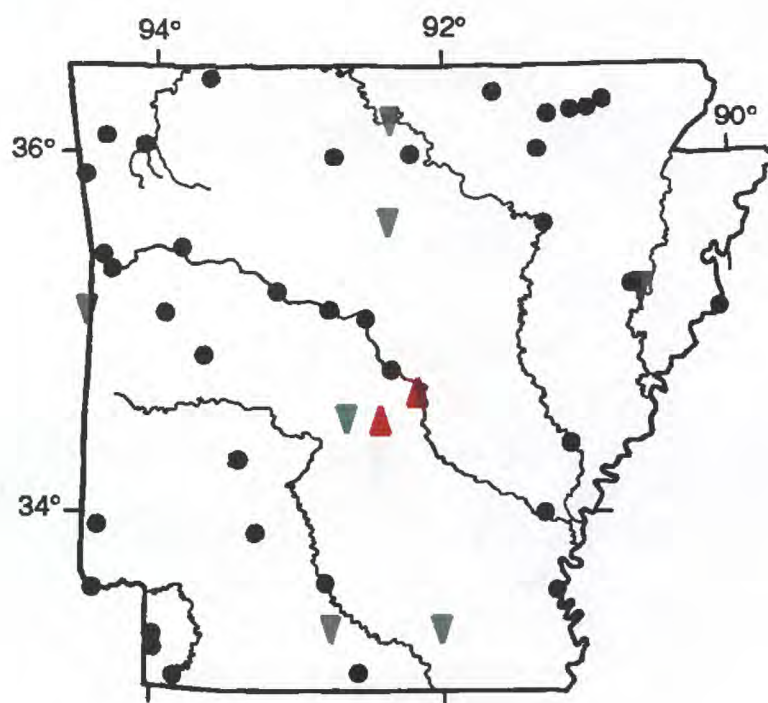


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1978 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

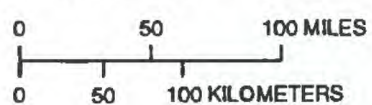


Figure 25.--Trends in residue on evaporation data.

Trends in specific conductance (fig. 26), dissolved calcium (fig. 27), dissolved magnesium (fig. 28), dissolved sodium (fig. 29), and dissolved potassium (fig. 30) generally were widely scattered and few. However, except for specific conductance, data were available for only 10 to 15 stations. Increases in magnesium during 1975-89 (fig. 28) were detected for all four stations on the Arkansas and Mississippi Rivers. Increases in sodium during 1975-89 (fig. 29) frequently were detected for stations on the Arkansas River.

Nitrogen and Phosphorus

For most of the nitrogen species, there are few stations having data trends (figs. 31-33). Trends in dissolved nitrite, dissolved nitrite plus nitrate, total organic nitrogen, and total nitrogen were detected at fewer than three stations.

Decreasing trends in total nitrite plus nitrate were detected at about one-sixth of the stations tested for the 1978 through 1989 period (fig. 31). These stations are distributed statewide; two clusters of three stations are in north-central and southeastern Arkansas. Three of the four stations with upward trends are in extreme northern Arkansas. Trend tests of 1975 through 1986 data were performed for a smaller number of stations (fig. 31). The tested stations are in the northern half of Arkansas. Upward trends were detected at most of the stations in the northeastern quarter of Arkansas.

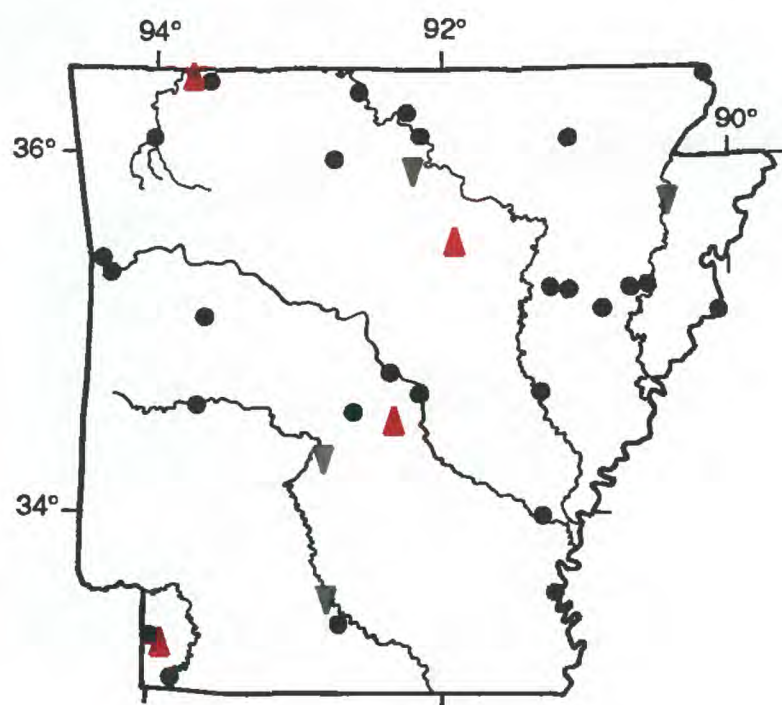
Downward trends frequently were detected in total ammonia (fig. 32). Decreasing trends in total ammonia were detected at half of the stations and were distributed nearly statewide.

Trends in total organic plus ammonia nitrogen data were detected at two stations (fig. 32). Both of these trends were downward and were in the northern Mississippi Alluvial Plain.

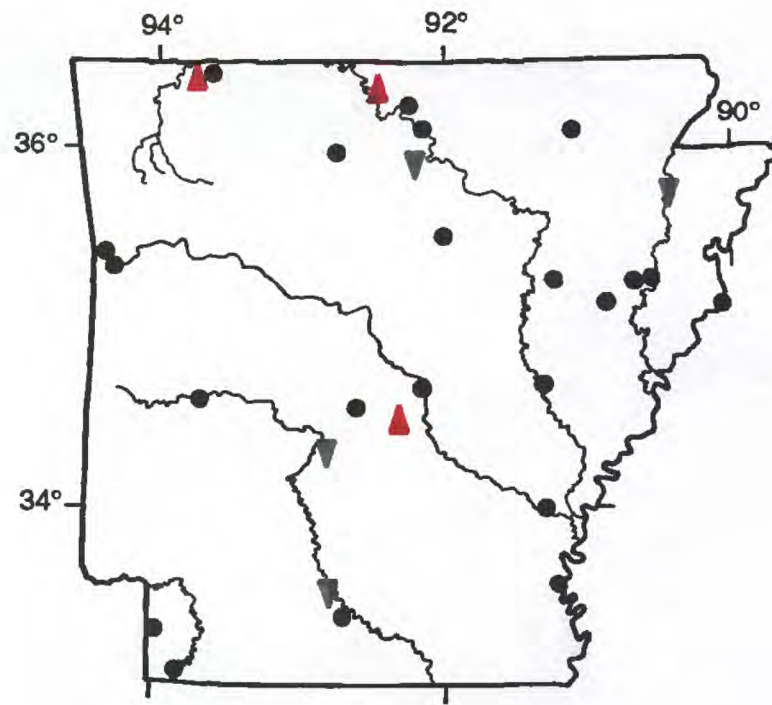
Geographic patterns are evident for trends in total phosphorus and total orthophosphate (figs. 33-34). Upward trends in total phosphorus were detected at about half of the tested stations in southwestern Arkansas and at two stations in extreme northwestern Arkansas. Few downward trends were detected. Upward trends in total orthophosphate during water years 1981-89 were detected at approximately one-third of the total stations; most of these stations are in the northwestern half of Arkansas. Many of these stations having upward orthophosphorus trends are on the Arkansas River upstream of Little Rock and in extreme northwestern and southwestern Arkansas.

Fewer stations were tested for dissolved phosphorus and dissolved orthophosphate trends; geographic patterns are not evident. However, downward trends consistently were detected at stations on the Mississippi and Arkansas Rivers (figs. 33-34).

Sources of phosphorus and nitrogen include wastewater treatment plants, food processing plants, fertilizers, livestock production, and (particularly for nitrate) atmospheric deposition. The individual effect of each source is unknown. However, the geographically widespread decreases in total ammonia suggest that less ammonia may have been released from wastewater treatment plants in recent years; as previously stated, agricultural and industrial sources changes are also possible. The absence of increasing trends in total phosphorus and total orthophosphate in the area of Arkansas where most field crop production occurs (the Mississippi Alluvial Plain) suggests that this type of agriculture currently is not contributing more phosphorus to Arkansas streams than in the 1970's, even though fertilizer consumption has increased. Many stations having increasing trends in total phosphorus and total orthophosphate are in areas of Arkansas where the human population and production of poultry and other livestock are greatest.

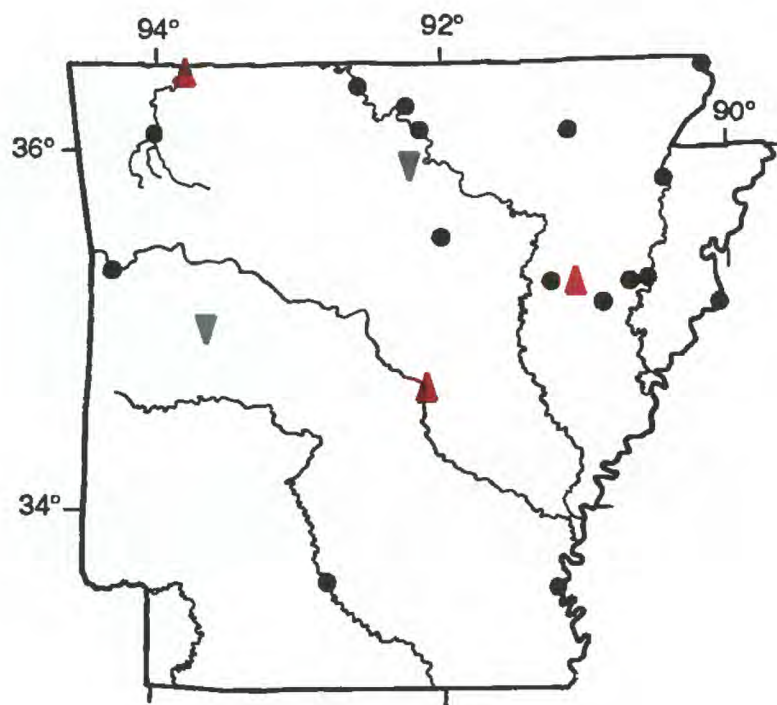


Unadjusted

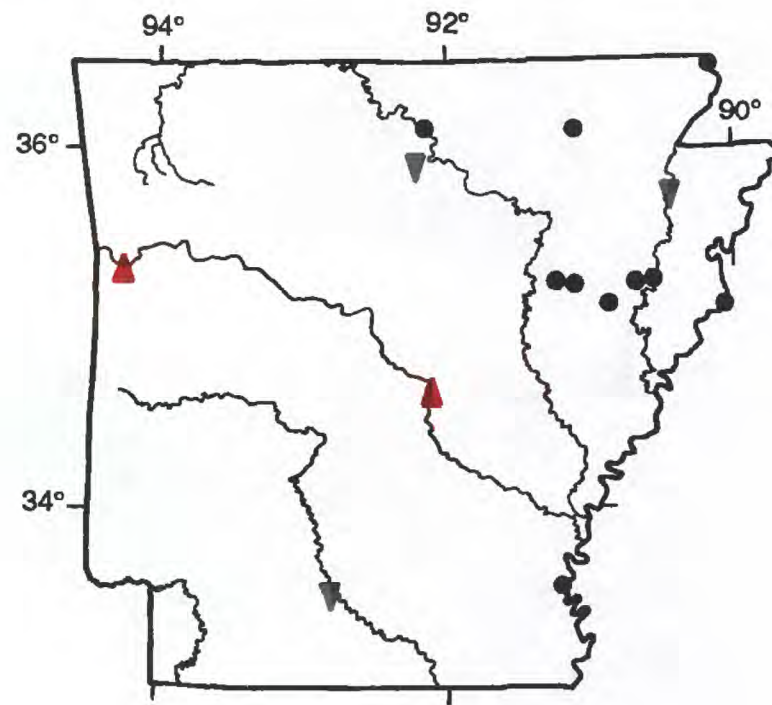


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

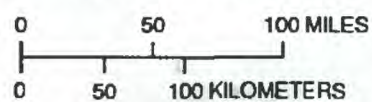
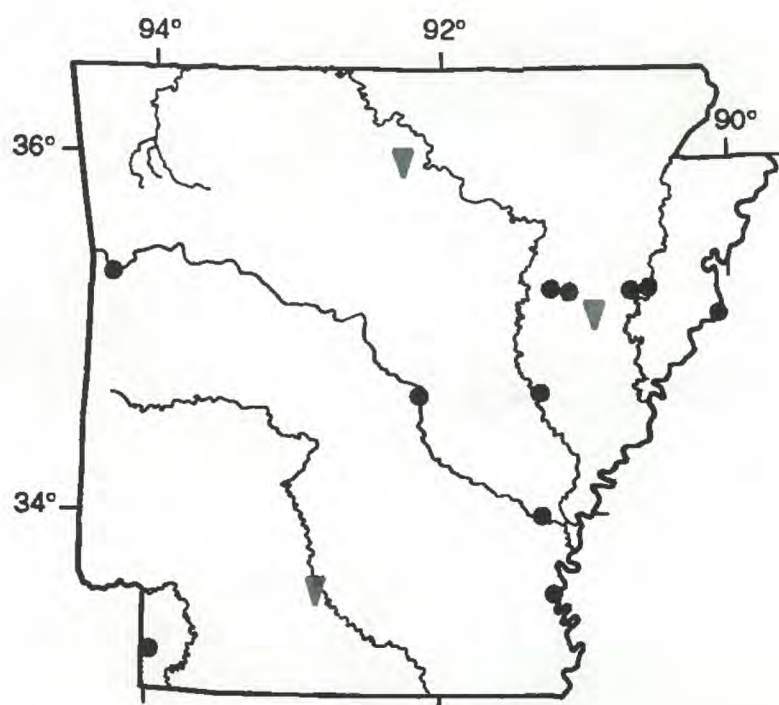
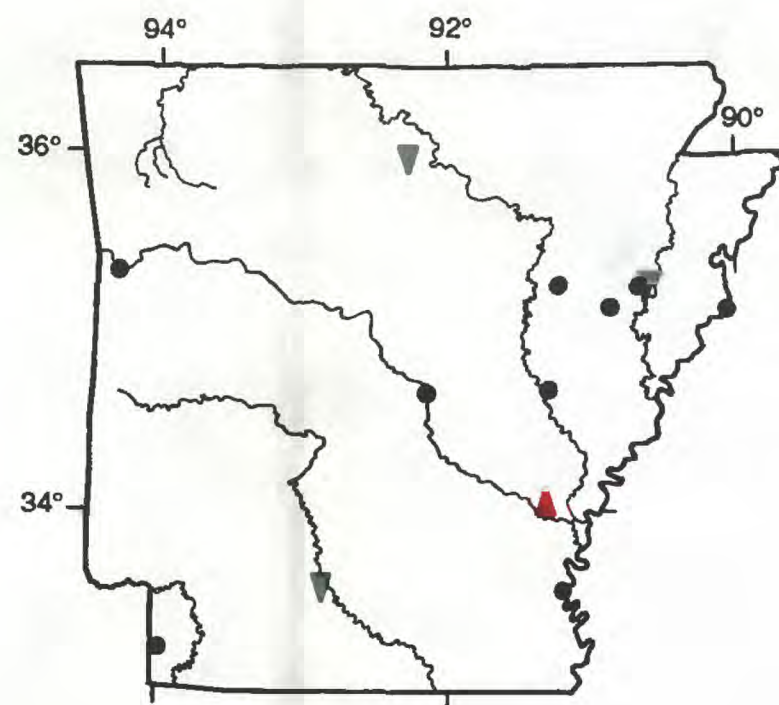


Figure 26.--Trends in specific conductance data.

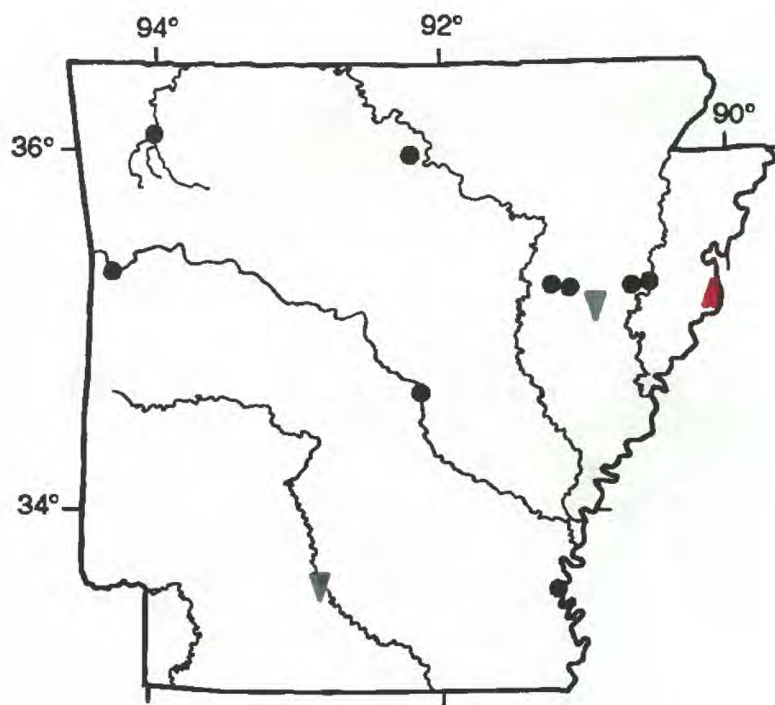


Unadjusted

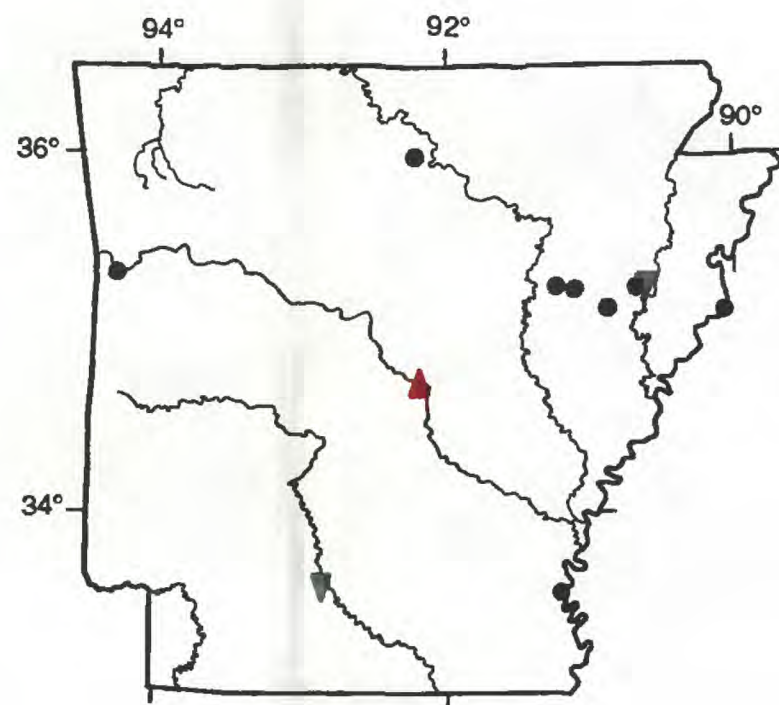


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



Downward



No detectable trend

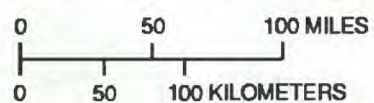
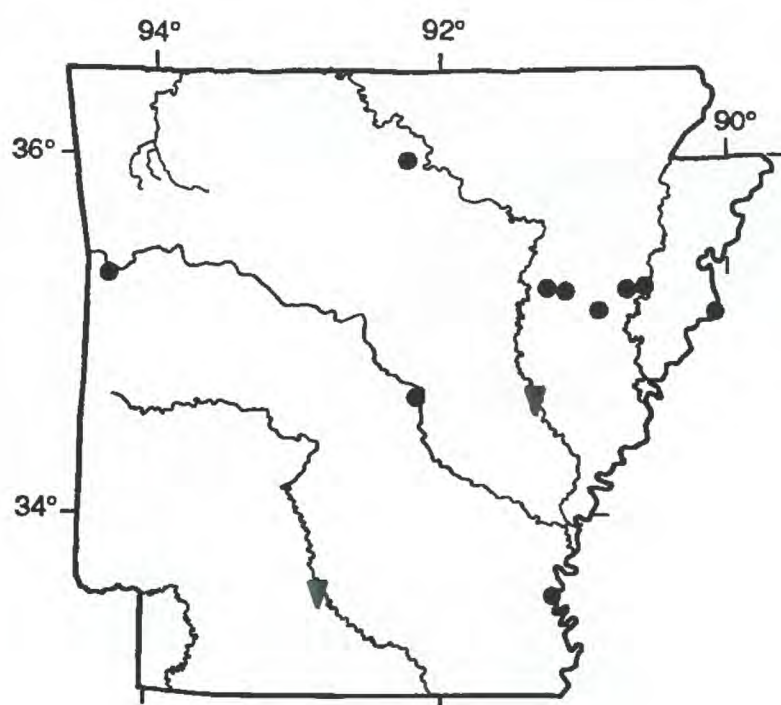
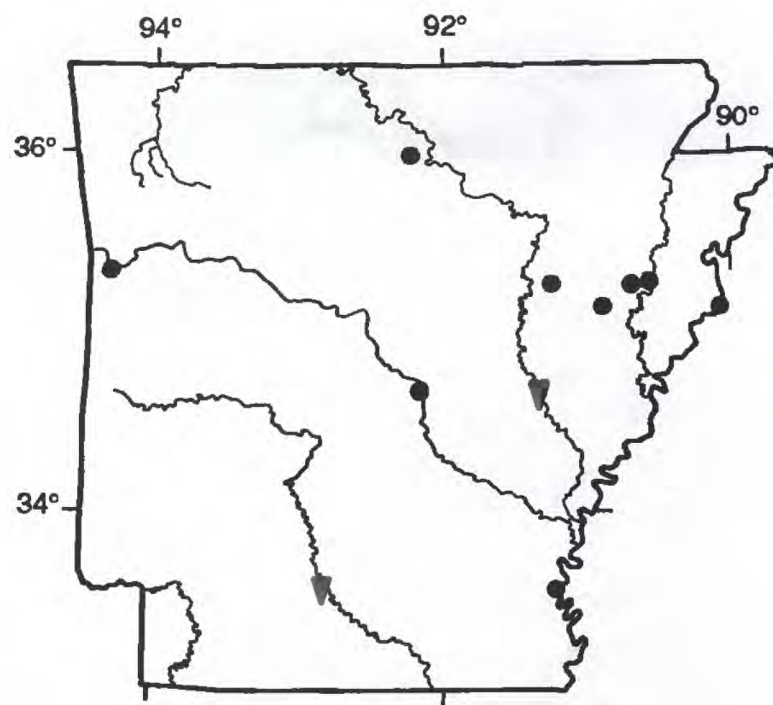


Figure 27.--Trends in dissolved calcium data.

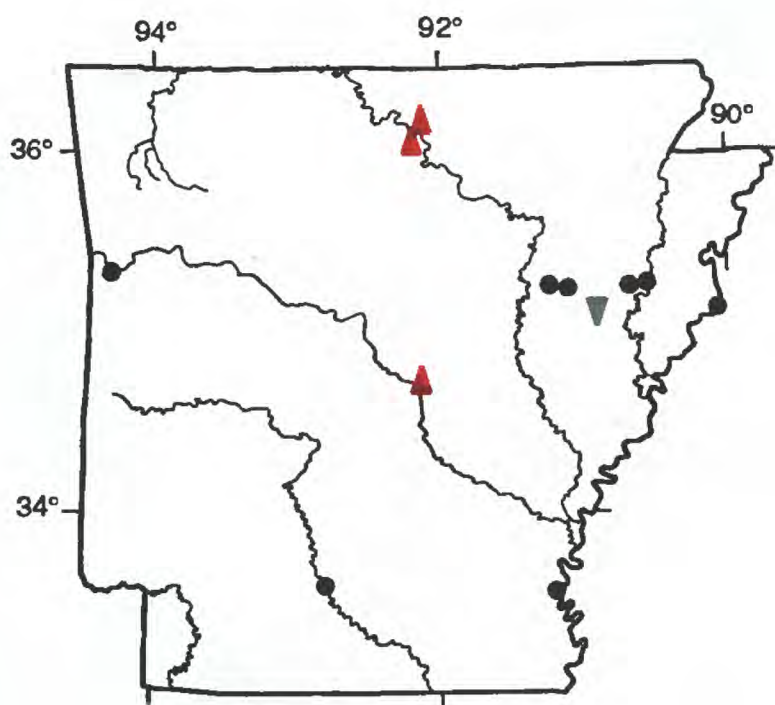


Unadjusted

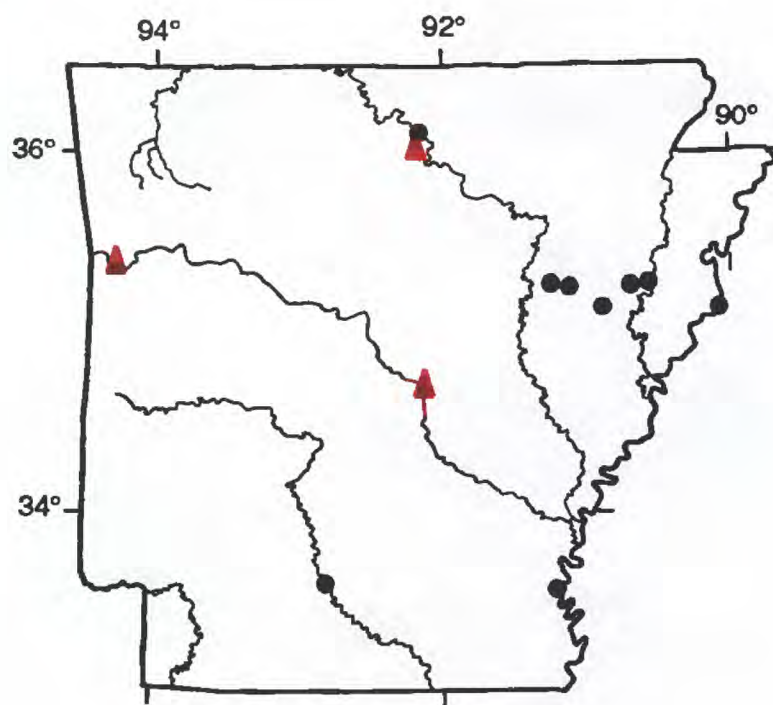


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

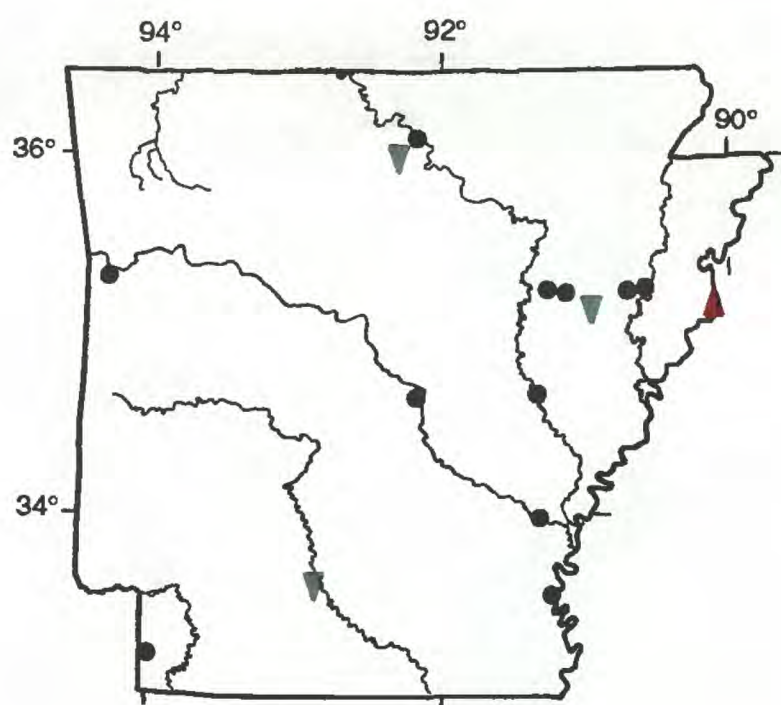
EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

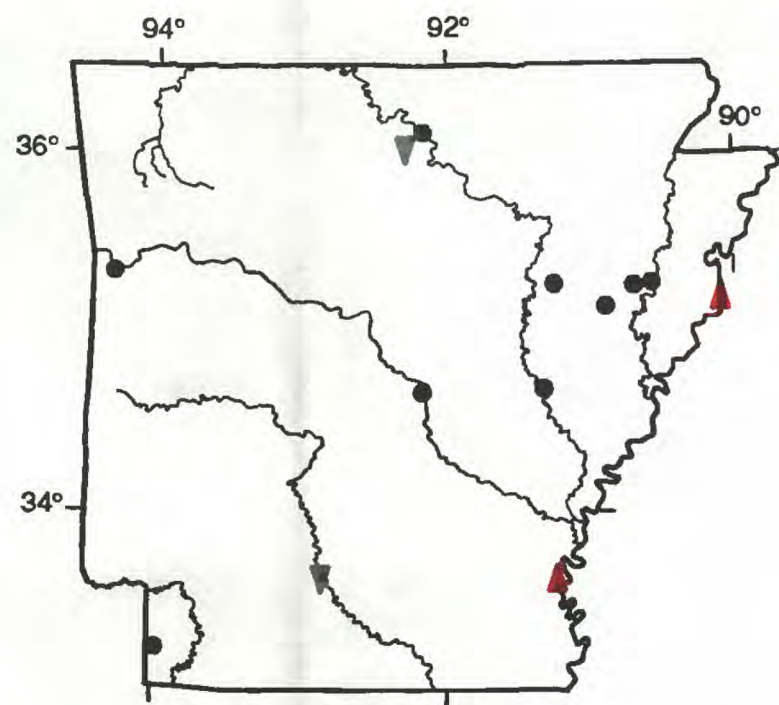
- ▲ Upward
- ▼ Downward
- No detectable trend

0 50 100 MILES
0 50 100 KILOMETERS

Figure 29.--Trends in dissolved sodium data.

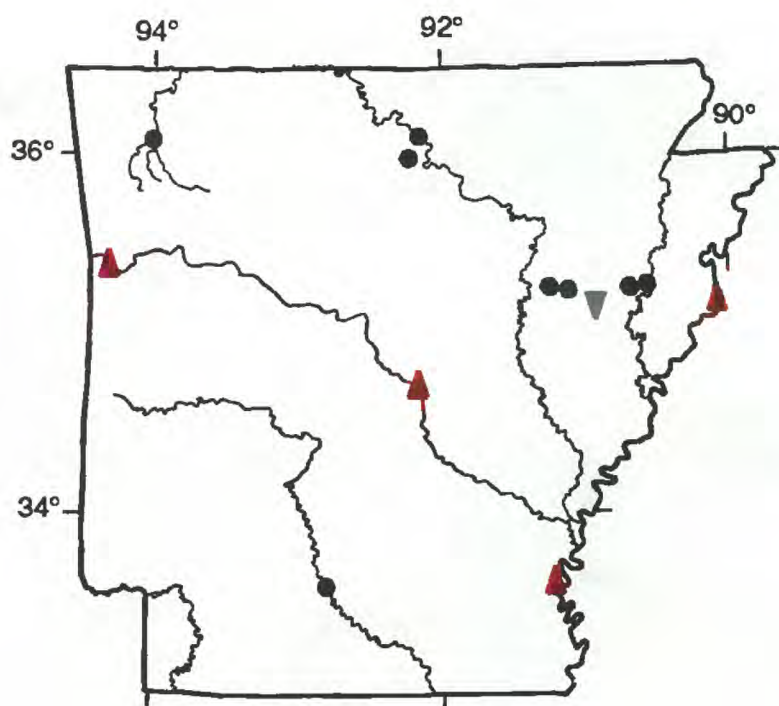


Unadjusted

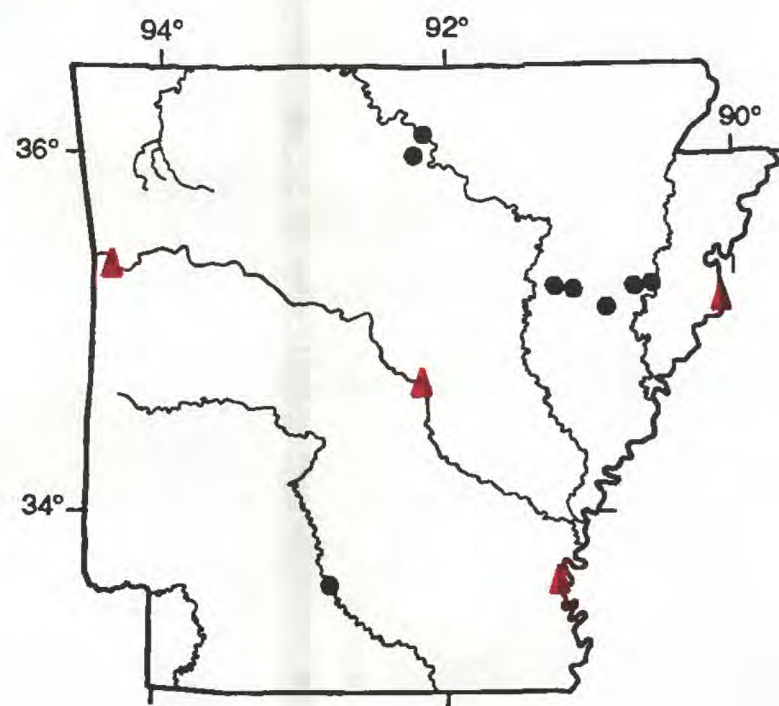


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

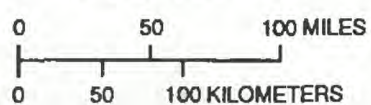
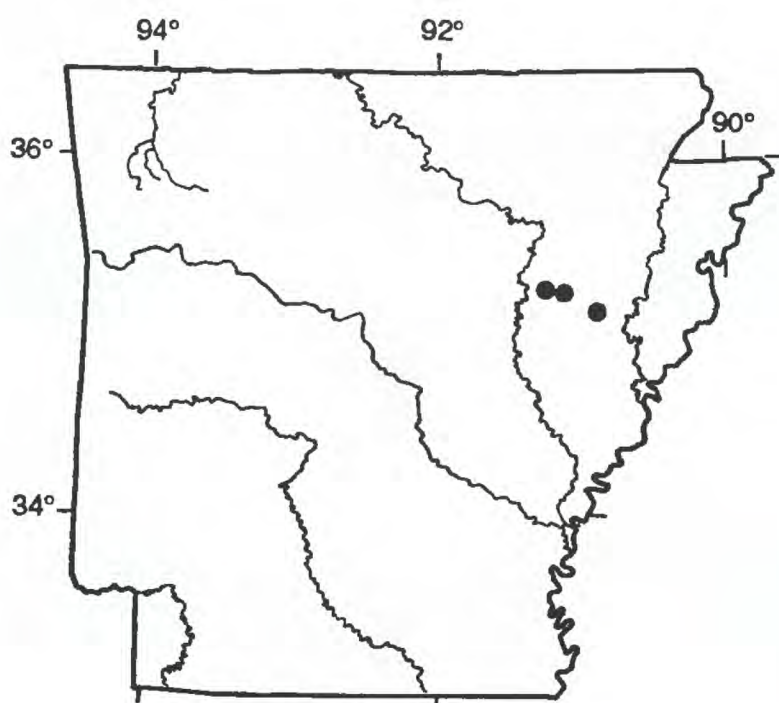
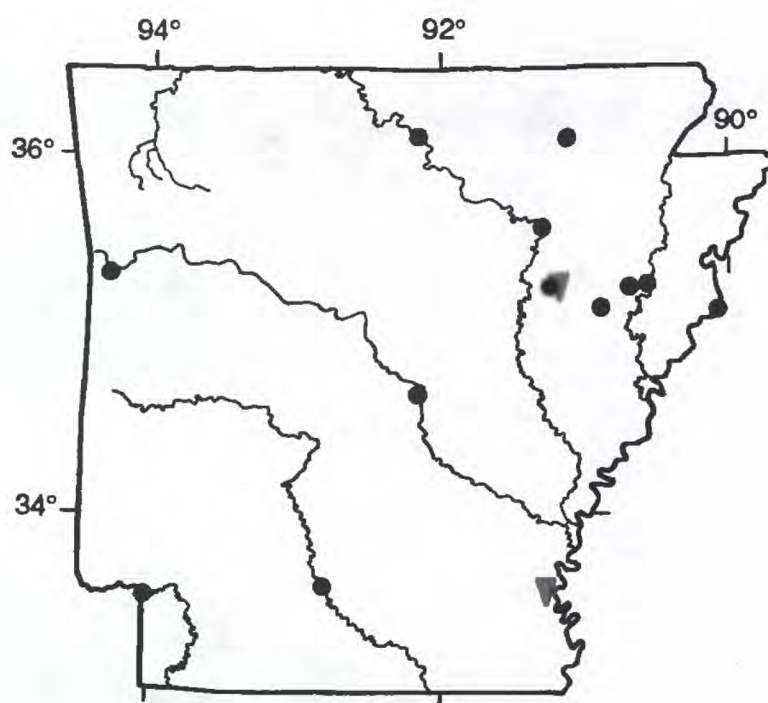


Figure 28.--Trends in dissolved magnesium data.



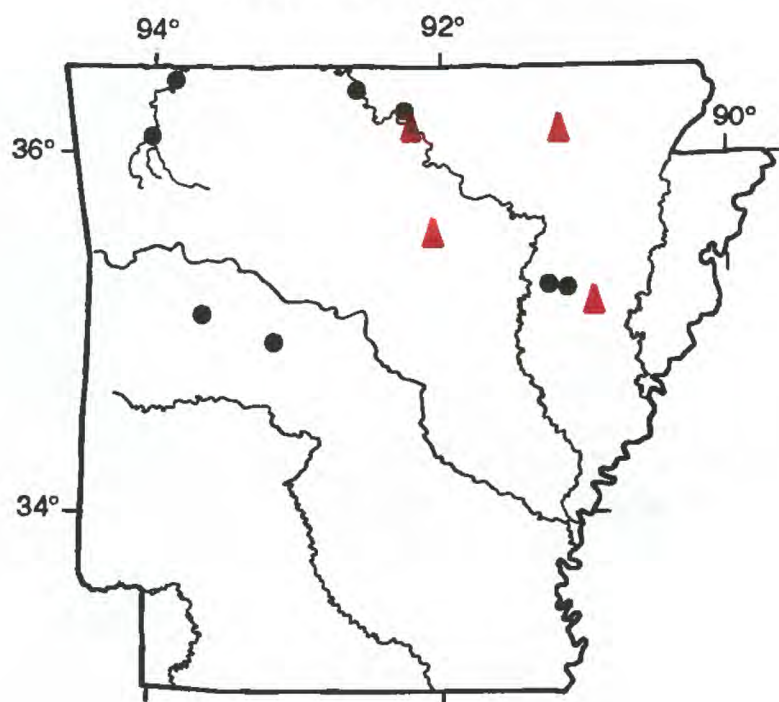
Unadjusted

Water years 1981 through 1989
DISSOLVED NITRITE



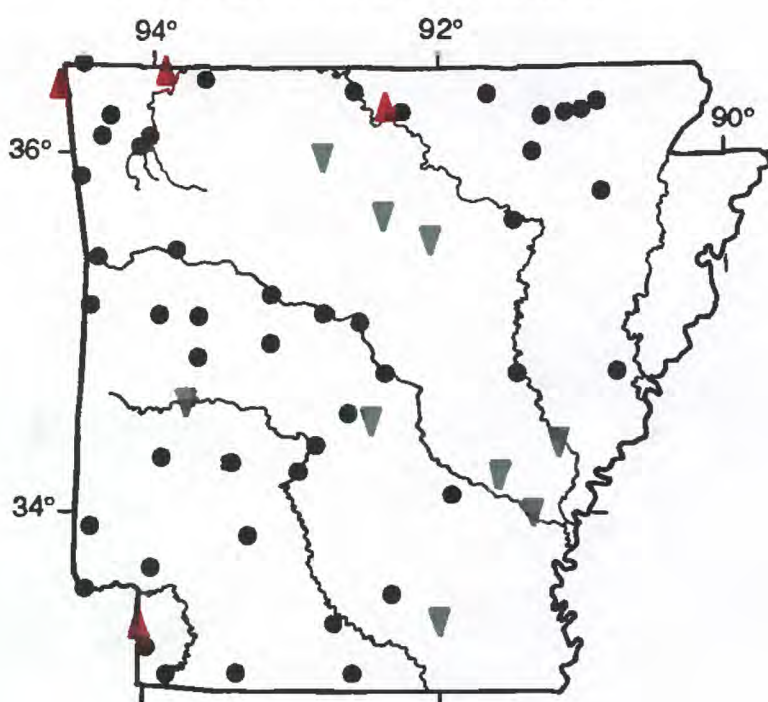
Unadjusted

Water years 1980 through 1989
DISSOLVED NITRITE PLUS NITRATE



Unadjusted

Water years 1975 through 1986
TOTAL NITRITE PLUS NITRATE



Unadjusted

Water years 1978 through 1989
TOTAL NITRITE PLUS NITRATE

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



Downward



No detectable trend

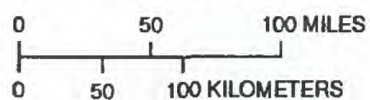
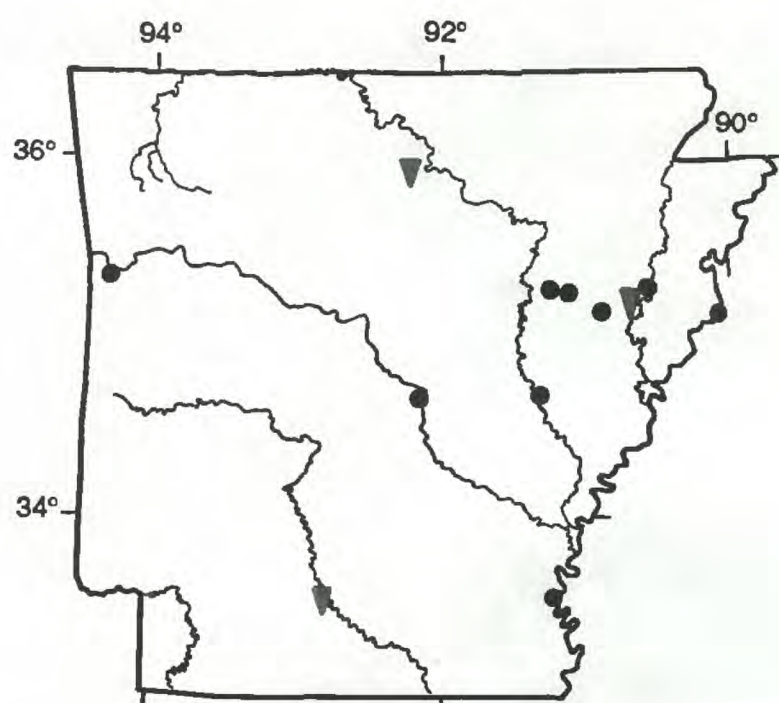
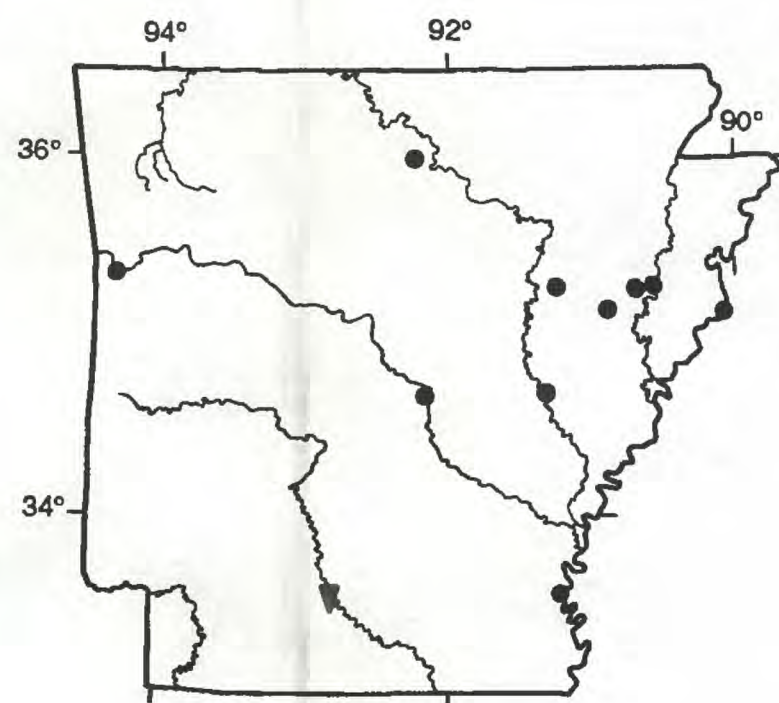


Figure 31.--Trends in dissolved nitrite, dissolved nitrite plus nitrate, and total nitrite plus nitrate data.

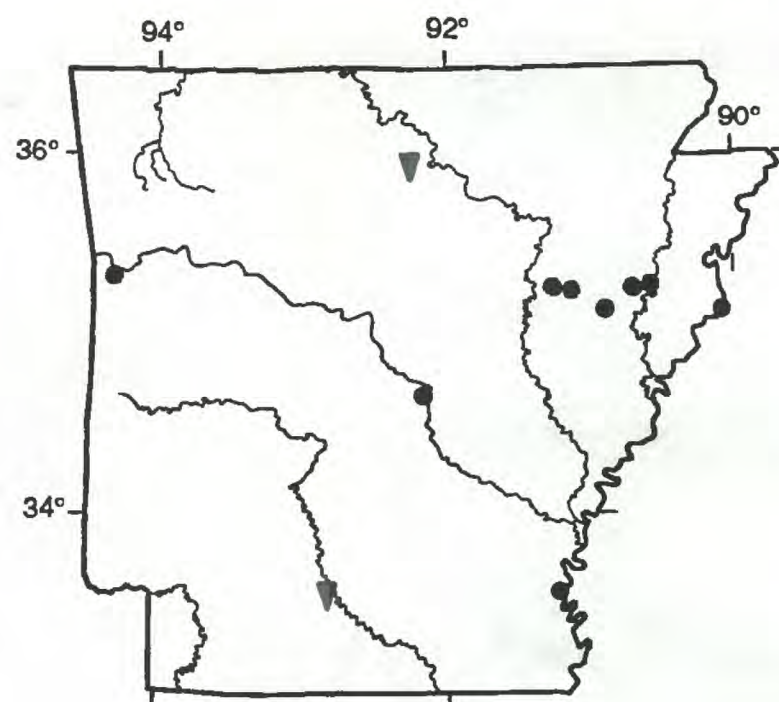


Unadjusted

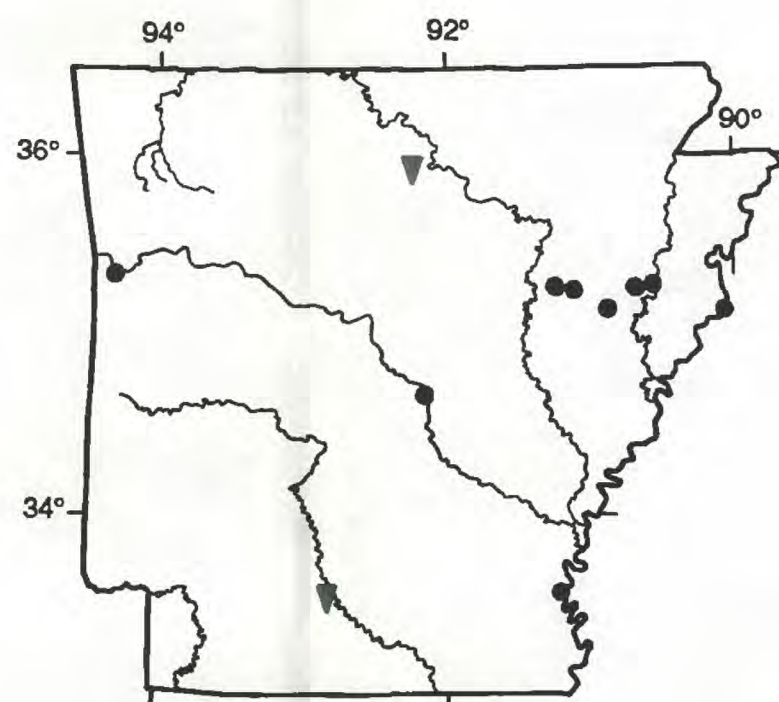


Flow adjusted

Water years 1975 through 1986



Unadjusted



Flow adjusted

Water years 1975 through 1989

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Downward



No detectable trend

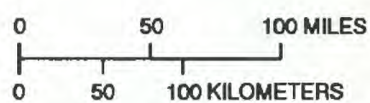
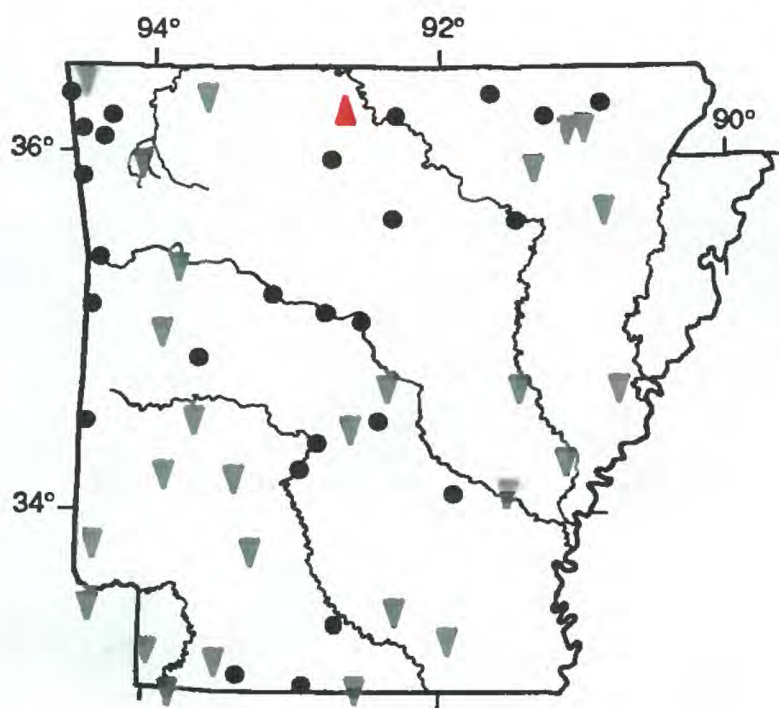
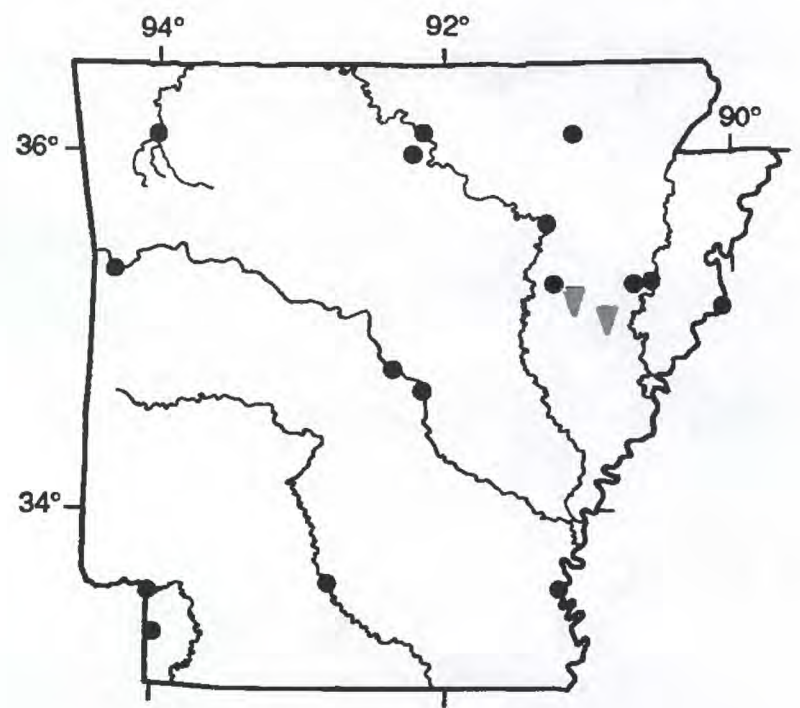


Figure 30.--Trends in dissolved potassium data.



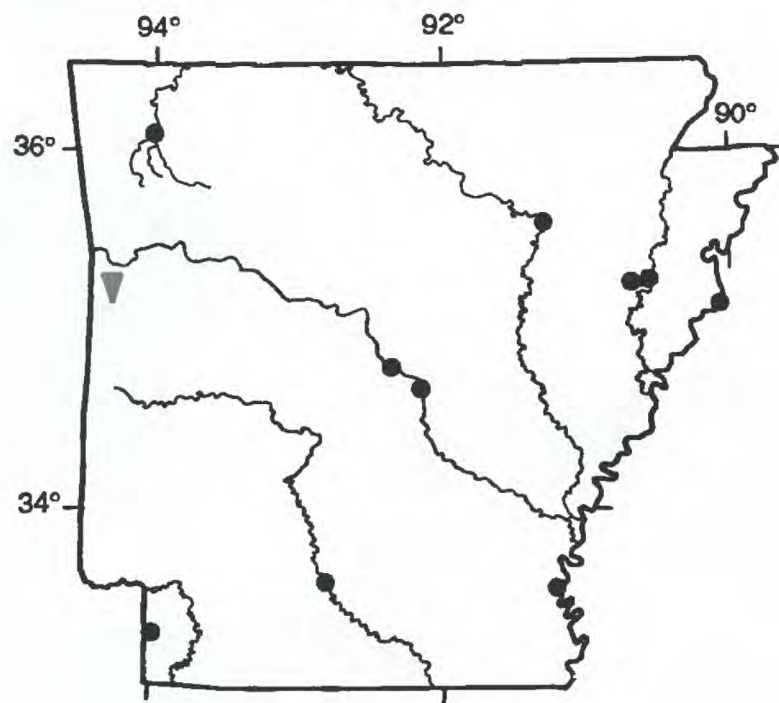
Unadjusted

Water years 1978 through 1989
TOTAL AMMONIA



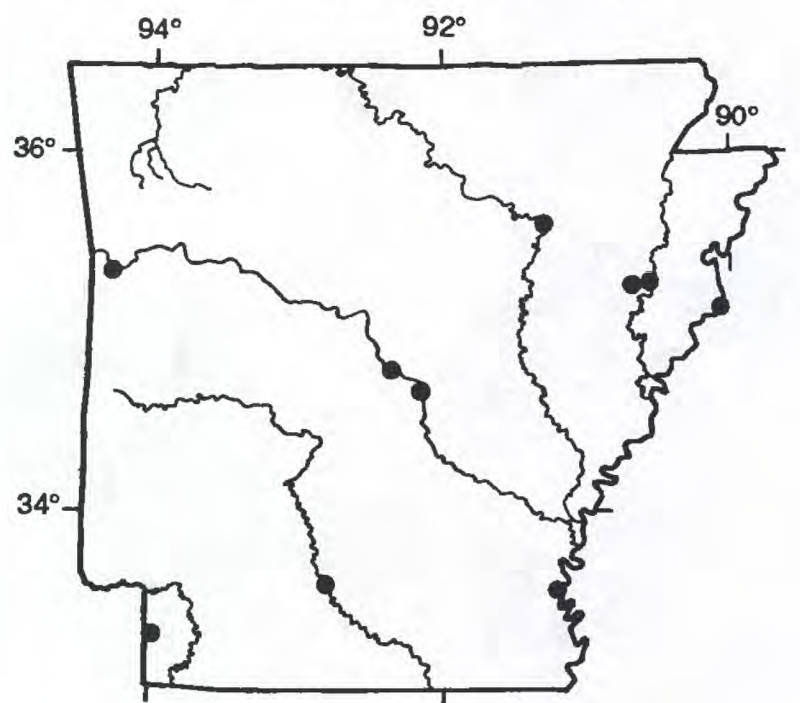
Unadjusted

Water years 1982 through 1989
TOTAL ORGANIC PLUS AMMONIA NITROGEN



Unadjusted

Water years 1978 through 1989
TOTAL ORGANIC NITROGEN



Flow adjusted

Water years 1978 through 1989
TOTAL ORGANIC NITROGEN

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

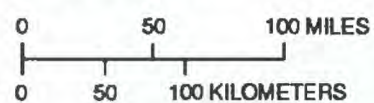
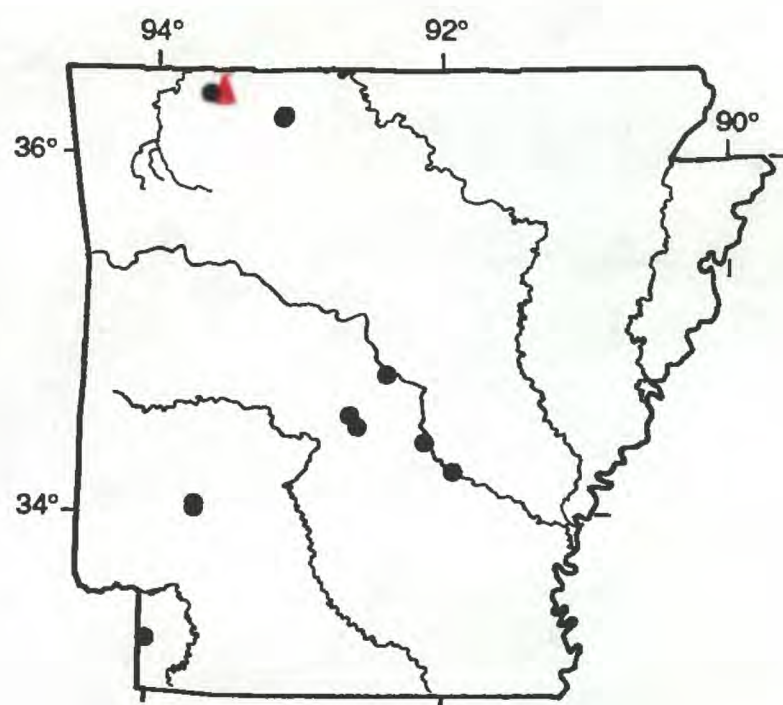


Figure 32.--Trends in total ammonia, total organic plus ammonia nitrogen, and total organic nitrogen data.



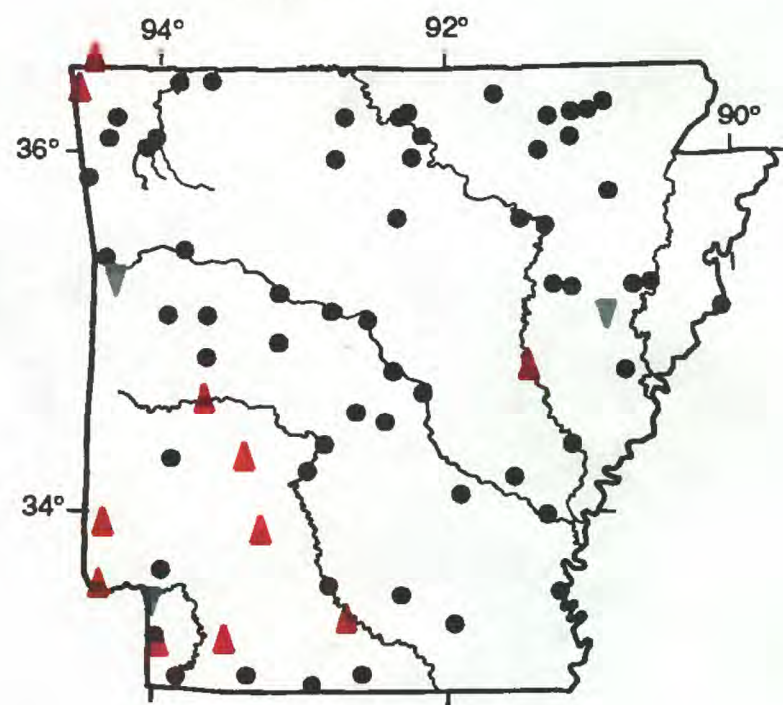
Unadjusted

Water years 1984 through 1989
TOTAL NITROGEN



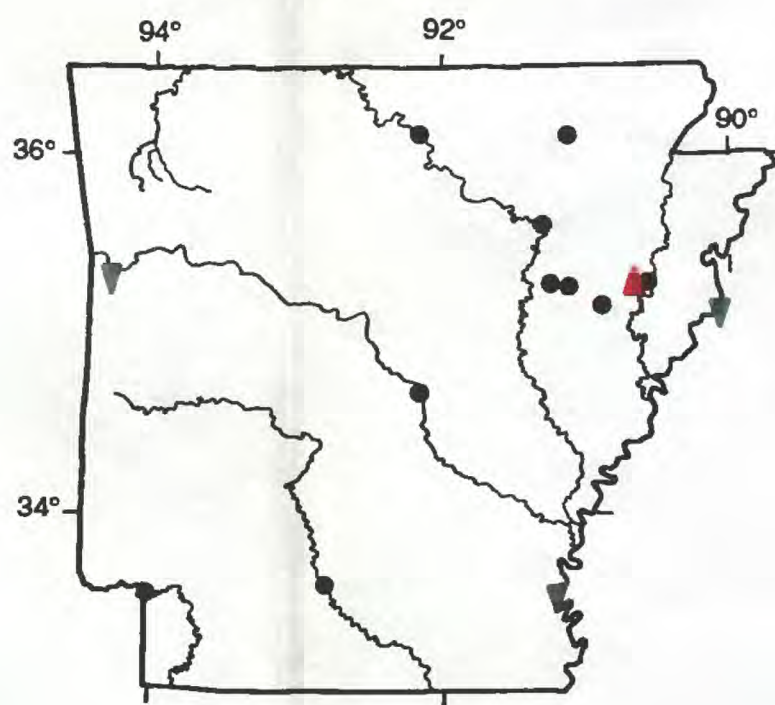
Flow adjusted

Water years 1984 through 1989
TOTAL NITROGEN



Unadjusted

Water years 1982 through 1989
TOTAL PHOSPHORUS



Unadjusted

Water years 1982 through 1989
DISSOLVED PHOSPHORUS

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

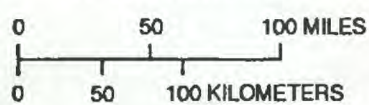
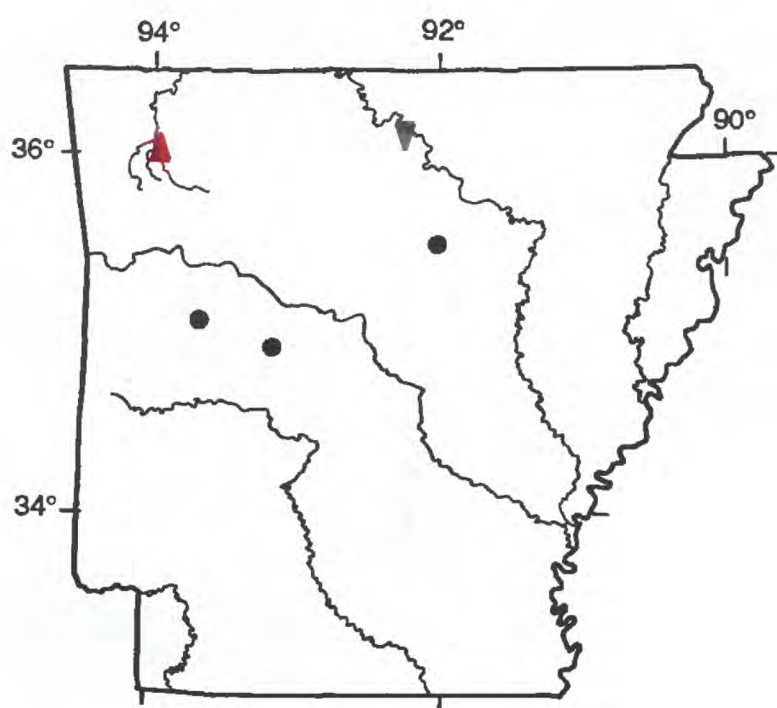
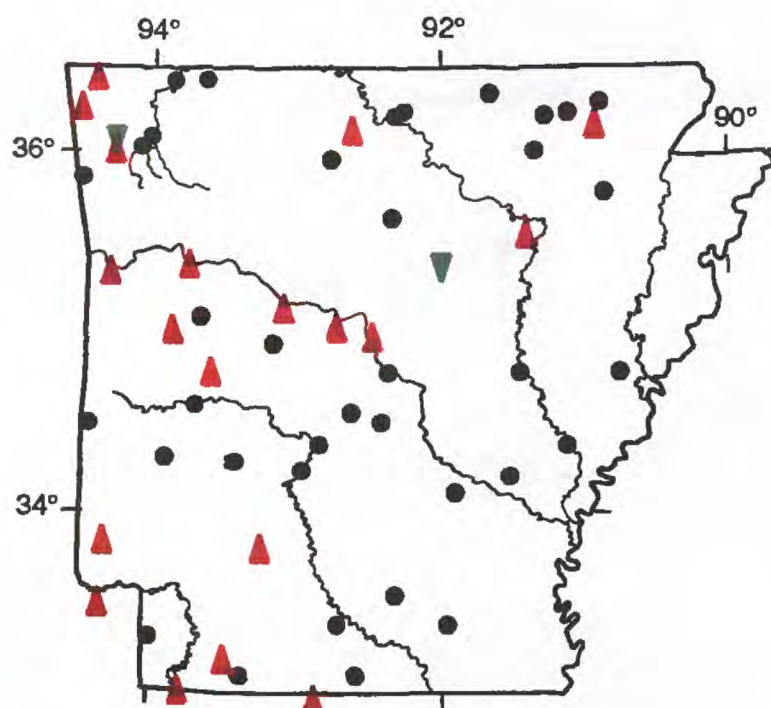


Figure 33.--Trends in total nitrogen, total phosphorus, and dissolved phosphorus data.



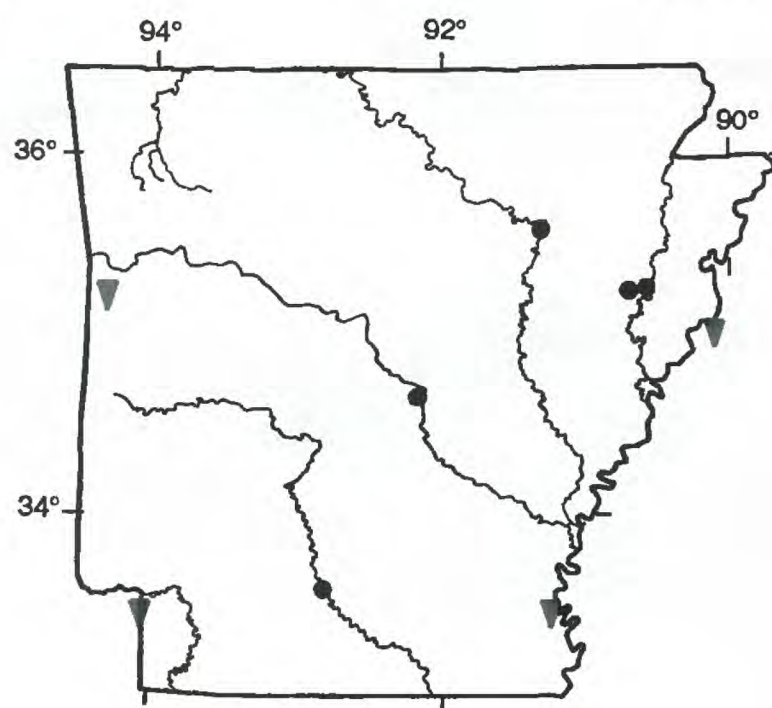
Unadjusted

Water years 1975 through 1986
TOTAL ORTHOPHOSPHATE



Unadjusted

Water years 1981 through 1989
TOTAL ORTHOPHOSPHATE



Unadjusted

Water years 1982 through 1989
DISSOLVED ORTHOPHOSPHATE

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

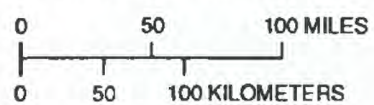


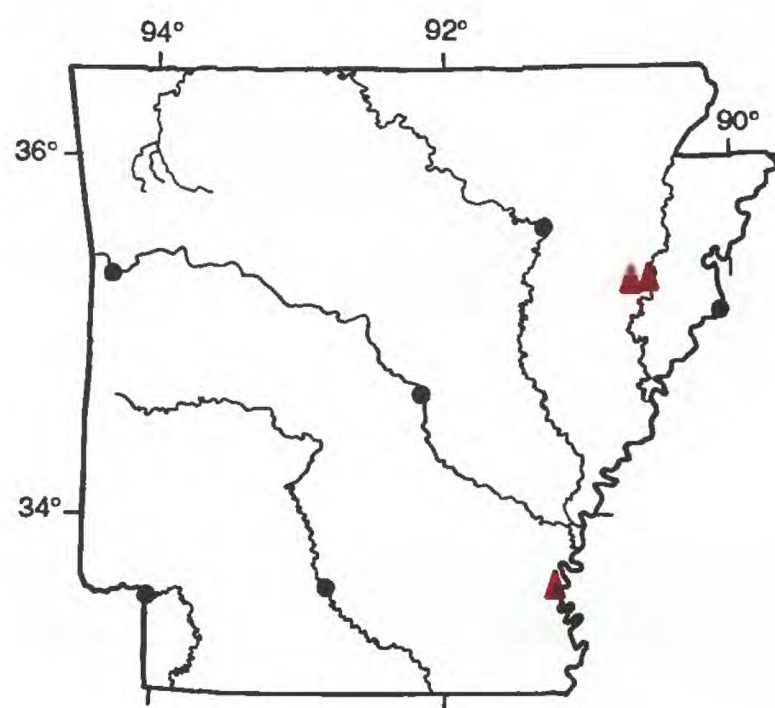
Figure 34.--Trends in total orthophosphate and dissolved orthophosphate data.

Trends in total ammonia data often are downward at the same stations where trends in total phosphorus and total orthophosphate data are upward. Because these nutrients often have the same source, the explanation for these trend differences is not known. The differences in trend analysis periods for total ammonia (1978-89 water years), total phosphorus (1982-89 water years), and total orthophosphate (1981-89 water years) may explain some, or all, of the differences.

Trace Elements

For most trace elements, adequate data for trend analysis were available at few (generally fewer than 10) stations. Reasons for lack of data included absence of sampling for a given element at most stations, elimination of data from the trend analysis data sets because of changes in field or laboratory procedures, and low frequency of values exceeding the reporting limit. Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter 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 (see Shiller and Boyle, 1987; Windom and others, 1990) and that higher concentrations could reflect contamination introduced during sampling, processing, or analysis. Therefore data for some dissolved trace elements were not analyzed for trends. Trend analyses were conducted for dissolved aluminum, dissolved barium, dissolved iron, dissolved manganese, dissolved nickel, and dissolved strontium data (figs. 35-37). However, the trend analysis results reported for these dissolved trace elements are somewhat uncertain because of uncertainties related to potential contamination.

Because of the low number of stations used for trend testing, any interpretations or observations related to geography, land use, or other influences have to be considered skeptically. The following observations are mentioned to summarize the available results and not to imply that a consistent pattern is evident. Trends, all upward, in dissolved aluminum (fig. 35) were detected at three stations. Two stations were in an agricultural area of the northern Mississippi Alluvial Plain and one downstream on the Mississippi River. Barium concentrations decreased at both stations on the Mississippi River (fig. 35). A few, isolated trends were detected for iron (fig. 36), manganese (fig. 36), and nickel (fig. 37) data.



Unadjusted

Water years 1983 through 1989

ALUMINUM



Unadjusted

Water years 1980 through 1989

BARIUM

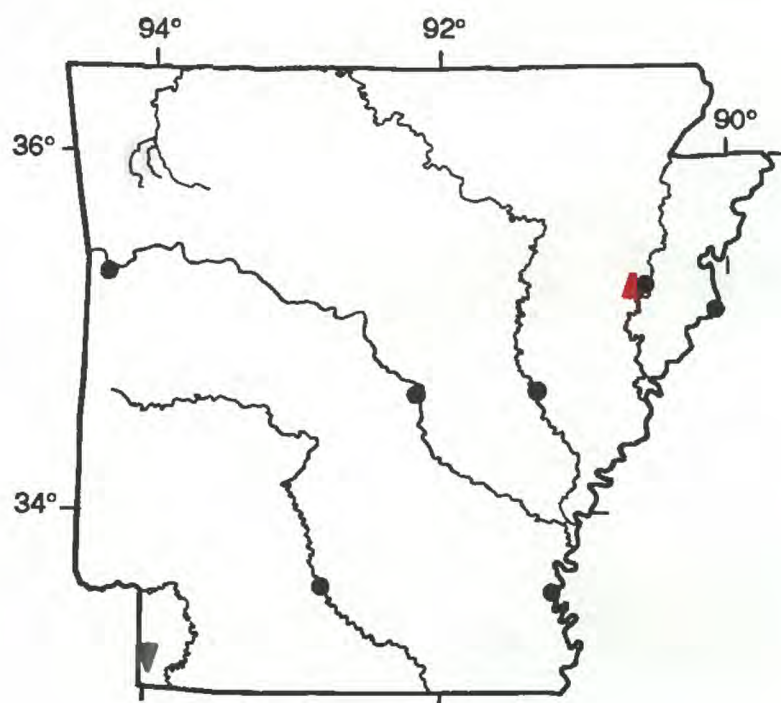
EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)

- ▲ Upward
- ▼ Downward
- No detectable trend

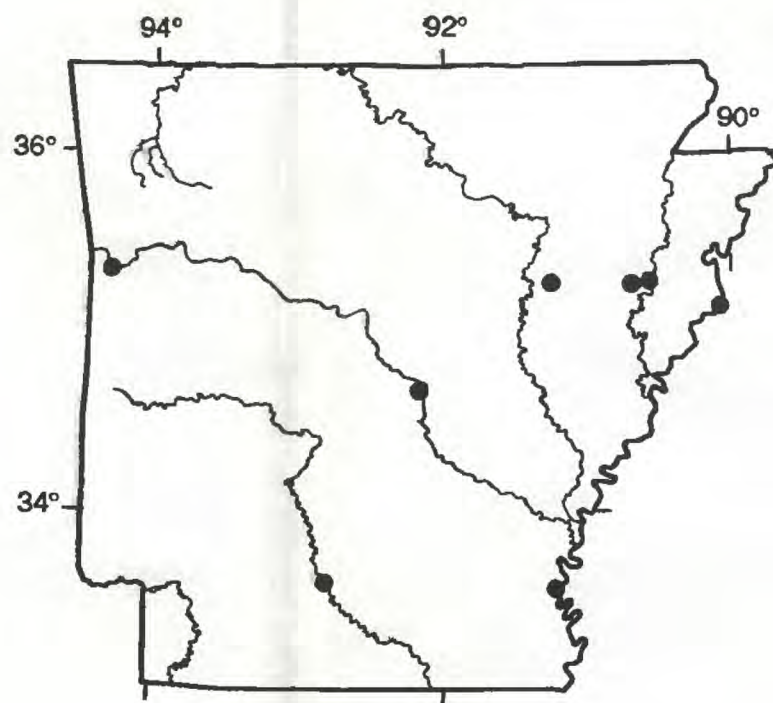
0 50 100 MILES
0 50 100 KILOMETERS

Figure 35.--Trends in dissolved aluminum and dissolved barium data.



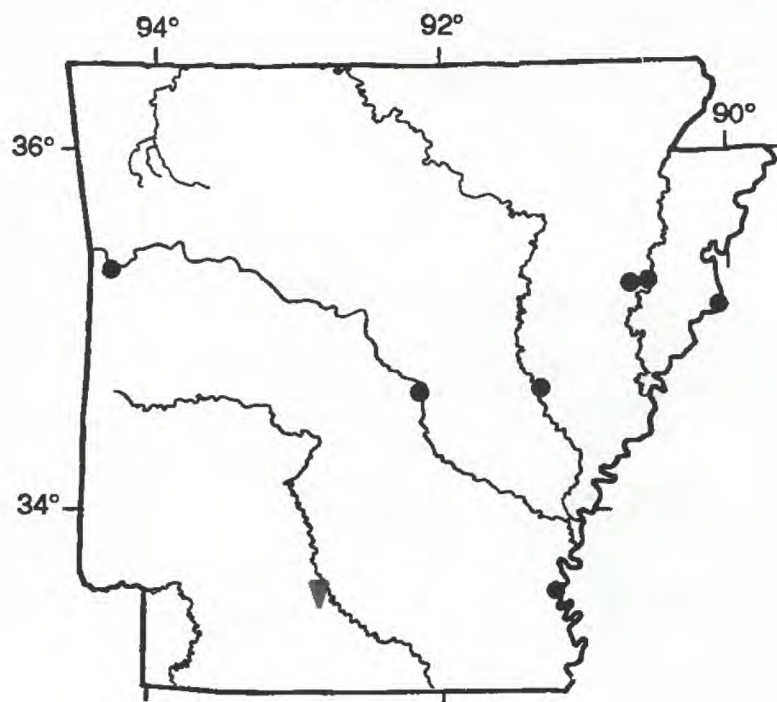
Unadjusted

Water years 1975 through 1986
IRON



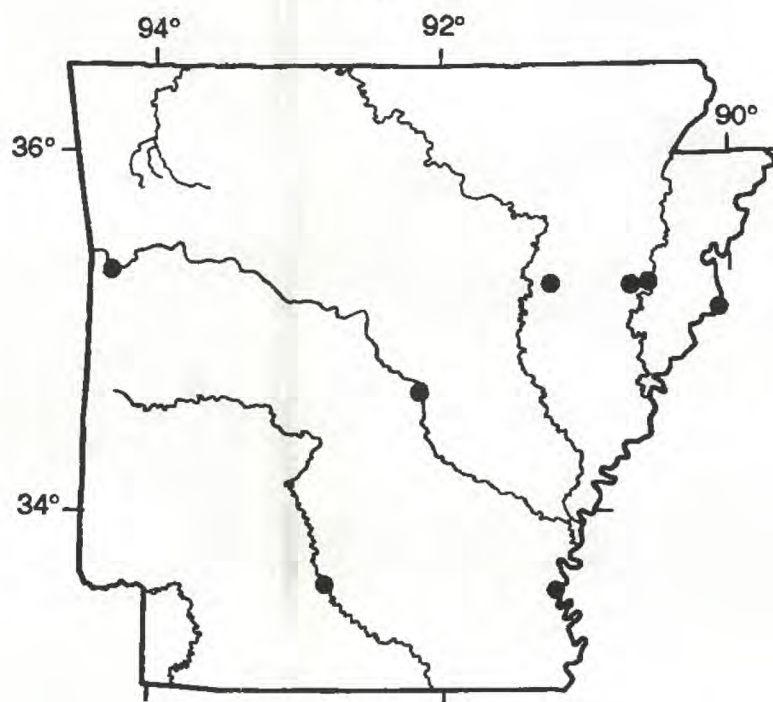
Unadjusted

Water years 1975 through 1989
IRON



Unadjusted

Water years 1975 through 1986
MANGANESE



Unadjusted

Water years 1975 through 1989
MANGANESE

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Upward



Downward



No detectable trend

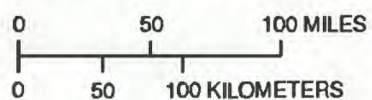


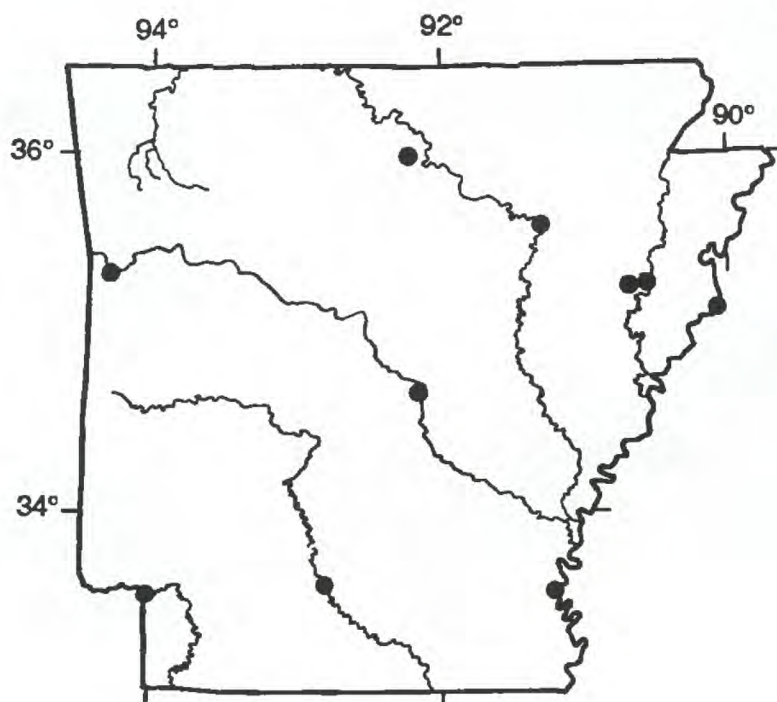
Figure 36.--Trends in dissolved iron and dissolved manganese data.



Unadjusted

Water years 1980 through 1989

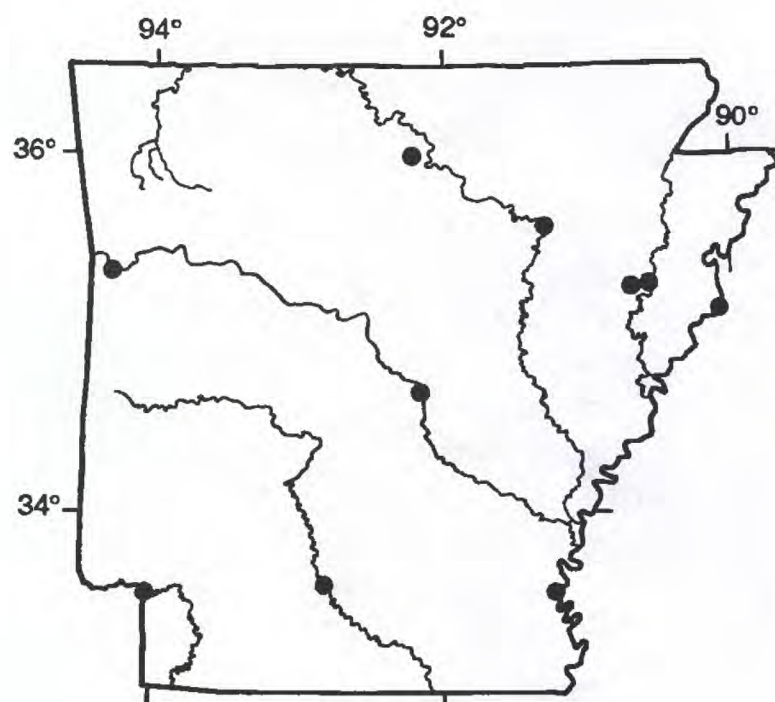
NICKEL



Unadjusted

Water years 1983 through 1989

STRONTIUM



Flow adjusted

Water years 1983 through 1989

STRONTIUM

EXPLANATION

SIGNIFICANT TRENDS
(Level of significance = 0.10)



Downward



No detectable trend

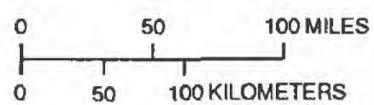


Figure 37.--Trends in dissolved nickel and dissolved strontium data.

SUMMARY

Trends in water-quality data were examined for 83 surface-water stations on Arkansas streams for the period October 1, 1974, through September 30, 1986 (water years 1975-86). Trends were examined for 120 stations for several other periods between October 1, 1974, and September 30, 1989 (water years 1975-89). The 1975-86 water-year period was selected to correspond with the trend-analysis period used for Texas (Schertz, 1990), New Jersey (Hay and Campbell, 1990), and Connecticut water-quality data.

The Seasonal Kendall test was used in the trend analysis. The test is a nonparametric statistical test and therefore is well-suited to water-quality data, which often are not normally distributed. Procedures in the test were used to reduce variability caused by seasonality and fluctuations in streamflow.

Undetected field- or laboratory-induced effects on data are potential causes of trends in water-quality data. Some data were considered likely to be affected by field or laboratory procedure changes and were eliminated from the data sets used for trend analysis. However, the possibility of undetected methodology effects should be considered as a potential cause of detected trends.

Relatively few statistically significant trends were detected for most water-quality properties. However, geographic patterns in trends were seen for some properties. Downward trends in flow-adjusted turbidity data were detected at several stations on the Arkansas River, in extreme southwestern Arkansas, and in the Mississippi Alluvial Plain; downward trends in total suspended solids occurred throughout most of Arkansas. Downward trends in dissolved oxygen data were detected at a relatively large percentage of stations in the Springfield-Salem Plateaus, and were most common in extreme northwestern Arkansas. Biochemical oxygen demand concentrations decreased nearly statewide during water years 1975-89. Fecal coliform bacteria concentrations decreased at stations scattered throughout most of Arkansas and at many stations on the Arkansas River. Increases in total hardness were detected at many stations on the Arkansas River and in the northwestern corner of the State during water years 1975-89. Dissolved sulfate concentrations increased during water years 1978-86 in all but the southern quarter of Arkansas. Dissolved chloride concentrations decreased nearly statewide during water years 1975-89. Downward trends in total ammonia were detected nearly statewide, and upward trends in total phosphorus and total orthophosphate were detected at several stations in southwestern and extreme northwestern Arkansas. Total orthophosphate concentrations also increased at stations on the Arkansas River upstream of Little Rock.

Consistent trends in some water-quality properties can be linked conceptually with factors or groups of factors that might be expected to affect water quality. For example, decreases in dissolved oxygen and increases in some nutrients have occurred in northwestern Arkansas where production of chickens, turkeys, cattle, and hogs is greatest, and where some of the larger human population centers are located. The largest decrease in residue on evaporation and dissolved chloride occurred in oil producing areas of southern Arkansas, indicating that oil brine disposal measures may have changed or, because of decreases in oil production, less brine is being produced. Changes may have occurred in the quality of effluents from wastewater treatment plants; such improvements would be one likely cause of decreasing fecal coliform bacteria concentrations at stations scattered throughout Arkansas. However, identification of statistically significant relations between water-quality trends and factors affecting water quality was outside the scope of this report. Also, listing of a change in some factor as a potential cause of a trend in water-quality data is not meant to imply that the change has actually occurred, only that the potential cause is plausible and that it may be worthy of future investigation.

REFERENCES CITED

- American Public Health Association and others, 1989, Standard methods for the examination of water and waste water [17th ed.]: American Public Health Association, Washington, D.C., various pagination.
- Arkansas Agricultural Statistics Service, 1986-90, Arkansas agricultural statistics: Agricultural Experiment Station, University of Arkansas.
- Arkansas Crop and Livestock Reporting Service, 1976-83, Agricultural statistics for Arkansas: Agricultural Experiment Station, University of Arkansas.
- 1984-85, Arkansas agricultural statistics: Agricultural Experiment Station, University of Arkansas.
- Arkansas Department of Economic Development, 1980, Directory of Arkansas manufacturers 1980 edition: Arkansas Industrial Development Foundation, 280 p.
- Arkansas Department of Pollution Control and Ecology, 1974, 1975, 1976, 1977, 1980, 1982, 1984, 1986, 1988, 1990, Arkansas water quality inventory report: Arkansas Department of Pollution Control and Ecology.
- Arkansas Industrial Development Commission, 1990, Directory of Arkansas manufacturers 1990 edition: Arkansas Industrial Development Foundation, 328 p.
- Arkansas Oil and Gas Commission, 1990, Annual oil and gas report 1989: Arkansas Oil and Gas Commission, El Dorado, Arkansas, 81 p.
- Baker, N.T., Cole, E.F., Holland, T.W., and Mack, L.E., 1990, Arkansas water supply in National Water Summary 1987--Water supply and use: U.S. Geological Survey Water-Supply Paper 2350, p. 165-171.
- Cleveland, W.S., 1979, Robust locally weighted regression and smoothing scatterplots: Journal of the American Statistical Association, v. 74, p. 829-836.
- Cohen, A.C., Jr., 1976, Progressively censored sampling in the three parameter log-normal distribution: Technometrics, v. 18, no. 1, p. 99-103.
- Cohn, T.A., 1988, Adjusted maximum likelihood estimation of the moments of lognormal populations from type I censored samples: U.S. Geological Survey Open-File Report 88-350, 34 p.
- Crawford, C.G., Slack, J.R., and Hirsch, R.M., 1983, Tests for trends in water-quality data using the Statistical Analysis System: U.S. Geological Survey Open-File Report 83-550, 106 p.
- Fenneman, N.M., 1938, Physiography of eastern United States: New York, McGraw-Hill, 534 p.
- Freiwald, D.A., 1985, Average annual precipitation and runoff for Arkansas 1951-80: U.S. Geological Survey Water-Resources Investigations Report 84-4363, scale 1:1,000,000

- 1987, Streamflow gain and loss of selected streams in northern Arkansas: U.S. Geological Survey Water-Resources Investigations Report 86-4185, 4 sheets.
- Giese, John, Keith, Bill, Maner, Martin, McDaniel, Roland, and Singleton, Bob, 1987, Physical, chemical, and biological characteristics of least-disturbed reference streams in Arkansas ecoregions, vol. II: data analysis: Arkansas Department of Pollution Control and Ecology, 148 p.
- Hay, L.E., and Campbell, J.P., 1990, Water-quality trends in New Jersey streams: U.S. Geological Survey Water-Resources Investigations Report 90-4046, 297 p.
- Hines, F.D., and Vissage, J.S., 1988, Forest statistics for Arkansas counties, 1988: U.S. Forest Service, Southern Forest Experiment Station Resource Bulletin SO-141, 68 p.
- Hirsch, R.M., Slack, J.R., and Smith, R.A., 1982, Techniques of trend analysis for monthly water-quality data: *Water Resources Research*, v. 18, p. 107-121.
- Hunrichs, R.A., 1983, Identification and classification of perennial streams of Arkansas: U.S. Geological Survey Water-Resources Investigations Report 83-4063, 1 sheet.
- Kendall, M.G., 1975, Rank correlation methods (4th ed.): London, Charles Griffin, 202 p.
- Lanfear, K.J., and Alexander, R.B., 1990, Methodology to derive water-quality trends for use by the National Water Summary Program of the U.S. Geological Survey: U.S. Geological Survey Open-File Report 90-359, 10 p.
- Leister, Randall, Grant, Jim, and Beltz, Roy, [1989], Arkansas' forest, status and change 1988: Arkansas Forestry Commission, 10 p.
- Mann, H.B., 1945, Non-parametric test against trend: *Econometrica*, v. 13, p. 245-259.
- Neely, B.L., Jr., Hehr, J.G., and Young, J.R., 1991, Arkansas floods and droughts in National water summary 1988-89--Hydrologic events and floods and droughts: U.S. Geological Survey Water-Supply Paper 2375, p. 189-196.
- Petersen, J.C., 1988, Statistical summary of selected water-quality data (water years 1975 through 1985) for Arkansas rivers and streams: U.S. Geological Survey Water-Resources Investigations Report 88-4112, 189 p.
- 1990, Trends and comparison of water-quality and bottom material of northeastern Arkansas streams, 1974-85, and effects of planned diversions: U.S. Geological Survey Water-Resources Investigations Report 90-4017, 215 p.
- Schertz, T.L., 1990, Trends in water-quality data in Texas: U.S. Geological Survey Water-Resources Investigations Report 89-4178, 177 p.
- Schertz, T.L., Alexander, R.B., and Ohe, D.J., 1991, The computer program **ESTIMATE TREND** (ESTREND), a system for the detection of trends in water-quality data: U.S. Geological Survey Water-Resources Investigations Report 91-4040, 63 p.

- Sen, P.K., 1968, Estimates of the regression coefficient based on Kendall's Tau: *Journal of American Statistical Association*, v. 63, p. 1,379-1,389.
- Shiller, A.M., and Boyle, E.A., 1987, Variability of dissolved trace metals in the Mississippi River: *Geochemica et Cosmochimica Acta*, v. 51, p. 3273-3277.
- Smith, R.A., Alexander, R.B., and Wolman, M.G., 1987a, Water-quality trends in the Nation's rivers: *Science*, v. 235, p. 1607-1616.
- 1987b, Analysis and interpretation of water-quality trends in major U.S. rivers, 1974-81: U.S. Geological Survey Water-Supply Paper 2307, 25 p.
- Smith, R.A., Hirsch, R.M., and Slack, J.R., 1982, A study of trends in total phosphorus measurements at NASQAN stations: U.S. Geological Survey Water-Supply Paper 2190, 34 p.
- Steele, T.D., Gilroy, E.J., and Hawkinson, R.O., 1974, Techniques for the assessment of areal and temporal variations in streamflow quality: U.S. Geological Survey Open-File Report 74-217, 89 p.
- Windom, H.L., Byrd, J.T., Smith, R.G., Jr., and Feng, Huan, 1991, Inadequacy of NASQAN data for assessing metal trends in the nation's rivers: *Environmental Science and Technology*, v. 25, p. 1137-1142.

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years

[The "best" trend result is the result calculated from flow-adjusted values, unless flow adjustment could not be performed for that property or constituent. N, number of observations selected for trend analysis; p, significance level; Trend codes, F is flow adjusted, U is unadjusted; μ S/cm, microsiemens per centimeter at 25 degrees Celsius; dis., dissolved; mg/L, milligrams per liter; --, insufficient data to calculate value; coli., coliforms; c/100mL, colonies per 100 milliliters; tot., total; e, parameter is estimated for censored constituent using a log-probability regression procedure; ***, data are for 1978-86 water years; ROE, residue on evaporation at 180 degrees Celsius; NO₂, nitrite; NO₃, nitrate; μ g/L, micrograms per liter; susp., suspended; Sed., sediment; μ t., 62 μ m, percent finer than 62 micrometers in diameter; BOD, biochemical oxygen demand; OrthoP, orthophosphate; TSS, total suspended residue at 105 degrees Celsius (total suspended solids). The nitrogen and phosphorus species are reported as nitrogen and phosphorus, respectively. Trend slopes computed from sets of data containing censored values (which can be identified because they have estimated means) are less reliable than slopes computed from data containing no censored values]

Station number: 07032000		Station name: Mississippi River at Memphis, Tenn.		Drainage area: 932,800 square miles						
Latitude: 350737		Longitude: 900425								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
Conductance, μ S/cm	104	393.35	351	389	440	47	2.71	0.69	0.180	F
pH, standard units	104	7.84	7.7	7.9	8.0	64	0.03	0.37	0.007	F
Oxygen dis., mg/L	71	8.74	7.1	8.1	10.2	0	--	--	--	--
Fecal coli., c/100 mL	17	938.06	200	400	550	10	--	--	--	--
Hardness tot., mg/L	104	152.08	140	150	170	47	1.32	0.87	0.168	F
Calcium dis., mg/L	104	40.27	37	40	43	47	0.25	0.62	0.274	F
Magnesium dis., mg/L	103	12.45	11	12	14	46	0.25	1.99	0.020	F
Sodium dis., mg/L	104	18.28	14	17	22	47	0.01	0.06	1.000	F
Potassium dis., mg/L	104	3.08	2.7	3.1	3.5	47	-0.01	-0.21	0.572	F
Alkalinity tot., mg/L	77	102.78	92	105	111	31	0.83	0.81	0.302	F
Chloride dis., mg/L	104	17.17	14	16	20	47	0.12	0.68	0.438	F
ROE, mg/L	104	236.08	213	233	260	47	2.48	1.05	0.034	F
NO2 + NO3 tot., mg/L	80	e 1.33	0.95	1.3	1.6	80	--	--	--	--
Iron dis., μ g/L	46	e 40.13	12	20	50	46	0.00	0.00	0.619	U
Manganese dis., μ g/L	46	e 11.48	e 10	4	14	46	0.00	0.00	0.800	U
Sediment susp., mg/L	97	169.40	92	140	203	35	2.23	1.32	0.249	F
Sed. susp., μ t. 62 μ m	96	87.91	84	92	96	35	-0.46	-0.53	0.249	F

Station number: 07040100		Station name: St. Francis River at St. Francis, Ark.		Drainage area: 1,772 square miles						
Latitude: 362721		Longitude: 900813								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm	132	193.09	136	188	240	69	-1.31	-0.68	0.574	U
pH, standard units	157	7.72	7.4	7.8	8.0	71	0.02	0.22	0.132	U
Oxygen dis., mg/L	157	9.15	7.4	8.9	10.8	71	0.01	0.11	0.604	U
BOD, 5-day, mg/L	87	3.01	2.2	3.0	3.6	0	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07040100		Station name: St. Francis River at St. Francis, Ark.--Continued				Drainage area: 1,772 square miles				
Latitude: 362721		Longitude: 900813								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Fecal coli., c/100 mL	93	350.96	20	50	130	0	--	--	--	--
Hardness tot., mg/L	51	93.69	74	90	120	0	--	--	--	--
Calcium dis., mg/L	11	20.27	13	18	25	11	--	--	--	--
Magnesium dis., mg/L	11	10.26	7.4	9.4	13	11	--	--	--	--
Alkalinity tot., mg/L	23	80.91	53	71	100	0	--	--	--	--
Sulfate dis., mg/L ***	68	e 10.35	7.0	10	13	68	--	--	--	--
Chloride dis., mg/L	96	7.79	4.6	6.0	7.5	0	--	--	--	--
ROE, mg/L	59	140.05	111	128	162	0	--	--	--	--
TSS, mg/L	87	126.34	48	80	122	0	--	--	--	--
NO2 + NO3 tot., mg/L	47	e 0.15	0.02	0.09	0.25	47	--	--	--	--
OrthoP tot., mg/L	31	e 0.03	0.010	0.010	0.050	31	--	--	--	--
Sediment susp., mg/L	93	215.80	93	158	224	0	--	--	--	--

Station number: 07040450		Station name: St. Francis River at Lake City, Ark.				Drainage area: 2,374 square miles				
Latitude: 354916		Longitude: 902556								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	169	216.75	154	210	279	70	-2.74	-1.27	0.021	F
pH, standard units	180	7.68	7.5	7.7	7.9	71	-0.01	-0.11	0.220	F
Oxygen dis., mg/L	180	8.03	6.2	7.6	9.9	71	-0.05	-0.66	0.530	F
BOD, 5-day, mg/L	104	2.68	2.1	2.6	3.2	0	--	--	--	--
Fecal coli., c/100 mL	96	192.14	30	76	210	0	--	--	--	--
Hardness tot., mg/L	50	96.90	72	93	130	0	--	--	--	--
Alkalinity tot., mg/L	21	100.10	63	107	136	0	--	--	--	--
Sulfate dis., mg/L ***	71	e 10.79	7.0	10	13	71	--	--	--	--
Chloride dis., mg/L	99	7.36	5.5	6.5	8.0	0	--	--	--	--
ROE, mg/L	56	166.93	137	164	191	0	--	--	--	--
TSS, mg/L	97	77.48	38	67	101	0	--	--	--	--
NO2 + NO3 tot., mg/L	44	e 0.16	0.05	0.09	0.23	44	--	--	--	--
OrthoP tot., mg/L	33	e 0.07	0.020	0.050	0.090	33	--	--	--	--
Sediment susp., mg/L	106	116.80	60	106	145	0	--	--	--	--
Sed. susp., %f.t. 62µm	14	65.14	47	73	82	8	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07047800			Station name: St. Francis River at Parkin, Ark.			Longitude: 903333			Drainage area:			Indeterminate		
Latitude: 351623														
Water-quality property or constituent			Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code		
Descriptive statistics													Best trend results	
Conductance, $\mu\text{S}/\text{cm}$	107	304.91	213	307	405	64	-3.13	-1.03	0.308	F				
pH, standard units	107	7.77	7.6	7.8	8.0	64	0.02	0.32	0.020	F				
Oxygen dis., mg/L	92	7.92	6.2	7.5	9.3	58	-0.08	-0.99	0.088	F				
Fecal coli., c/100 mL	15	283.93	89	210	300	9	--	--	--	--				
Hardness tot., mg/L	106	139.50	93	140	180	64	-2.52	-1.81	0.139	F				
Calcium dis., mg/L	106	38.87	25	38	52	64	-0.76	-1.95	0.081	F				
Magnesium dis., mg/L	106	10.35	6.8	11	14	64	-0.16	-1.58	0.178	F				
Sodium dis., mg/L	106	8.39	6.5	8.8	10	64	0.09	1.08	0.490	F				
Potassium dis., mg/L	106	2.70	2.3	2.8	3.0	64	-0.04	-1.58	0.157	F				
Alkalinity tot., mg/L	79	133.48	91	135	178	44	-0.07	-0.05	1.000	F				
Chloride dis., mg/L	106	6.34	4.7	6.1	8.0	64	0.18	2.88	0.045	F				
ROE, mg/L	105	187.45	137	188	240	64	-2.44	-1.30	0.340	F				
NO ₂ + NO ₃ tot., mg/L	83	e 0.58	0.20	0.41	0.76	83	--	--	--	--				
Iron dis., $\mu\text{g}/\text{L}$	47	e 166.39	20	40	90	47	0.00	0.00	1.000	U				
Manganese dis., $\mu\text{g}/\text{L}$	46	e 51.29	2	11	38	46	0.00	0.00	0.869	U				
Sediment susp., mg/L	101	288.26	94	172	374	61	-0.60	-0.21	0.916	F				
Sed. susp., %f.t. 62 μm	100	89.95	88	96	98	61	-0.11	-0.12	0.463	F				

Station number: 07047900			Station name: St. Francis Bay at Riverfront, Ark.			Longitude: 904048			Drainage area:			Indeterminate		
Latitude: 351534														
Water-quality property or constituent			Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code		
Descriptive statistics													Best trend results	
Conductance, $\mu\text{S}/\text{cm}$	176	257.59	183	245	327	69	0.36	0.14	0.953	F				
pH, standard units	175	7.81	7.5	7.9	8.1	69	0.03	0.43	0.003	F				
Oxygen dis., mg/L	160	8.76	7.2	8.6	9.8	66	-0.02	-0.19	0.633	U				
Fecal coli., c/100 mL	19	400.16	25	67	380	11	--	--	--	--				
Hardness tot., mg/L	112	116.01	77	110	150	68	-0.70	-0.60	0.485	F				
Calcium dis., mg/L	113	31.34	20	28	42	68	-0.18	-0.58	0.485	F				
Magnesium dis., mg/L	112	9.22	6.3	8.9	12	68	0.01	0.13	0.927	F				
Sodium dis., mg/L	113	7.34	5.1	6.9	9.2	68	-0.07	-0.95	0.172	F				
Potassium dis., mg/L	113	2.24	1.9	2.2	2.5	68	-0.01	-0.42	0.606	F				
Alkalinity tot., mg/L	83	108.24	68	98	150	45	-0.02	-0.02	0.912	F				
Chloride dis., mg/L	113	6.56	5.0	6.1	7.7	68	0.00	0.02	0.976	F				
ROE, mg/L	113	160.27	111	151	204	68	0.20	0.13	0.785	F				

Station number: 07047900		Station name: St. Francis Bay at Riverfront, Ark.					Longitude: 904048		Drainage area:		Indeterminate	
Latitude: 351534												
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results					
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code		
Conductance, $\mu\text{S}/\text{cm}$	176	257.59	183	245	327	69	0.36	0.14	0.953	F		
pH, standard units	175	7.81	7.5	7.9	8.1	69	0.03	0.43	0.003	F		
Oxygen dis., mg/L	160	8.76	7.2	8.6	9.8	66	-0.02	-0.19	0.633	U		
Fecal coli., c/100 mL	19	400.16	25	67	380	11	--	--	--	--		
Hardness tot., mg/L	112	116.01	77	110	150	68	-0.70	-0.60	0.485	F		
Calcium dis., mg/L	113	31.34	20	28	42	68	-0.18	-0.58	0.485	F		
Magnesium dis., mg/L	112	9.22	6.3	8.9	12	68	0.01	0.13	0.927	F		
Sodium dis., mg/L	113	7.34	5.1	6.9	9.2	68	-0.07	-0.95	0.172	F		
Potassium dis., mg/L	113	2.24	1.9	2.2	2.5	68	-0.01	-0.42	0.606	F		
Alkalinity tot., mg/L	83	108.24	68	98	150	45	-0.02	-0.02	0.912	F		
Chloride dis., mg/L	113	6.56	5.0	6.1	7.7	68	0.00	0.02	0.976	F		
ROE, mg/L	113	160.27	111	151	204	68	0.20	0.13	0.785	F		

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07047900		Station name: St. Francis Bay at Riverfront, Ark.--Continued				Longitude: 904048		Drainage area:		Indeterminate	
Latitude: 351534											
		Descriptive statistics				Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
NO2 + NO3 tot., mg/L	82	e 0.23	0.05	0.17	0.33	82	--	--	--	--	
Iron dis., µg/L	46	e 97.57	20	50	110	46	4.00	4.10	0.092	U	
Manganese dis., µg/L	46	e 31.03	5	12	30	46	0.00	0.00	0.469	U	
Sediment susp., mg/L	170	183.42	79	141	233	67	-3.50	-1.91	0.115	F	
Sed. susp., %f.t. 62µm	110	78.75	68	82	93	65	-1.37	-1.73	0.009	F	
Station number: 07047942		Station name: L'Anguille River near Colt, Ark.				Longitude: 905242		Drainage area:		535 square miles	
Latitude: 350840											
		Descriptive statistics				Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
Conductance, µS/cm	150	234.70	110	182	327	68	-1.15	-0.49	0.432	F	
pH, standard units	148	7.45	7.2	7.4	7.7	68	0.03	0.35	0.009	F	
Oxygen dis., mg/L	142	6.44	4.5	5.8	8.0	68	-0.09	-1.38	0.079	F	
BOD, 5-day, mg/L	100	3.37	2.5	3.2	4.0	63	-0.05	-1.60	0.177	F	
Fecal coli., c/100 mL	20	1,856.90	160	320	1,200	12	--	--	--	--	
Hardness tot., mg/L	56	100.86	50	74	160	20	1.28	1.27	0.708	F	
Calcium dis., mg/L	56	24.91	12	19	37	20	0.19	0.76	0.618	F	
Magnesium dis., mg/L	56	9.36	4.5	6.3	15	20	0.04	0.47	0.901	F	
Sodium dis., mg/L	56	12.24	6.3	9.4	20	20	0.02	0.20	0.901	F	
Potassium dis., mg/L	56	3.79	2.7	3.4	4.7	20	0.00	-0.06	1.000	F	
Alkalinity tot., mg/L	36	93.86	44	65	141	17	-4.27	-4.54	0.248	F	
Chloride dis., mg/L	57	12.80	7.1	11	18	20	-0.09	-0.73	0.533	F	
ROE, mg/L	24	160.42	109	132	202	0	--	--	--	--	
NO2 + NO3 tot., mg/L	98	e 0.37	0.20	0.30	0.46	98	0.01	3.93	0.009	U	
OrthoP tot., mg/L	8	e 0.12	0.060	0.120	0.150	8	--	--	--	--	
Iron dis., µg/L	6	e 140.00	30	80	380	6	--	--	--	--	
Manganese dis., µg/L	6	e 335.00	180	180	1,100	6	--	--	--	--	
Sediment susp., mg/L	78	165.35	90	139	193	0	--	--	--	--	
Sed. susp., %f.t. 62µm	21	89.19	83	94	97	0	--	--	--	--	

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07047964		Station name: L'Anguille River at Marianna, Ark.				Drainage area: Unknown		
Latitude: 344712		Longitude: 904500		Drainage area: Unknown				
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	231.72	98	173	330	0	--	--	--
pH, standard units	7.31	7.0	7.3	7.6	70	-0.02	-0.28	0.059 U
Oxygen dis., mg/L	7.17	5.8	6.8	8.5	70	0.07	1.00	0.070 U
BOD, 5-day, mg/L	3.02	2.2	2.8	3.4	69	0.00	0.00	0.788 U
Fecal coli., c/100 mL	400.87	52	120	340	66	-1.38	-0.34	0.824 U
Hardness tot., mg/L	103.56	50	74	150	45	-0.83	-0.80	0.365 U
Magnesium dis., mg/L	13.60	8.3	13	17	8	--	--	--
Alkalinity tot., mg/L	91.86	32	95	133	0	--	--	--
Sulfate dis., mg/L ***	e 13.87	8.0	12	18	101	0.29	2.10	0.452 U
Chloride dis., mg/L	12.85	7.5	11	17	67	-0.33	-2.59	0.119 U
ROE, mg/L	208.24	157	186	241	0	--	--	--
TSS, mg/L	82.49	39	63	105	69	-1.50	-1.82	0.494 U
NO2 + NO3 tot., mg/L	e 0.31	0.15	0.28	0.43	78	--	--	--
OrthoP tot., mg/L	e 0.13	0.080	0.120	0.200	66	--	--	--

Station number: 07048550		Station name: West Fork White River east of Fayetteville, Ark.				Drainage area: Unknown		
Latitude: 360300		Longitude: 940442		Drainage area: Unknown				
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	160.90	116	151	191	0	--	--	--
pH, standard units	7.55	7.4	7.6	7.7	71	0.00	0.00	0.580 U
Oxygen dis., mg/L	8.82	6.8	8.5	10.7	70	0.05	0.53	0.365 U
BOD, 5-day, mg/L	2.61	1.4	2.2	3.4	70	-0.13	-4.95	0.001 U
Fecal coli., c/100 mL	265.76	23	98	240	68	-6.09	-2.29	0.171 U
Hardness tot., mg/L	75.67	57	67	97	20	3.76	4.97	0.007 F
Calcium dis., mg/L	22.60	13	20	26	9	--	--	--
Magnesium dis., mg/L	2.50	1.8	2.5	3.0	9	--	--	--
Alkalinity tot., mg/L	58.32	40	53	82	0	--	--	--
Sulfate dis., mg/L ***	e 18.71	13	17	23	97	0.59	3.13	0.051 U
Chloride dis., mg/L	7.44	5.0	6.5	8.5	68	0.00	0.00	0.902 U
ROE, mg/L	119.89	91	114	143	0	--	--	--
TSS, mg/L	28.08	12	22	32	71	-0.57	-2.03	0.303 U
NO2 + NO3 tot., mg/L	e 0.44	0.19	0.33	0.62	72	--	--	--
OrthoP tot., mg/L	e 0.05	0.010	0.030	0.060	65	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07048700		Station name: White River near Goshen, Ark.		Longitude: 940041		Drainage area: 412 square miles			
Latitude: 360622		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	85	160.82	87	112	201	24	0.65	0.41	0.627 U
pH, standard units	147	7.36	7.2	7.4	7.5	64	0.00	0.05	0.667 F
Oxygen dis., mg/L	145	7.85	5.4	8.1	10.4	64	-0.02	-0.19	0.715 F
BOD, 5-day, mg/L	130	3.07	1.7	2.6	3.9	63	-0.03	-1.03	0.397 F
Fecal coli., c/100 mL	108	261.18	5	44	150	61	-7.55	-2.89	0.077 F
Hardness tot., mg/L	95	61.00	40	50	78	60	1.50	2.46	0.049 U
Calcium dis., mg/L	29	17.59	11	16	26	0	--	--	--
Magnesium dis., mg/L	29	2.46	1.4	2.2	3.0	0	--	--	--
Alkalinity tot., mg/L	43	47.95	29	38	56	20	0.35	0.74	0.657 U
Chloride dis., mg/L	131	12.44	5.0	7.5	14	60	0.29	2.30	0.061 F
ROE, mg/L	79	119.42	76	88	168	0	--	--	--
TSS, mg/L	121	28.98	14	22	34	64	-0.94	-3.23	0.043 F
NO ₂ + NO ₃ tot., mg/L	100	e 0.75	0.43	0.63	0.95	100	0.01	1.77	0.364 U
OrthoP tot., mg/L	92	e 0.61	0.100	0.250	0.770	92	0.02	3.28	0.072 U

Station number: 07049691		Station name: White River at Beaver Dam near Eureka Springs, Ark.		Longitude: 935050		Drainage area: 1,192 square miles			
Latitude: 362515		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	148	137.41	126	138	150	30	2.89	2.10	0.012 F
pH, standard units	146	7.56	7.3	7.6	7.8	30	-0.02	-0.28	0.089 F
Oxygen dis., mg/L	148	9.31	7.8	9.5	11.1	30	-0.10	-1.07	0.484 F
BOD, 5-day, mg/L	28	1.09	0.8	1.1	1.3	0	--	--	--
Hardness tot., mg/L	32	67.00	62	67	74	21	-0.25	-0.38	0.723 U
Calcium dis., mg/L	19	22.21	21	23	24	0	--	--	--
Magnesium dis., mg/L	19	2.62	2.1	2.5	3.2	0	--	--	--
Alkalinity tot., mg/L	27	60.44	54	59	64	18	1.00	1.65	0.137 U
Sulfate dis., mg/L ***	19	e 7.68	7.0	8.0	9.0	19	--	--	--
Chloride dis., mg/L	26	3.45	2.8	3.2	3.6	0	--	--	--
NO2 + NO3 tot., mg/L	34	e 0.33	0.20	0.30	0.40	34	0.01	3.01	0.325 U

Table 4.---Statistical summary and trend results of selected water-quality data for the 1975-86 water years---Continued

Station number: 07056000		Station name: Buffalo River near St. Joe, Ark.		Drainage area: 829 square miles					
Latitude: 355902		Longitude: 924444							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	111	206.97	172	209	243	59	-0.17	-0.08	0.823 F
pH, standard units	137	7.93	7.8	7.9	8.0	71	0.00	0.03	0.568 F
Oxygen dis., mg/L	140	9.70	8.5	9.6	11.0	71	0.13	1.33	0.005 F
BOD, 5-day, mg/L	136	1.50	0.8	1.3	2.1	71	0.06	3.80	0.030 F
Fecal coli., c/100 mL	131	77.97	4	14	48	69	-1.50	-1.92	0.015 F
Hardness tot., mg/L	71	104.38	85	100	120	46	0.69	0.66	0.650 F
Alkalinity tot., mg/L	21	101.00	82	100	120	0	--	--	--
Sulfate dis., mg/L ***	99	e 5.67	4.0	6.0	7.0	99	0.50	8.82	0.001 U
Chloride dis., mg/L	132	3.98	3.1	4.0	4.5	67	-0.16	-4.04	0.000 F
ROE, mg/L	90	121.32	104	124	137	0	--	--	--
TSS, mg/L	137	7.91	2	4	7	71	-0.32	-4.05	0.001 F
NO2 + NO3 tot., mg/L	76	e 0.13	0.05	0.10	0.19	76	--	--	--
OrthoP tot., mg/L	68	e 0.01	e 0.010	0.010	0.020	68	--	--	--

Station number: 07057370		Station name: White River near Norfolk, Ark.		Drainage area: Unknown					
Latitude: 361324		Longitude: 921806							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	68	253.99	239	257	278	0	--	--	--
pH, standard units	136	8.05	7.9	8.1	8.2	71	-0.01	-0.10	0.154 F
Oxygen dis., mg/L	139	10.17	9.3	10.2	11.2	71	-0.03	-0.25	0.278 F
BOD, 5-day, mg/L	134	1.09	0.8	1.0	1.3	71	-0.01	-1.12	0.530 F
Fecal coli., c/100 mL	129	66.34	4	12	35	68	-0.33	-0.49	0.448 F
Hardness tot., mg/L	69	130.99	120	130	140	0	--	--	--
Alkalinity tot., mg/L	22	125.41	118	127	140	0	--	--	--
Sulfate dis., mg/L ***	94	e 6.95	5.0	7.0	9.0	94	0.38	5.40	0.003 U
Chloride dis., mg/L	132	5.49	4.5	5.5	6.5	68	-0.04	-0.69	0.412 F
ROE, mg/L	90	150.37	144	150	157	0	--	--	--
TSS, mg/L	136	7.19	4	5	9	70	-0.16	-2.22	0.067 F
NO2 + NO3 tot., mg/L	72	e 0.29	0.19	0.26	0.36	72	--	--	--
OrthoP tot., mg/L	64	e 0.01	e 0.010	0.010	0.020	64	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07060000		Station name: North Fork River at Norfolk Dam near Norfolk, Ark.								
Latitude: 361457		Longitude: 921418		Drainage area: 1,808 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	145	313.97	297	315	338	30	-1.32	-0.42	0.484	F
pH, standard units	143	7.94	7.7	8.0	8.2	30	-0.01	-0.08	0.617	F
Oxygen dis., mg/L	145	9.84	8.0	10.2	12.0	30	-0.32	-3.27	0.007	F
BOD, 5-day, mg/L	28	1.44	0.9	1.2	1.8	0	--	--	--	--
Hardness tot., mg/L	33	174.24	160	180	180	22	-2.25	-1.29	0.007	U
Calcium dis., mg/L	19	35.47	32	36	37	0	--	--	--	--
Magnesium dis., mg/L	19	21.32	20	22	23	0	--	--	--	--
Alkalinity tot., mg/L	27	160.59	150	169	171	18	-2.76	-1.72	0.015	U
Sulfate dis., mg/L ***	18	e 5.84	4.7	5.1	7.9	18	--	--	--	--
Chloride dis., mg/L	26	5.92	2.3	2.5	3.5	0	--	--	--	--
NO2 + NO3 tot., mg/L	34	e 0.27	0.16	0.24	0.40	34	0.00	0.00	0.876	U
OrthoP tot., mg/L	34	e 0.02	e 0.010	0.010	0.030	34	0.00	-6.69	0.082	U

Station number: 07060500		Station name: White River at Calico Rock, Ark.								
Latitude: 360658		Longitude: 920835		Drainage area: 9,978 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	102	276.24	260	275	291	65	-0.46	-0.17	0.538	F
pH, standard units	102	7.94	7.8	8.0	8.1	65	0.00	0.03	0.871	F
Oxygen dis., mg/L	104	9.91	8.8	9.6	10.7	66	0.04	0.38	0.294	F
BOD, 5-day, mg/L	98	1.54	0.9	1.2	1.8	64	0.02	1.16	0.336	F
Fecal coli., c/100 mL	23	703.96	10	27	110	12	--	--	--	--
Hardness tot., mg/L	56	141.61	130	140	150	0	--	--	--	--
Calcium dis., mg/L	56	35.95	34	36	38	0	--	--	--	--
Magnesium dis., mg/L	57	12.59	10	12	15	20	0.02	0.12	0.752	F
Sodium dis., mg/L	56	2.22	1.9	2.2	2.6	0	--	--	--	--
Potassium dis., mg/L	56	1.42	1.3	1.4	1.5	0	--	--	--	--
Alkalinity tot., mg/L	38	131.18	121	130	141	15	0.00	0.00	1.000	F
Chloride dis., mg/L	57	3.77	3.3	3.6	4.4	20	0.03	0.81	0.411	F
ROE, mg/L	26	154.04	147	153	165	0	--	--	--	--
NO2 + NO3 tot., mg/L	96	e 0.23	0.14	0.23	0.30	96	0.01	5.20	0.072	U
Sediment susp., mg/L	13	5.69	4	4	6	13	--	--	--	--
Sed. susp., $\% \text{t. } 62\mu\text{m}$	12	77.00	65	79	88	12	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07060710		Station name: North Sylamore Creek near Fifty Six, Ark.		Longitude: 921245		Drainage area: 58.1 square miles				
Latitude: 355943										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	113	266.82	258	273	284	70	-2.13	-0.80	0.000	F
pH, standard units	114	8.07	7.9	8.1	8.2	71	0.02	0.27	0.011	F
Oxygen dis., mg/L	116	9.92	8.6	9.8	11.2	71	0.00	-0.04	0.909	F
Fecal coli., c/100 mL	23	60.13	--	8	38	12	--	--	--	--
Hardness tot., mg/L	114	136.60	130	140	150	70	-0.28	-0.20	0.308	F
Calcium dis., mg/L	115	44.55	42	45	48	71	-0.25	-0.56	0.030	F
Magnesium dis., mg/L	113	6.07	5.4	6.1	6.8	70	-0.04	-0.67	0.051	F
Sodium dis., mg/L	114	1.61	1.2	1.5	1.7	71	-0.01	-0.52	0.408	F
Potassium dis., mg/L	114	0.80	0.70	0.80	0.90	70	-0.01	-0.69	0.211	F
Alkalinity tot., mg/L	82	132.90	128	136	144	48	-0.98	-0.74	0.049	F
Chloride dis., mg/L	114	2.17	1.7	2.1	2.3	71	-0.03	-1.19	0.110	F
ROE, mg/L	113	150.86	143	153	161	70	-0.40	-0.27	0.190	F
NO2 + NO3 tot., mg/L	91	e 0.07	0.02	0.04	0.07	91	--	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	15	e 4.68	e 10	e 10	6	15	--	--	--	--
Manganese dis., $\mu\text{g}/\text{L}$	15	e 4.43	2	4	6	15	--	--	--	--
Sediment susp., mg/L	113	5.87	2	5	8	66	-0.25	-4.24	0.199	F
Sed. susp., %f.t. 62 μm	49	56.39	44	52	68	0	--	--	--	--

Station number: 07061105		Station name: White River at Oil Trough, Ark.		Longitude: 912742		Drainage area: 11,234 square miles				
Latitude: 353836										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	58	273.45	254	278	295	0	--	--	--	--
pH, standard units	130	8.05	7.9	8.1	8.2	69	-0.01	-0.10	0.077	U
Oxygen dis., mg/L	128	10.09	9.2	9.8	11.3	69	0.00	0.00	0.905	U
BOD, 5-day, mg/L	127	2.15	1.2	1.8	2.8	67	-0.10	-4.65	0.030	U
Fecal coli., c/100 mL	124	188.97	14	40	170	68	-2.80	-1.48	0.171	U
Hardness tot., mg/L	71	138.46	130	140	150	45	0.00	0.00	0.383	U
Alkalinity tot., mg/L	20	136.95	129	136	150	0	--	--	--	--
Sulfate dis., mg/L ***	96	e 7.30	5.0	7.0	9.0	96	0.40	5.48	0.004	U
Chloride dis., mg/L	125	5.50	4.5	5.0	6.5	67	0.00	0.00	1.000	U
ROE, mg/L	87	159.54	150	159	170	0	--	--	--	--
TSS, mg/L	125	18.41	8	14	21	68	-0.33	-1.81	0.099	U
NO2 + NO3 tot., mg/L	71	e 0.28	0.21	0.28	0.35	71	--	--	--	--
Orthop tot., mg/L	64	e 0.02	e 0.010	0.010	0.030	64	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07068850		Station name: Current River near Pocahontas, Ark.		Longitude: 905130		Drainage area: 2,606 square miles				
Latitude: 361755										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	61	268.98	230	290	314	0	--	--	--	--
pH, standard units	132	8.00	7.9	8.0	8.2	71	0.00	0.04	0.530	F
Oxygen dis., mg/L	131	9.46	8.4	9.2	10.4	72	-0.02	-0.23	0.208	F
BOD, 5-day, mg/L	131	1.63	1.0	1.4	2.0	69	-0.01	-0.60	0.766	F
Fecal coli., c/100 mL	129	98.57	8	20	92	71	-0.62	-0.62	0.458	F
Hardness tot., mg/L	72	146.06	130	150	170	46	1.29	0.88	0.022	F
Alkalinity tot., mg/L	20	142.30	124	144	163	0	--	--	--	--
Sulfate dis., mg/L ***	92	e 4.62	3.0	4.0	6.0	92	0.50	10.83	0.005	U
Chloride dis., mg/L	128	4.11	3.5	4.0	4.5	68	-0.09	-2.29	0.023	F
ROE, mg/L	88	162.94	150	165	178	0	--	--	--	--
TSS, mg/L	129	20.47	10	14	23	72	-0.19	-0.91	0.327	F
NO2 + NO3 tot., mg/L	71	e 0.27	0.17	0.25	0.33	71	--	--	--	--
OrthoP tot., mg/L	67	e 0.03	e 0.010	0.020	0.040	67	--	--	--	--

Station number: 07069000		Station name: Black River at Pocahontas, Ark.		Longitude: 905812		Drainage area: 4,845 square miles				
Latitude: 361514										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	29	249.90	207	258	301	0	--	--	--	--
pH, standard units	103	7.91	7.8	7.9	8.1	0	--	--	--	--
Oxygen dis., mg/L	100	9.02	7.8	8.7	10.0	0	--	--	--	--
BOD, 5-day, mg/L	98	2.00	1.3	1.9	2.6	0	--	--	--	--
Fecal coli., c/100 mL	94	138.96	19	42	130	0	--	--	--	--
Hardness tot., mg/L	63	130.57	100	140	160	0	--	--	--	--
Alkalinity tot., mg/L	12	133.00	103	135	168	6	--	--	--	--
Sulfate dis., mg/L ***	90	e 5.53	3.0	5.0	7.0	90	0.40	7.24	0.039	U
Chloride dis., mg/L	103	4.33	3.5	4.5	5.0	0	--	--	--	--
ROE, mg/L	90	154.96	136	157	174	0	--	--	--	--
TSS, mg/L	99	34.41	17	30	43	0	--	--	--	--
NO2 + NO3 tot., mg/L	71	e 0.24	0.17	0.22	0.28	71	--	--	--	--
OrthoP tot., mg/L	67	e 0.03	0.010	0.020	0.040	67	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07069295		Station name: South Fork Spring River at Saddle, Ark.							
Latitude: 362100		Longitude: 913800		Drainage area:		Unknown			
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	60	364.35	341	376	402	0	--	--	--
pH, standard units	135	8.11	8.0	8.1	8.2	65	-0.02	-0.25	0.035 F
Oxygen dis., mg/L	134	9.56	8.1	9.4	11.2	66	0.00	-0.04	0.924 F
BOD, 5-day, mg/L	127	1.74	1.0	1.5	2.3	64	-0.04	-2.20	0.220 F
Fecal coli., c/100 mL	126	185.21	13	46	130	65	-1.82	-0.98	0.284 F
Hardness tot., mg/L	72	202.68	180	210	220	46	-2.11	-1.04	0.075 U
Alkalinity tot., mg/L	19	209.58	197	213	222	0	--	--	--
Sulfate dis., mg/L ***	94	e 4.07	2.0	4.0	6.0	94	0.18	4.50	0.139 U
Chloride dis., mg/L	130	4.52	3.9	4.5	5.5	66	-0.10	-2.28	0.024 F
ROE, mg/L	93	203.73	184	208	227	0	--	--	--
TSS, mg/L	135	13.46	4	8	16	65	-0.65	-4.80	0.008 F
NO2 + NO3 tot., mg/L	72	e 0.30	0.11	0.19	0.42	72	--	--	--
OrthoP tot., mg/L	67	e 0.01	e 0.010	0.010	0.020	67	--	--	--

Station number: 07069370		Station name: Spring River at Ravenden, Ark.							
Latitude: 361330		Longitude: 911503		Drainage area:		Unknown			
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	59	402.19	387	409	438	0	--	--	--
pH, standard units	133	8.23	8.2	8.2	8.3	71	0.00	-0.03	0.493 F
Oxygen dis., mg/L	131	9.56	8.3	9.1	10.8	71	-0.04	-0.44	0.231 F
BOD, 5-day, mg/L	129	1.80	1.2	1.6	2.3	69	-0.06	-3.17	0.024 F
Fecal coli., c/100 mL	127	107.46	8	27	90	68	-1.35	-1.25	0.250 F
Hardness tot., mg/L	73	217.92	210	220	240	47	0.94	0.43	0.088 F
Alkalinity tot., mg/L	21	206.10	220	226	238	0	--	--	--
Sulfate dis., mg/L ***	91	e 3.43	1.0	3.0	5.0	91	0.50	14.57	0.001 U
Chloride dis., mg/L	129	4.37	3.5	4.0	5.0	68	-0.14	-3.14	0.004 F
ROE, mg/L	89	229.64	225	234	240	0	--	--	--
TSS, mg/L	126	17.63	7	12	18	71	-0.19	-1.09	0.154 F
NO2 + NO3 tot., mg/L	72	e 0.42	0.30	0.40	0.52	72	--	--	--
OrthoP tot., mg/L	67	e 0.01	e 0.010	0.010	0.010	67	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07072100		Station name: Eleven Point River near Pocahontas, Ark.							
Latitude: 361443		Longitude: 910505		Drainage area: 1,192 square miles					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	60	340.63	313	355	373	0	--	--	--
pH, standard units	133	8.09	8.0	8.1	8.2	71	-0.01	-0.08	0.209 F
Oxygen dis., mg/L	133	9.53	8.4	9.3	10.6	71	-0.03	-0.32	0.332 F
BOD, 5-day, mg/L	128	1.56	0.9	1.4	2.0	69	-0.04	-2.83	0.109 F
Fecal coli., c/100 mL	125	102.36	14	32	73	67	-1.38	-1.35	0.252 F
Hardness tot., mg/L	73	184.29	170	190	210	46	0.42	0.23	0.721 F
Alkalinity tot., mg/L	20	183.95	171	181	197	0	--	--	--
Sulfate dis., mg/L ***	90	e 3.33	1.0	3.0	5.0	90	0.50	15.02	0.002 U
Chloride dis., mg/L	127	3.64	3.0	3.5	4.5	68	-0.10	-2.62	0.006 F
ROE, mg/L	90	196.87	183	199	211	0	--	--	--
TSS, mg/L	128	15.20	8	14	20	70	-0.60	-3.94	0.039 F
NO ₂ + NO ₃ tot., mg/L	72	e 0.48	0.38	0.48	0.58	72	--	--	--
OrthoP tot., mg/L	68	e 0.01	e 0.010	0.010	0.020	68	--	--	--

Station number: 07072500		Station name: Black River at Black Rock, Ark.							
Latitude: 360615		Longitude: 910550		Drainage area: 7,369 square miles					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	92	289.01	244	296	334	62	-0.66	-0.23	0.580 F
pH, standard units	92	7.91	7.7	8.0	8.2	62	0.00	0.06	0.534 F
Oxygen dis., mg/L	88	8.89	7.5	8.6	10.0	62	-0.09	-1.04	0.045 F
BOD, 5-day, mg/L	83	1.85	1.4	1.6	2.0	58	-0.01	-0.47	0.524 F
Fecal coli., c/100 mL	18	710.22	230	330	700	11	--	--	--
Hardness tot., mg/L	49	146.24	120	150	180	0	--	--	--
Calcium dis., mg/L	49	30.59	26	31	36	0	--	--	--
Magnesium dis., mg/L	49	16.91	14	18	21	0	--	--	--
Sodium dis., mg/L	48	2.11	1.8	2.1	2.4	0	--	--	--
Potassium dis., mg/L	48	1.26	1.1	1.2	1.5	0	--	--	--
Alkalinity tot., mg/L	32	147.00	126	150	174	12	-0.33	-0.22	0.798 F
Chloride dis., mg/L	49	3.05	2.5	2.9	3.2	0	--	--	--
ROE, mg/L	20	169.45	156	169	191	17	--	--	--
NO ₂ + NO ₃ tot., mg/L	84	e 0.25	0.20	0.25	0.30	84	0.00	1.78	0.037 U
OrthoP tot., mg/L	6	e 0.04	0.010	0.050	0.100	6	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07074100		Station name: Strawberry River near Smithville, Ark.				Longitude: 911931		Drainage area: 539 square miles	
Latitude: 360140									
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	57	369.56	340	382	396	0	--	--	--
pH, standard units	131	8.14	8.1	8.1	8.2	71	-0.01	-0.14	0.000 F
Oxygen dis., mg/L	130	9.50	8.1	9.0	10.8	71	0.02	0.23	0.568 F
BOD, 5-day, mg/L	127	1.36	0.9	1.2	1.7	69	-0.02	-1.48	0.405 F
Fecal coli., c/100 mL	124	182.27	14	40	160	69	-0.03	-0.02	1.000 F
Hardness tot., mg/L	71	198.70	190	200	220	21	0.65	0.33	0.597 F
Alkalinity tot., mg/L	17	209.41	200	210	217	0	--	--	--
Sulfate dis., mg/L ***	90	e 5.39	3.0	5.0	7.0	90	0.33	6.19	0.034 U
Chloride dis., mg/L	127	4.57	4.0	4.5	5.5	68	-0.19	-4.07	0.001 F
ROE, mg/L	89	208.78	201	211	226	0	--	--	--
TSS, mg/L	127	28.13	10	19	29	71	-0.74	-2.63	0.040 F
NO2 + NO3 tot., mg/L	71	e 0.30	0.11	0.24	0.44	71	--	--	--
OrthoP tot., mg/L	67	e 0.04	e 0.010	0.010	0.020	67	--	--	--

Station number: 07074500		Station name: White River at Newport, Ark.				Longitude: 911719		Drainage area: 19,860 square miles	
Latitude: 353618									
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	67	275.73	258	279	305	0	--	--	--
pH, standard units	67	8.08	8.0	8.1	8.3	0	--	--	--
Oxygen dis., mg/L	66	9.40	8.2	9.0	10.5	0	--	--	--
Hardness tot., mg/L	64	138.89	120	140	160	0	--	--	--
Calcium dis., mg/L	64	33.00	30	34	36	0	--	--	--
Magnesium dis., mg/L	65	13.77	12	14	16	0	--	--	--
Sodium dis., mg/L	65	2.87	2.2	2.7	3.3	0	--	--	--
Potassium dis., mg/L	66	1.37	1.2	1.4	1.5	0	--	--	--
Alkalinity tot., mg/L	42	129.98	114	130	150	0	--	--	--
Chloride dis., mg/L	66	4.17	3.4	4.1	4.7	0	--	--	--
ROE, mg/L	66	154.71	138	158	172	0	--	--	--
NO2 + NO3 tot., mg/L	37	e 0.24	0.17	0.25	0.34	37	--	--	--
Iron dis., μ g/L	33	e 34.15	8	22	50	33	--	--	--
Manganese dis., μ g/L	33	e 7.35	2	5	7	33	--	--	--
Sediment susp., mg/L	66	67.48	40	60	77	0	--	--	--
Sed. susp., $\frac{1}{2}$ f.t. 62 μ m	66	75.02	67	80	86	0	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07074990		Station name: Middle Fork Little Red River near Shirley, Ark.								
Latitude: 353906		Longitude: 921920		Drainage area:		Unknown				
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	67	90.04	76	84	105	0	--	--	--	--
pH, standard units	136	7.38	7.2	7.4	7.5	70	0.01	0.17	0.154	F
Oxygen dis., mg/L	140	9.69	8.2	9.4	11.2	70	-0.01	-0.12	0.839	F
BOD, 5-day, mg/L	135	1.51	0.8	1.2	2.1	70	-0.03	-2.21	0.171	F
Fecal coli., c/100 mL	129	87.23	4	16	62	66	0.00	0.00	1.000	F
Hardness tot., mg/L	70	41.73	34	40	46	0	--	--	--	--
Alkalinity tot., mg/L	22	34.95	27	32	42	0	--	--	--	--
Sulfate dis., mg/L ***	100	e 6.61	5.0	7.0	8.0	100	0.40	6.05	0.004	U
Chloride dis., mg/L	131	3.78	3.0	4.0	4.5	67	-0.08	-2.20	0.047	F
ROE, mg/L	90	60.43	52	58	64	0	--	--	--	--
TSS, mg/L	137	9.16	4	6	10	70	-0.12	-1.32	0.116	F
NO2 + NO3 tot., mg/L	76	e 0.07	0.02	0.03	0.10	76	--	--	--	--
OrthoP tot., mg/L	69	e 0.02	e 0.010	0.010	0.020	69	--	--	--	--

Station number: 07076000		Station name: Little Red River near Heber Springs, Ark.								
Latitude: 353102		Longitude: 915950		Drainage area: 1,153 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend code
Conductance, $\mu\text{S}/\text{cm}$	144	40.19	35	41	46	30	-0.17	-0.42	0.484	F
pH, standard units	143	7.03	6.7	7.0	7.3	30	0.00	0.03	1.000	F
Oxygen dis., mg/L	143	10.02	8.4	10.5	11.6	30	0.23	2.34	0.004	F
BOD, 5-day, mg/L	28	1.40	0.9	1.4	1.9	0	--	--	--	--
Hardness tot., mg/L	33	17.55	16	17	20	22	-0.42	-2.41	0.104	U
Calcium dis., mg/L	19	4.98	4.6	4.9	5.3	0	--	--	--	--
Magnesium dis., mg/L	19	1.03	0.90	1.0	1.2	0	--	--	--	--
Alkalinity tot., mg/L	27	13.85	12	13	15	18	0.15	1.12	0.292	U
Sulfate dis., mg/L ***	18	e 3.85	2.7	4.0	5.0	18	--	--	--	--
Chloride dis., mg/L	26	1.60	1.4	1.5	1.7	0	--	--	--	--
NO2 + NO3 tot., mg/L	34	e 0.22	0.16	0.20	0.30	34	0.01	2.76	0.061	U
OrthoP tot., mg/L	34	e 0.02	e 0.010	0.010	0.030	34	0.00	5.59	0.197	U

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07077000			Station name: White River at Devalls Bluff, Ark.			Longitude: 912645			Drainage area: 23,431 square miles		
Latitude: 344725											
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm		63	237.29	207	243	271	0	--	--	--	--
pH, standard units		134	7.96	7.8	8.0	8.2	70	0.00	0.04	0.621	F
Oxygen dis., mg/L		134	9.51	8.4	9.4	10.5	69	0.11	1.20	0.002	F
BOD, 5-day, mg/L		133	2.14	1.5	2.0	2.7	70	-0.03	-1.23	0.138	F
Fecal coli., c/100 mL		124	84.70	10	40	100	67	1.22	1.44	0.535	F
Hardness tot., mg/L		68	122.85	110	120	140	32	-0.60	-0.49	0.471	F
Calcium dis., mg/L		10	31.50	29	31	33	8	--	--	--	--
Magnesium dis., mg/L		10	13.90	13	13	15	8	--	--	--	--
Alkalinity tot., mg/L		21	122.00	113	120	136	0	--	--	--	--
Sulfate dis., mg/L ***		100	e 5.78	4.0	5.0	7.0	100	0.20	3.46	0.049	U
Chloride dis., mg/L		125	5.81	5.0	5.5	6.5	66	0.01	0.18	0.925	F
ROE, mg/L		94	149.84	137	147	161	0	--	--	--	--
TSS, mg/L		125	43.45	27	36	47	68	-0.73	-1.67	0.122	F
NO2 + NO3 tot., mg/L		80	e 0.21	0.12	0.20	0.29	80	--	--	--	--
OrthoP tot., mg/L		66	e 0.03	0.010	0.020	0.040	66	--	--	--	--

Station number: 07077500			Station name: Cache River at Patterson, Ark.			Longitude: 911415			Drainage area: 1,037 square miles		
Latitude: 351610											
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm		105	170.44	85	125	241	69	0.82	0.48	0.373	F
pH, standard units		105	7.32	7.1	7.3	7.6	69	0.05	0.68	0.000	F
Oxygen dis., mg/L		95	7.10	5.3	6.9	8.5	65	-0.11	-1.50	0.010	F
BOD, 5-day, mg/L		102	2.73	2.1	2.5	3.2	69	-0.01	-0.19	0.859	F
Fecal coli., c/100 mL		23	265.43	100	150	240	12	--	--	--	--
Hardness tot., mg/L		104	61.84	25	43	91	69	0.27	0.43	0.635	F
Calcium dis., mg/L		104	15.56	6.1	10	23	69	0.07	0.43	0.721	F
Magnesium dis., mg/L		105	5.52	2.5	3.7	7.6	69	0.02	0.44	0.476	F
Sodium dis., mg/L		105	9.79	5.8	8.7	12	69	0.07	0.73	0.137	F
Potassium dis., mg/L		105	3.02	2.3	2.9	3.8	69	-0.04	-1.27	0.172	F
Alkalinity tot., mg/L		81	58.94	21	39	80	48	0.75	1.28	0.479	F
Chloride dis., mg/L		105	7.53	5.1	7.0	9.6	69	0.10	1.27	0.285	F
ROE, mg/L		71	114.35	75	104	140	0	--	--	--	--
NO2 + NO3 tot., mg/L		99	e 0.36	0.17	0.33	0.50	99	0.01	2.58	0.124	U
OrthoP tot., mg/L		6	e 0.19	0.120	0.170	0.360	6	--	--	--	--
Iron dis., mg/L		8	e 91.25	20	100	140	8	--	--	--	--
Manganese dis., mg/L		8	e 270.43	20	200	290	8	--	--	--	--
Sediment susp., mg/L		23	106.13	62	71	161	0	--	--	--	--
Sed. susp., %f.t. 62 μ m		22	90.50	85	96	97	0	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07077660		Station name: Bayou Deview near Gibson, Ark.				Longitude: 905018		Drainage area: Unknown		Latitude: 354736	
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
Conductance, μ S/cm	59	236.20	117	190	352	0	--	--	--	--	
pH, standard units	126	7.50	7.2	7.4	7.8	58	0.02	0.28	0.085	F	
Oxygen dis., mg/L	128	8.19	5.9	8.5	10.5	57	0.47	5.68	0.000	F	
BOD, 5-day, mg/L	113	6.17	2.6	4.4	7.6	66	-0.60	-9.72	0.000	U	
Fecal coli., c/100 mL	109	2,653.73	64	300	1,200	64	-40.00	-1.51	0.004	U	
Hardness tot., mg/L	71	65.72	38	54	92	0	--	--	--	--	
Alkalinity tot., mg/L	19	75.00	34	68	107	0	--	--	--	--	
sulfate dis., mg/L ***	95	e 20.55	13	17	25	95	0.77	3.77	0.027	U	
Chloride dis., mg/L	123	20.68	9.5	17	29	67	0.00	0.00	0.975	U	
ROE, mg/L	86	209.92	152	205	250	0	--	--	--	--	
TSS, mg/L	117	74.59	26	38	77	54	0.39	0.52	0.771	F	
NO2 + NO3 tot., mg/L	69	e 0.95	0.37	0.68	1.2	69	--	--	--	--	
OrthoP tot., mg/L	62	e 1.34	0.330	0.800	1.60	62	--	--	--	--	

Station number: 07077700		Station name: Bayou Deview at Morton, Ark.			Longitude: 910637		Drainage area: 421 square miles			
Latitude: 351507		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	105	188.55	96	148	256	71	1.50	0.80	0.291	U
pH, standard units	105	7.30	7.0	7.3	7.6	71	0.04	0.61	0.000	U
Oxygen dis., mg/L	94	6.36	4.4	5.9	8.4	67	-0.02	-0.35	0.598	U
BOD, 5-day, mg/L	101	3.81	3.0	3.6	4.4	71	-0.10	-2.63	0.055	U
Fecal coli., c/100 mL	20	391.80	84	220	480	12	--	--	--	U
Hardness tot., mg/L	105	68.41	30	45	96	71	0.29	0.42	0.566	U
Calcium dis., mg/L	105	17.66	7.7	11	25	71	0.10	0.57	0.528	U
Magnesium dis., mg/L	105	5.84	2.8	4.0	8.3	71	0.04	0.73	0.667	U
Sodium dis., mg/L	104	10.68	6.6	9.3	14	71	0.00	0.00	0.886	U
Potassium dis., mg/L	105	3.59	2.3	3.2	4.6	71	-0.01	-0.31	0.775	U
Alkalinity tot., mg/L	80	64.41	27	42	90	47	1.00	1.55	0.210	U
Chloride dis., mg/L	105	9.61	5.7	8.7	12	71	0.20	2.08	0.114	U
ROE, mg/L	68	128.99	84	119	164	0	--	--	--	U
NO2 + NO3 tot., mg/L	99	e 0.34	0.15	0.30	0.47	99	0.01	1.65	0.116	U
OrthoP tot., mg/L	6	e 0.32	0.140	0.310	0.860	6	--	--	--	U
Iron dis., μ g/L	8	e 127.41	60	160	230	8	--	--	--	U
Manganese dis., μ g/L	8	e 350.00	100	330	550	8	--	--	--	U
Sediment susp., mg/L	23	111.09	49	101	140	0	--	--	--	U
Sed. susp., %f.t. 62 μ m	22	93.37	92	96	97	0	--	--	--	U

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07077800		Station name: White River at Clarendon, Ark.		Longitude: 911855		Drainage area: 25,555 square miles				
Latitude: 344108										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	100	237.82	206	240	278	48	0.76	0.32	0.515	F
pH, standard units	99	7.86	7.6	7.9	8.1	48	0.05	0.70	0.000	F
Oxygen dis., mg/L	98	8.78	7.5	8.4	10.1	48	0.06	0.71	0.258	F
BOD, 5-day, mg/L	14	1.69	1.4	1.6	1.9	8	--	--	--	--
Fecal coli., c/100 mL	21	662.33	12	50	180	12	--	--	--	--
Hardness tot., mg/L	100	116.14	100	120	140	48	0.36	0.31	0.515	F
Calcium dis., mg/L	100	27.84	24	28	32	48	0.05	0.17	0.706	F
Magnesium dis., mg/L	100	11.33	9.5	11	13	48	0.07	0.60	0.355	F
Sodium dis., mg/L	99	3.70	2.7	3.4	4.3	48	-0.08	-2.29	0.026	F
Potassium dis., mg/L	100	1.58	1.4	1.5	1.7	48	-0.01	-0.57	0.656	F
Alkalinity tot., mg/L	75	108.44	91	110	128	33	0.39	0.36	0.768	F
Chloride dis., mg/L	99	4.83	3.7	4.6	5.5	48	-0.04	-0.90	0.355	F
ROE, mg/L	100	135.21	118	134	153	48	1.22	0.90	0.051	F
NO ₂ + NO ₃ tot., mg/L	78	e 0.26	0.12	0.20	0.27	78	--	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	52	e 55.45	16	50	89	52	2.13	3.83	0.129	U
Manganese dis., $\mu\text{g}/\text{L}$	52	e 14.63	2	9	20	52	0.00	0.00	0.420	U
Sediment susp., mg/L	94	79.17	46	63	98	48	-0.44	-0.56	0.560	F
Sed. susp., %f.t. 62 μm	94	81.68	76	88	94	48	-0.70	-0.86	0.080	F

Station number: 07077820

Latitude: 342242

Station name: White River at St. Charles, Ark.

Longitude: 910736

Drainage area: 25,809 square miles

Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	65	224.46	187	232	267	0	--	--	--	--
pH, standard units	135	7.88	7.7	7.9	8.1	70	0.00	0.00	0.977	U
Oxygen dis., mg/L	140	9.07	7.8	8.8	10.5	71	0.04	0.44	0.390	U
BOD, 5-day, mg/L	137	2.39	1.6	2.2	3.0	71	-0.02	-0.84	0.646	U
Fecal coli., c/100 mL	133	45.08	9	24	56	69	-1.25	-2.77	0.100	U
Hardness tot., mg/L	75	116.95	98	120	140	47	0.60	0.51	0.399	U
Calcium dis., mg/L	11	27.96	20	31	32	9	--	--	--	--
Magnesium dis., mg/L	12	11.09	7.5	12	15	10	--	--	--	--
Alkalinity tot., mg/L	22	104.91	80	104	125	0	--	--	--	--
Sulfate dis., mg/L ***	102	e 6.36	5.0	6.0	8.0	102	0.50	7.86	0.000	U
Chloride dis., mg/L	125	5.98	4.5	6.0	7.0	65	-0.17	-2.79	0.003	U
ROE, mg/L	95	145.11	132	145	159	0	--	--	--	--
TSS, mg/L	126	52.27	27	48	71	68	-1.60	-3.06	0.035	U
NO ₂ + NO ₃ tot., mg/L	83	e 0.22	0.14	0.20	0.29	83	--	--	--	--
OrthoP tot., mg/L	67	e 0.03	0.010	0.020	0.040	67	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07188910		Station name: Butler Creek near Sulphur Springs, Ark.				Longitude: 942854		Drainage area: 34.9 square miles	
Latitude: 363044									
		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	63	301.21	270	307	328	0	--	--	--
pH, standard units	135	7.97	7.9	8.0	8.1	42	-0.01	-0.10	0.206 F
Oxygen dis., mg/L	131	10.20	8.7	10.1	11.5	42	-0.06	-0.54	0.558 F
BOD, 5-day, mg/L	128	1.59	0.9	1.4	2.2	42	-0.05	-2.99	0.166 F
Fecal coli., c/100 mL	127	204.27	8	62	200	40	0.26	0.13	0.950 F
Hardness tot., mg/L	74	150.47	140	150	160	27	-0.16	-0.10	0.915 F
Alkalinity tot., mg/L	21	131.71	115	139	149	0	--	--	--
Sulfate dis., mg/L ***	101	e 10.54	8.0	10	13	101	-0.08	-0.79	0.659 U
Chloride dis., mg/L	127	8.52	6.0	8.0	11	38	-0.20	-2.38	0.134 F
ROE, mg/L	91	187.86	172	187	200	0	--	--	--
TSS, mg/L	127	4.88	1	3	6	43	-0.02	-0.35	0.605 F
NO2 + NO3 tot., mg/L	78	e 1.18	0.86	1.0	1.5	78	--	--	--
OrthoP tot., mg/L	66	e 0.03	0.010	0.020	0.030	66	--	--	--

Station number: 07191179		Station name: Spavinaw Creek near Cherokee City, Ark.				Longitude: 943515		Drainage area: 104 square miles	
Latitude: 362031									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	62	283.87	267	285	305	0	--	--	--
pH, standard units	95	7.90	7.8	7.9	8.0	0	--	--	--
Oxygen dis., mg/L	89	10.21	9.1	10.0	11.3	0	--	--	--
BOD, 5-day, mg/L	90	1.33	0.7	1.1	1.7	0	--	--	--
Fecal coli., c/100 mL	92	52.43	8	20	59	0	--	--	--
Hardness tot., mg/L	60	126.67	120	130	140	0	--	--	--
Sulfate dis., mg/L ***	91	e 5.71	4.0	6.0	7.0	91	0.33	5.84	0.099 U
Chloride dis., mg/L	92	12.16	10	12	14	0	--	--	--
ROE, mg/L	82	172.67	158	176	185	0	--	--	--
TSS, mg/L	92	3.01	1	2	4	0	--	--	--
NO2 + NO3 tot., mg/L	67	e 2.25	1.8	2.1	2.7	67	--	--	--
OrthoP tot., mg/L	67	e 0.10	0.050	0.060	0.090	67	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07194800		Station name: Illinois River at Savoy, Ark.			Longitude: 942039		Drainage area: 167 square miles		
Latitude: 360611									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	79	247.29	218	260	284	0	--	--	--
pH, standard units	141	7.79	7.7	7.8	8.0	61	-0.02	-0.26	0.030 F
Oxygen dis., mg/L	138	9.61	7.9	9.3	11.1	60	-0.13	-1.36	0.038 F
BOD, 5-day, mg/L	135	2.63	1.6	2.4	3.5	60	-0.14	-5.45	0.010 F
Fecal coli., c/100 mL	119	318.00	36	110	340	57	-2.07	-0.65	0.442 F
Hardness tot., mg/L	78	114.35	100	120	130	48	0.00	0.00	0.727 U
Alkalinity tot., mg/L	21	102.14	89	107	120	0	--	--	--
Sulfate dis., mg/L ***	107	e 10.66	7.0	11	15	107	0.50	4.69	0.003 U
Chloride dis., mg/L	137	10.28	8.5	10	12	59	0.00	0.00	1.000 F
ROE, mg/L	98	160.06	144	162	176	0	--	--	--
TSS, mg/L	136	15.79	6	10	20	58	-0.70	-4.42	0.011 F
NO2 + NO3 tot., mg/L	80	e 1.68	1.1	1.6	2.0	80	--	--	--
OrthoP tot., mg/L	70	e 0.11	0.020	0.040	0.090	70	--	--	--

Station number: 07195000		Station name: Osage Creek near Elm Springs, Ark.				Drainage area: 130 square miles			
Latitude: 361319		Longitude: 941718							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	81	292.94	262	294	336	0	--	--	--
pH, standard units	139	7.79	7.6	7.8	7.9	70	-0.02	-0.26	0.007 U
Oxygen dis., mg/L	140	9.54	7.9	9.3	10.9	70	0.00	0.977	U
BOD, 5-day, mg/L	126	2.98	1.8	2.7	3.8	69	-0.16	-5.31	0.003 U
Fecal coli., c/100 mL	111	528.85	38	180	410	67	-5.50	-1.04	0.193 U
Hardness tot., mg/L	71	119.73	110	120	130	22	1.67	1.39	0.140 U
Alkalinity tot., mg/L	21	104.33	97	110	115	0	--	--	--
Sulfate dis., mg/L ***	100	e 12.22	9.0	11	15	100	0.06	0.51	0.738 U
Chloride dis., mg/L	129	15.29	11	14	18	67	0.00	0.00	0.708 U
ROE, mg/L	90	194.03	175	192	211	0	--	--	--
TSS, mg/L	131	14.29	6	11	16	69	0.25	1.75	0.217 U
NO2 + NO3 tot., mg/L	76	e 3.97	3.3	4.2	4.8	76	--	--	--
Orthoph tot., mg/L	65	e 0.88	0.480	0.810	1.25	65	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07195400		Station name: Illinois River near Siloam Springs, Ark.		Longitude: 942941		Drainage area: 509 square miles			
Latitude: 360841									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	17	253.71	230	261	284	11	--	--	--
pH, standard units	45	7.68	7.6	7.7	7.8	0	--	--	--
Oxygen dis., mg/L	44	8.88	7.3	8.4	10.2	0	--	--	--
BOD, 5-day, mg/L	37	1.28	0.9	1.2	1.5	17	--	--	--
Fecal coli., c/100 mL	31	258.19	36	76	220	0	--	--	--
Hardness tot., mg/L	27	108.52	100	110	120	12	--	--	--
Sulfate dis., mg/L ***	42	e 9.81	8.0	10	11	42	0.33	3.40	0.458 U
Chloride dis., mg/L	40	10.36	7.6	9.5	13	0	--	--	--
ROE, mg/L	40	160.88	143	157	177	0	--	--	--
TSS, mg/L	39	12.97	5	11	16	0	--	--	--
NO2 + NO3 tot., mg/L	40	e 3.15	2.1	2.4	2.9	40	--	--	--
OrthoP tot., mg/L	37	e 0.28	0.160	0.260	0.390	37	--	--	--

Station number: 07196900		Station name: Baron Fork at Dutch Mills, Ark.		Longitude: 942911		Drainage area: 46 square miles			
Latitude: 355248									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	78	283.00	256	283	317	0	--	--	--
pH, standard units	136	7.80	7.7	7.8	7.9	69	-0.01	-0.17	0.028 F
Oxygen dis., mg/L	132	8.97	7.1	8.7	10.7	69	-0.06	-0.68	0.342 F
BOD, 5-day, mg/L	130	2.44	1.4	2.0	3.0	68	-0.04	-1.62	0.192 F
Fecal coli., c/100 mL	115	283.28	40	120	290	66	0.03	0.01	1.000 F
Hardness tot., mg/L	75	137.24	130	140	150	46	1.30	0.95	0.051 F
Alkalinity tot., mg/L	21	119.29	117	120	131	0	--	--	--
Sulfate dis., mg/L ***	102	e 16.26	12	15	20	102	0.40	2.46	0.076 U
Chloride dis., mg/L	128	9.63	7.5	9.0	12	66	0.05	0.47	0.528 F
ROE, mg/L	91	184.62	168	180	202	0	--	--	--
TSS, mg/L	130	10.51	4	6	10	68	-0.27	-2.56	0.276 F
NO2 + NO3 tot., mg/L	79	e 1.76	0.32	1.8	2.6	79	--	--	--
OrthoP tot., mg/L	65	e 0.12	0.060	0.100	0.150	65	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07249400		Station name: James Fork near Hackett, Ark.		Longitude: 942425		Drainage area: 147 square miles		
Latitude: 350945								
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	395.10	227	380	527	0	--	--	--
pH, standard units	7.37	7.1	7.4	7.6	60	0.02	0.21	0.086 F
Oxygen dis., mg/L	8.32	6.3	7.8	10.2	59	-0.05	-0.59	0.232 F
BOD, 5-day, mg/L	1.85	1.0	1.5	2.4	46	-0.02	-1.31	0.487 F
Fecal coli., c/100 mL	201.24	20	58	170	45	4.99	2.48	0.019 F
Hardness tot., mg/L	124.82	72	130	170	46	0.51	0.41	0.754 F
Calcium dis., mg/L	25.55	16	26	34	0	--	--	--
Magnesium dis., mg/L	18.02	12	18	24	0	--	--	--
Sodium dis., mg/L	36.99	13	21	49	0	--	--	--
Potassium dis., mg/L	2.48	1.9	2.4	3.0	0	--	--	--
Alkalinity tot., mg/L	80.31	28	54	98	0	--	--	--
Sulfate dis., mg/L ***	e 100.56	62	93	130	85	-4.70	-4.67	0.099 U
Chloride dis., mg/L	8.03	5.5	7.0	9.9	55	-0.19	-2.31	0.005 F
ROE, mg/L	259.64	142	241	355	0	--	--	--
TSS, mg/L	25.67	10	18	30	47	0.04	0.15	1.000 F
NO ₂ + NO ₃ tot., mg/L	e 0.24	0.05	0.17	0.30	65	--	--	--
OrthoP tot., mg/L	e 0.03	0.010	0.020	0.040	34	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	e 92.84	30	60	130	74	--	--	--
Manganese dis., $\mu\text{g}/\text{L}$	e 223.99	120	200	310	74	--	--	--
Sediment susp., mg/L	39.53	17	28	52	0	--	--	--
Sed. susp., %f.t. 62 μm	90.23	86	94	96	0	--	--	--

Station number: 07250500		Station name: Arkansas River at Van Buren, Ark.		Longitude: 942137		Drainage area: 150,482 square miles		
Latitude: 352542								
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	578.73	444	544	709	52	0.33	0.06	0.964 F
pH, standard units	7.93	7.7	7.9	8.1	67	0.01	0.07	0.624 F
Oxygen dis., mg/L	10.13	8.4	9.9	11.5	67	0.08	0.78	0.388 F
BOD, 5-day, mg/L	3.15	2.4	3.0	3.9	66	-0.09	-2.97	0.006 F
Fecal coli., c/100 mL	2,441.71	22	330	2,600	65	-233.91	-9.58	0.000 F
Hardness tot., mg/L	122.38	98	120	150	44	-0.58	-0.48	0.194 F
Alkalinity tot., mg/L	94.70	90	93	105	0	--	--	--
Sulfate dis., mg/L ***	e 44.80	33	46	55	96	-0.83	-1.85	0.173 U

Station number: 07250500		Station name: Arkansas River at Van Buren, Ark.		Longitude: 942137		Drainage area: 150,482 square miles			
Latitude: 352542		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	108	578.73	444	544	709	52	0.33	0.06	0.964 F
pH, standard units	132	7.93	7.7	7.9	8.1	67	0.01	0.07	0.624 F
Oxygen dis., mg/L	135	10.13	8.4	9.9	11.5	67	0.08	0.78	0.388 F
BOD, 5-day, mg/L	124	3.15	2.4	3.0	3.9	66	-0.09	-2.97	0.006 F
Fecal coli., c/100 mL	125	2,441.71	22	330	2,600	65	-233.91	-9.58	0.000 F
Hardness tot., mg/L	68	122.38	98	120	150	44	-0.58	-0.48	0.194 F
Alkalinity tot., mg/L	20	94.70	90	93	105	0	---	---	---
Sulfate dis., mg/L ***	96	e 44.80	33	46	55	96	-0.83	-1.85	0.173 U

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07250500		Station name: Arkansas River at Van Buren, Ark.--Continued				Longitude: 942137		Drainage area: 150,482 square miles			
Latitude: 352542											
Water-quality property or constituent		Descriptive statistics			Best trend results						
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code		
Chloride dis., mg/L	101.28	65	87	130	63	0.53	0.52	0.814	F		
ROE, mg/L	351.39	283	351	410	0	--	--	--	--		
TSS, mg/L	33.69	16	27	48	66	0.34	1.00	0.471	F		
NO2 + NO3 tot., mg/L	e 0.35	0.14	0.32	0.55	69	--	--	--	--		
OrthoP tot., mg/L	e 0.04	0.010	0.030	0.070	66	--	--	--	--		

Station number: 07250550		Station name: Arkansas River at Dam No. 13 near Van Buren, Ark.				Longitude: 941754		Drainage area: 150,547 square miles			
Latitude: 352056											
Water-quality property or constituent		Descriptive statistics			Best trend results						
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code		
Conductance, µS/cm	626.80	460	593	785	68	-0.98	-0.16	0.904	F		
pH, standard units	7.85	7.7	7.9	8.1	68	0.05	0.62	0.000	F		
Oxygen dis., mg/L	9.49	7.7	8.8	10.7	69	0.04	0.44	0.329	F		
BOD, 5-day, mg/L	1.55	1.0	1.4	2.0	7	--	--	--	--		
Fecal coli., c/100 mL	2,918.77	320	680	1,800	12	--	--	--	--		
Hardness tot., mg/L	131.75	120	130	150	68	0.32	0.24	0.608	F		
Calcium dis., mg/L	38.53	34	39	44	68	-0.07	-0.19	0.651	F		
Magnesium dis., mg/L	8.94	7.4	8.9	11	68	0.08	0.86	0.217	F		
Sodium dis., mg/L	73.50	48	68	91	68	0.16	0.22	0.976	F		
Potassium dis., mg/L	3.74	3.2	3.7	4.3	68	-0.01	-0.24	0.651	F		
Alkalinity tot., mg/L	91.57	82	92	101	47	-0.42	-0.46	0.467	F		
Chloride dis., mg/L	110.62	72	100	140	68	0.27	0.24	0.833	F		
ROE, mg/L	358.74	273	346	433	68	0.51	0.14	0.833	F		
NO2 + NO3 tot., mg/L	e 0.31	0.14	0.28	0.48	80	--	--	--	--		
Iron dis., µg/L	e 42.14	10	26	40	49	0.00	0.00	0.243	U		
Manganese dis., µg/L	e 7.69	e 10	2	10	49	0.00	0.00	1.000	U		
Sediment susp., mg/L	36.40	19	30	47	63	-0.06	-0.16	0.712	F		
Sed. susp., %f.t. 62µm	76.88	66	81	93	65	-1.93	-2.51	0.002	F		

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07252406			Station name: Arkansas River at Ozark Dam at Ozark, Ark.			Drainage area: 151,801 square miles			
Latitude: 352821			Longitude: 934846						
			Descriptive statistics			Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	67	601.34	459	560	745	0	--	--	--
pH, standard units	138	7.97	7.8	8.0	8.1	68	0.00	0.04	0.506 F
Oxygen dis., mg/L	135	9.63	7.7	9.3	11.1	67	0.03	0.29	0.279 F
BOD, 5-day, mg/L	130	2.25	1.6	2.1	2.9	67	0.07	3.16	0.019 F
Fecal coli., c/100 mL	123	196.62	6	30	190	63	-8.73	-4.44	0.004 F
Hardness tot., mg/L	69	121.42	100	120	150	35	0.89	0.73	0.321 F
Alkalinity tot., mg/L	20	94.20	83	97	108	0	--	--	--
Sulfate dis., mg/L ***	99	e 47.92	38	48	56	99	-0.50	-1.04	0.570 U
Chloride dis., mg/L	129	105.91	67	94	150	64	-0.71	-0.67	0.644 F
ROE, mg/L	85	364.84	285	374	440	0	--	--	--
TSS, mg/L	131	29.18	14	22	39	68	-0.84	-2.86	0.025 F
NO ₂ + NO ₃ tot., mg/L	70	e 0.39	0.15	0.40	0.62	70	--	--	--
OrthoP tot., mg/L	67	e 0.04	0.010	0.040	0.060	67	--	--	--

Station number: 07258000		Station name: Arkansas River at Dardanelle, Ark.		Drainage area: 153,670 square miles					
Latitude: 351334		Longitude: 930858							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	73	601.11	423	543	728	0	--	--	--
pH, standard units	126	7.93	7.8	7.9	8.1	66	0.01	0.11	0.567 F
Oxygen dis., mg/L	140	9.57	7.3	9.6	11.7	71	-0.01	-0.07	0.864 F
BOD, 5-day, mg/L	125	2.24	1.5	2.0	2.6	66	-0.03	-1.42	0.357 F
Fecal coli., c/100 mL	116	210.40	20	98	230	0	--	--	--
Hardness tot., mg/L	71	121.31	96	130	150	0	--	--	--
Alkalinity tot., mg/L	17	86.94	75	89	98	9	--	--	--
Sulfate dis., mg/L ***	101	e 47.19	37	47	57	101	0.40	0.85	0.455 U
Chloride dis., mg/L	127	105.30	66	90	140	64	1.09	1.04	0.336 F
ROE, mg/L	94	364.06	280	369	441	0	--	--	--
TSS, mg/L	129	25.84	14	19	32	66	-0.13	-0.51	0.546 F
NO2 + NO3 tot., mg/L	78	e 0.36	0.17	0.33	0.57	78	--	--	--
Orthop tot., mg/L	69	e 0.04	0.010	0.030	0.070	69	--	--	--

Table 4.---Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07258500		Station name: Petit Jean River near Booneville, Ark.				Longitude: 935525		Drainage area: 241 square miles	
Latitude: 350625									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	62	102.48	76	96	121	0	--	--	--
pH, standard units	136	7.10	6.9	7.1	7.3	68	-0.01	-0.12	0.414 F
Oxygen dis., mg/L	132	8.12	6.0	8.1	10.3	67	-0.03	-0.34	0.805 F
BOD, 5-day, mg/L	120	2.31	1.3	2.0	3.0	67	0.00	-0.02	1.000 F
Fecal coli., c/100 mL	122	244.80	30	80	190	66	-3.26	-1.33	0.205 F
Hardness tot., mg/L	72	28.76	23	28	34	37	-0.20	-0.68	0.383 F
Alkalinity tot., mg/L	20	29.25	19	22	41	0	--	--	--
Sulfate dis., mg/L ***	94	e 11.30	8.0	11	14	94	0.00	0.00	0.784 U
Chloride dis., mg/L	123	6.85	5.5	6.5	8.0	65	-0.15	-2.20	0.015 F
ROE, mg/L	84	76.49	64	72	82	0	--	--	--
TSS, mg/L	133	23.64	9	14	25	69	0.19	0.79	0.574 F
NO2 + NO3 tot., mg/L	70	e 0.15	0.04	0.08	0.18	70	--	--	--
OrthoP tot., mg/L	70	e 0.02	0.010	0.010	0.030	70	--	--	--

Station number: 07259001		Station name: Petit Jean River near Waveland, Ark.				Drainage area: 488 square miles				
Latitude: 350606		Longitude: 933902								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, μ S/cm	85	64.69	55	65	72	30	-0.93	-1.44	0.218	U
pH, standard units	85	6.95	6.7	7.0	7.2	0	--	--	--	
Oxygen dis., mg/L	85	9.21	7.4	8.8	11.0	30	0.00	0.00	1.000	U
BOD, 5-day, mg/L	28	1.82	1.3	1.6	2.1	0	--	--	--	--
Hardness tot., mg/L	33	19.88	15	19	24	0	--	--	--	--
Calcium dis., mg/L	19	4.14	3.2	3.7	4.7	0	--	--	--	--
Magnesium dis., mg/L	19	2.31	1.9	2.3	2.6	0	--	--	--	--
Alkalinity tot., mg/L	26	16.50	14	17	19	0	--	--	--	--
Sulfate dis., mg/L ***	19	e 8.04	7.7	8.2	9.2	19	--	--	--	--
Chloride dis., mg/L	27	3.77	2.9	3.9	5.0	0	--	--	--	--
NO2 + NO3 tot., mg/L	34	e 0.16	0.05	0.15	0.23	34	0.00	0.00	0.875	U
OrthoP tot., mg/L	34	e 0.04	0.010	0.020	0.050	34	0.00	-9.40	0.116	U

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07260660		Station name: Arkansas River at Dam No. 9 near Oppelo, Ark.				Drainage area: 154,949 square miles				
Latitude: 350726		Longitude: 924711								
Water-quality property or constituent		Descriptive statistics				Best trend results				
		Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	68	580.06	423	7.7	528	691	0	--	--	--
pH, standard units	136	7.95		8.0		8.2	71	0.01	0.13	0.608 F
Oxygen dis., mg/L	137	9.59		8.0		9.4	71	0.00	0.03	0.955 F
BOD, 5-day, mg/L	134	2.11		1.5		1.9	70	-0.02	-0.82	0.503 F
Fecal coli., c/100 mL	129	78.65		5		28	67	-5.51	-7.00	0.009 F
Hardness tot., mg/L	74	122.24		98		130	40	2.00	1.64	0.110 F
Alkalinity tot., mg/L	20	86.65		75		86	0	--	--	--
Sulfate dis., mg/L ***	101	e 44.85		34		45	101	0.25	0.56	0.568 U
Chloride dis., mg/L	129	105.57		64		91	65	1.24	1.17	0.497 F
ROE, mg/L	94	350.16		268		359	0	--	--	--
TSS, mg/L	138	27.60		15		22	71	-0.51	-1.86	0.171 F
NO2 + NO3 tot., mg/L	78	e 0.33		0.11		0.33	78	--	--	--
OrthoP tot., mg/L	69	e 0.04		0.010		0.030	69	--	--	--
						0.070	78	--	--	--

Station number: 07261260		Station name: Arkansas River at Toad Suck Ferry Dam near Conway, Ark.		Drainage area: 156,386 square miles					
Latitude: 350430		Longitude: 923206							
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p
Conductance, μ S/cm	59	543.49	348	504	711	0	--	--	--
pH, standard units	125	7.85	7.6	7.9	8.1	64	0.00	0.01	0.868
Oxygen dis., mg/L	125	9.68	8.4	9.4	10.9	65	0.02	0.16	0.820
BOD, 5-day, mg/L	121	2.04	1.5	2.0	2.5	65	-0.06	-2.77	0.064
Fecal coli., c/100 mL	123	94.72	5	33	130	66	0.09	0.09	1.000
Hardness tot., mg/L	71	109.72	80	110	140	0	--	--	--
Alkalinity tot., mg/L	17	78.94	62	82	97	9	--	--	--
Sulfate dis., mg/L ***	100	e 40.53	31	39	52	100	0.50	1.23	0.313
Chloride dis., mg/L	127	96.50	52	83	130	63	0.92	0.95	0.611
ROE, mg/L	94	330.53	233	336	405	0	--	--	--
TSS, mg/L	129	29.88	16	24	39	65	-0.76	-2.53	0.074
NO2 + NO3 tot., mg/L	78	e 0.36	0.14	0.37	0.54	78	--	--	--
OrthoP tot., mg/L	68	e 0.04	0.010	0.030	0.070	68	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07261500		Station name: Fourche LaPave River near Gravelly, Ark.				Drainage area: 410 square miles			
Latitude: 345221		Longitude: 933924							
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code

Conductance, $\mu\text{S}/\text{cm}$	67	49.67	40	46	57	0	--	--	--
pH, standard units	127	6.96	6.8	7.0	7.2	68	0.01	0.11	0.229 F
Oxygen dis., mg/L	131	9.51	8.2	9.2	11.0	68	-0.04	-0.41	0.397 F
BOD, 5-day, mg/L	119	1.58	1.1	1.4	2.0	65	-0.06	-3.82	0.019 F
Fecal coli., c/100 mL	128	51.70	3	16	54	66	0.75	1.45	0.138 F
Hardness tot., mg/L	70	18.53	13	16	21	44	0.07	0.37	0.866 F
Alkalinity tot., mg/L	20	15.00	9	14	22	0	--	--	--
Sulfate dis., mg/L ***	95	e 5.07	3.0	5.0	6.0	95	0.17	3.29	0.020 U
Chloride dis., mg/L	121	4.95	4.0	4.5	5.5	65	-0.14	-2.93	0.000 F
ROE, mg/L	90	42.67	37	42	47	0	--	--	--
TSS, mg/L	129	7.81	4	6	9	68	-0.17	-2.16	0.079 F
NO2 + NO3 tot., mg/L	71	e 0.11	0.03	0.08	0.16	71	--	--	--
OrthoP tot., mg/L	61	e 0.02	e 0.010	0.010	0.020	61	--	--	--

Station number: 07262500		Station name: Fourche LaPave River near Nimrod, Ark.				Longitude: 930916		Drainage area: 684 square miles	
Latitude: 345702									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	83	39.11	32	39	44	0	--	--	--
pH, standard units	86	6.78	6.5	6.7	7.0	0	--	--	--
Oxygen dis., mg/L	86	9.00	7.4	8.8	10.4	0	--	--	--
BOD, 5-day, mg/L	28	1.96	1.3	1.9	2.4	0	--	--	--
Hardness tot., mg/L	33	13.42	9	11	16	0	--	--	--
Calcium dis., mg/L	19	2.56	1.6	1.9	2.7	0	--	--	--
Magnesium dis., mg/L	19	1.31	1.0	1.4	1.6	0	--	--	--
Alkalinity tot., mg/L	27	11.99	7	12	16	0	--	--	--
Sulfate dis., mg/L ***	17	e 3.41	1.2	3.0	4.0	17	--	--	--
Chloride dis., mg/L	26	2.52	2.1	2.5	3.1	0	--	--	--
NO2 + NO3 tot., mg/L	34	e 0.08	0.02	0.07	0.12	34	0.00	0.00	0.587 U
OrthoP tot., mg/L	34	e 0.02	e 0.010	0.010	0.030	34	0.00	-8.65	0.137 U

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07263450		Station name: Arkansas River at Murray Dam at Little Rock, Ark.								
Latitude: 344727		Longitude: 922132		Drainage area: 158,030 square miles						
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, mS/cm	96	501.59	347	491	617	55	-1.21	-0.24	0.967	U
pH, standard units	128	7.87	7.6	7.9	8.1	70	-0.01	-0.07	0.330	U
Oxygen dis., mg/L	131	9.72	8.2	9.1	11.2	69	0.06	0.64	0.095	U
BOD, 5-day, mg/L	128	1.85	1.3	1.6	2.3	69	0.00	0.00	0.719	U
Fecal coli., c/100 mL	124	68.38	5	16	80	69	-0.25	-0.37	0.385	U
Hardness tot., mg/L	74	110.47	82	120	140	46	0.00	0.00	0.843	U
Alkalinity tot., mg/L	18	84.83	70	82	101	0	--	--	--	--
Sulfate dis., mg/L ***	96	e 40.33	30	40	50	96	0.69	1.71	0.378	U
Chloride dis., mg/L	117	88.09	47	76	120	64	-0.03	-0.03	0.842	U
ROE, mg/L	87	311.94	213	295	410	0	--	--	--	--
TSS, mg/L	130	26.04	13	20	32	68	-0.13	-0.48	0.670	U
NO2 + NO3 tot., mg/L	77	e 0.32	0.08	0.32	0.52	77	--	--	--	--
Orthop tot., mg/L	64	e 0.04	0.010	0.030	0.060	64	--	--	--	--

Station number: 07263620		Station name: Arkansas River at David D. Terry Lock and Dam below Little Rock, Ark.								
Latitude: 344007		Longitude: 920918		Drainage area: 158,288 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
Conductance, µS/cm	112	537.99	373	518	681	71	5.44	1.01	0.493	F
pH, standard units	111	7.90	7.7	7.9	8.1	71	0.05	0.57	0.000	F
Oxygen dis., mg/L	105	9.31	7.4	9.0	10.8	70	0.04	0.47	0.109	F
Fecal coli., c/100 mL	23	1,394.48	420	1,100	1,500	12	--	--	--	--
Hardness tot., mg/L	110	114.20	90	120	140	70	1.07	0.94	0.367	F
Calcium dis., mg/L	110	32.94	26	35	40	70	0.26	0.80	0.337	F
Magnesium dis., mg/L	111	7.70	6.3	7.7	9.1	70	0.06	0.79	0.467	F
Sodium dis., mg/L	111	60.70	37	55	78	70	0.79	1.31	0.503	F
Potassium dis., mg/L	111	3.37	2.8	3.4	3.9	71	0.00	0.01	1.000	F
Alkalinity tot., mg/L	82	79.71	65	81	94	47	0.23	0.29	0.755	F
Chloride dis., mg/L	112	92.30	52	84	120	71	0.68	0.73	0.608	F
ROE, mg/L	111	298.05	215	291	368	71	4.03	1.35	0.231	F
NO2 + NO3 tot., mg/L	81	e 0.27	0.11	0.25	0.43	81	--	--	--	--
Iron dis., µg/L	48	e 46.91	20	31	70	48	0.00	0.00	0.875	U
Manganese dis., µg/L	48	e 10.02	e 10	4	12	48	0.00	0.00	0.118	U
Sediment susp., mg/L	105	47.30	20	29	47	69	-0.55	-1.16	0.635	U
Sed. susp., %f.t. 62µm	106	71.83	57	77	90	70	-2.96	-4.13	0.000	F

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07265099		Station name: Bayou Meto near Bayou Meto, Ark.		Longitude: 913145		Drainage area: 794 square miles				
Latitude: 341205										
		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	64	195.14	104	160	253	0	--	--	--	--
pH, standard units	128	7.20	6.9	7.2	7.4	60	-0.01	-0.19	0.171	F
Oxygen dis., mg/L	130	6.30	4.7	6.0	7.9	59	0.04	0.58	0.459	F
BOD, 5-day, mg/L	121	2.36	1.7	2.2	2.8	57	0.05	2.31	0.374	F
Fecal coli., c/100 mL	124	115.33	20	64	130	59	-1.47	-1.28	0.740	F
Hardness tot., mg/L	75	69.36	38	49	92	47	-0.38	-0.55	0.796	U
Magnesium dis., mg/L	10	7.04	3.0	7.0	11	9	--	--	--	--
Alkalinity tot., mg/L	20	50.45	27	41	77	0	--	--	--	--
Sulfate dis., mg/L ***	95	e 10.99	7.0	10	14	95	0.67	6.07	0.015	U
Chloride dis., mg/L	120	19.36	11	16	26	56	-0.19	-0.97	0.379	F
ROE, mg/L	86	167.28	133	155	188	0	--	--	--	--
TSS, mg/L	121	45.56	23	36	60	59	-0.54	-1.19	0.554	F
NO2 + NO3 tot., mg/L	73	e 0.24	0.15	0.23	0.32	73	--	--	--	--
OrthoP tot., mg/L	62	e 0.13	0.070	0.110	0.190	62	--	--	--	--

Station number: 07265283

Latitude: 335920

Station name: Arkansas River at Dam No. 2 near Gillett, Ark.

Longitude: 911847

Drainage area: 160,475 square miles

		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	101	522.92	388	505	625	65	9.13	1.75	0.223	F
pH, standard units	100	7.85	7.7	7.9	8.0	65	0.01	0.12	0.200	F
Oxygen dis., mg/L	97	9.23	7.8	8.8	10.5	64	0.00	0.00	1.000	F
BOD, 5-day, mg/L	45	1.84	1.3	1.6	2.2	0	--	--	--	--
Fecal coli., c/100 mL	41	167.12	10	50	190	0	--	--	--	--
Hardness tot., mg/L	69	111.58	81	120	140	58	0.75	0.67	0.277	U
Calcium dis., mg/L	64	32.11	24	34	39	37	0.77	2.40	0.036	F
Magnesium dis., mg/L	65	7.86	5.6	7.7	9.4	54	0.10	1.27	0.267	U
Sodium dis., mg/L	55	62.76	41	56	82	0	--	--	--	--
Potassium dis., mg/L	55	3.49	2.8	3.2	4.0	0	--	--	--	--
Alkalinity tot., mg/L	44	75.57	58	74	97	14	1.45	1.92	0.339	F
Chloride dis., mg/L	95	89.64	57	78	110	62	1.25	1.40	0.273	F
ROE, mg/L	67	302.49	213	286	378	0	--	--	--	--
TSS, mg/L	43	34.44	23	29	45	0	--	--	--	--
NO2 + NO3 tot., mg/L	38	e 0.41	0.17	0.42	0.51	38	--	--	--	--
Iron dis., μ g/L	28	e 87.93	20	60	140	28	--	--	--	--
Manganese dis., μ g/L	28	e 17.05	4	8	24	28	--	--	--	--
Sediment susp., mg/L	52	52.85	15	41	77	0	--	--	--	--
Sed. susp., %f.t. 62 μ m	53	68.15	57	74	85	0	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07265450		Station name: Mississippi River near Arkansas City, Ark.				Longitude: 911415				Drainage area: 1,130,600 square miles			
Latitude: 333327													
		Descriptive statistics				Best trend results							
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, $\mu\text{S}/\text{cm}$	104	395.07	350	399	439	44	1.83	0.46	0.508	F			
pH, standard units	104	7.83	7.7	7.9	8.0	64	0.02	0.27	0.035	U			
Oxygen dis., mg/L	70	8.82	7.2	8.1	10.4	0	--	--	--	--			
Fecal coli., c/100 mL	21	957.62	320	750	1,700	11	--	--	--	--			
Hardness tot., mg/L	104	146.29	130	140	160	44	1.13	0.77	0.173	F			
Calcium dis., mg/L	104	38.88	36	39	42	44	0.19	0.49	0.330	F			
Magnesium dis., mg/L	104	11.88	10	12	13	44	0.13	1.12	0.094	F			
Sodium dis., mg/L	104	20.39	15	20	24	44	0.17	0.86	0.508	F			
Potassium dis., mg/L	104	3.03	2.7	3.0	3.4	44	-0.01	-0.27	0.726	F			
Alkalinity tot., mg/L	78	101.28	91	101	110	31	1.27	1.26	0.398	U			
Chloride dis., mg/L	103	21.09	16	20	24	43	0.10	0.46	0.841	F			
ROE, mg/L	103	234.99	208	234	263	44	3.53	1.50	0.018	F			
NO2 + NO3 tot., mg/L	82	e 1.18	0.84	1.2	1.4	82	--	--	--	--			
Iron dis., $\mu\text{g}/\text{L}$	45	e 38.83	14	22	40	45	0.00	0.00	0.610	U			
Manganese dis., $\mu\text{g}/\text{L}$	45	e 11.34	1	6	11	45	0.00	0.00	1.000	U			
Sediment susp., mg/L	99	169.16	97	145	194	33	-1.28	-0.76	0.653	F			
Sed. susp., %f.t. 62 μm	99	84.72	78	90	96	33	0.09	0.11	0.928	F			

Station number: 07336860		Station name: Red River near Foreman, Ark.				Longitude: 942439				Drainage area: 47,648 square miles			
Latitude: 333412													
		Descriptive statistics				Best trend results							
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, $\mu\text{S}/\text{cm}$	66	1,078.58	526	1,120	1,540	0	--	--	--	--			
pH, standard units	134	8.01	7.9	8.0	8.2	70	0.00	0.02	0.600	F			
Oxygen dis., mg/L	132	9.08	7.8	8.7	10.4	71	-0.01	-0.12	0.732	F			
BOD, 5-day, mg/L	131	3.01	2.1	3.0	3.9	71	-0.01	-0.31	0.690	F			
Fecal coli., c/100 mL	125	197.57	16	50	180	69	-2.55	-1.29	0.476	F			
Hardness tot., mg/L	71	210.54	150	210	280	45	-3.23	-1.53	0.598	F			
Alkalinity tot., mg/L	20	120.05	110	127	135	0	--	--	--	--			
Sulfate dis., mg/L ***	100	e 115.26	73	97	140	100	-2.00	-1.74	0.469	U			
Chloride dis., mg/L	126	160.85	72	150	240	68	-2.08	-1.29	0.524	F			
ROE, mg/L	89	563.74	338	546	738	0	--	--	--	--			
TSS, mg/L	138	130.01	39	74	158	71	-0.95	-0.73	0.608	F			
NO2 + NO3 tot., mg/L	79	e 0.16	0.02	0.16	0.28	79	--	--	--	--			
OrthoP tot., mg/L	65	e 0.03	0.010	0.020	0.050	65	--	--	--	--			

Station number: 07336860		Station name: Red River near Foreman, Ark.		Longitude: 942439		Drainage area: 47,648 square miles			
Latitude: 333412		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	66	1,078.58	526	1,120	1,540	0	--	--	--
pH, standard units	134	8.01	7.9	8.0	8.2	70	0.00	0.02	0.600 F
Oxygen dis., mg/L	132	9.08	7.8	8.7	10.4	71	-0.01	-0.12	0.732 F
BOD, 5-day, mg/L	131	3.01	2.1	3.0	3.9	71	-0.01	-0.31	0.690 F
Fecal coli., c/100 mL	125	197.57	16	50	180	69	-2.55	-1.29	0.476 F
Hardness tot., mg/L	71	210.54	150	210	280	45	-3.23	-1.53	0.598 F
Alkalinity tot., mg/L	20	120.05	110	127	135	0	--	--	--
Sulfate dis., mg/L ***	100	e 115.26	73	97	140	100	-2.00	-1.74	0.469 U
Chloride dis., mg/L	126	160.85	72	150	240	68	-2.08	-1.29	0.524 F
ROE, mg/L	89	563.74	338	546	738	0	--	--	--
TSS, mg/L	138	130.01	39	74	158	71	-0.95	-0.73	0.608 F
NO2 + NO3 tot., mg/L	79	e 0.16	0.02	0.16	0.28	79	--	--	--
OrthoP tot., mg/L	65	e 0.03	0.010	0.020	0.050	65	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07340000		Station name: Little River near Horatio, Ark.		Longitude: 942315		Drainage area: 2,662 square miles					
Latitude: 335510											
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results					
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm		74	67.43	51	60	82	0	--	--	--	--
pH, standard units		144	6.92	6.7	6.9	7.1	71	0.01	0.07	0.493	F
Oxygen dis., mg/L		143	8.86	7.4	8.4	10.2	72	0.02	0.21	0.417	F
BOD, 5-day, mg/L		132	1.46	1.0	1.4	1.8	72	-0.07	-4.48	0.001	F
Fecal coli., c/100 mL		131	147.98	12	28	110	68	-4.89	-3.30	0.002	F
Hardness tot., mg/L		82	20.99	16	20	26	0	--	--	--	--
Alkalinity tot., mg/L		19	16.42	14	15	19	0	--	--	--	--
Sulfate dis., mg/L ***		110	e 7.14	5.0	6.0	8.0	110	0.00	0.00	0.376	U
Chloride dis., mg/L		135	8.93	5.0	7.5	13	68	0.18	1.96	0.172	F
ROE, mg/L		89	58.82	47	60	70	0	--	--	--	--
TSS, mg/L		147	17.97	6	11	22	71	-0.23	-1.27	0.209	F
NO2 + NO3 tot., mg/L		91	e 0.20	0.14	0.19	0.25	91	--	--	--	--
OrthoP tot., mg/L		66	e 0.03	0.010	0.020	0.050	66	--	--	--	--

Station number: 07341301		Station name: Little River at Millwood Dam near Ashdown, Ark.		Longitude: 935753		Drainage area: 4,119 square miles					
Latitude: 334128											
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results					
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm		91	63.19	55	64	70	0	--	--	--	--
pH, standard units		89	7.15	6.9	7.1	7.4	0	--	--	--	--
Oxygen dis., mg/L		99	9.79	8.0	9.1	11.2	0	--	--	--	--
Hardness tot., mg/L		54	19.52	17	19	23	0	--	--	--	--
Calcium dis., mg/L		48	5.81	4.9	5.6	6.9	0	--	--	--	--
Magnesium dis., mg/L		47	1.33	1.2	1.3	1.5	0	--	--	--	--
Sodium dis., mg/L		45	4.25	3.1	4.1	5.0	0	--	--	--	--
Potassium dis., mg/L		46	1.37	1.2	1.4	1.5	0	--	--	--	--
Alkalinity tot., mg/L		32	18.56	14	18	24	9	--	--	--	--
Chloride dis., mg/L		53	5.15	3.8	4.8	6.3	0	--	--	--	--
ROE, mg/L		46	51.74	44	50	57	0	--	--	--	--
NO2 + NO3 tot., mg/L		33	e 0.13	0.02	0.06	0.20	33	--	--	--	--
OrthoP tot., mg/L		10	e 0.03	e 0.010	0.010	0.050	10	--	--	--	--
Iron dis., μ g/L		29	e 160.45	50	160	210	29	--	--	--	--
Manganese dis., μ g/L		29	e 36.56	4	12	36	29	--	--	--	--
Sediment susp., mg/L		44	21.59	11	16	23	0	--	--	--	--
Sed. susp., $\frac{1}{8}$ ft. 62 μ m		45	67.04	56	68	83	0	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07344275			Station name: Sulphur River south of Texarkana, Ark.				Longitude: 935958				Drainage area: 3,540 square miles			
Latitude: 331432														
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results							
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, μ S/cm		126	253.88	190	216	299	60	8.15	3.21	0.041	U			
pH, standard units		124	7.46	7.2	7.5	7.7	58	0.05	0.67	0.007	U			
Oxygen dis., mg/L		122	6.96	5.0	7.1	8.5	60	0.12	1.68	0.149	U			
BOD, 5-day, mg/L		44	2.43	1.6	2.0	3.1	0	--	--	--	--			
Fecal coli., c/100 mL		41	116.61	13	27	130	0	--	--	--	--			
Hardness tot., mg/L		57	75.86	62	76	86	18	0.71	0.93	0.338	F			
Calcium dis., mg/L		51	24.62	21	25	28	15	0.47	1.92	0.181	F			
Magnesium dis., mg/L		52	3.04	2.5	2.9	3.5	15	0.01	0.23	0.849	F			
Sodium dis., mg/L		41	20.96	11	14	22	0	--	--	--	--			
Potassium dis., mg/L		43	3.70	3.2	3.6	4.2	0	--	--	--	--			
Alkalinity tot., mg/L		37	63.54	54	64	72	14	1.00	1.57	0.595	U			
Chloride dis., mg/L		78	25.50	12	18	27	54	-0.25	-0.98	0.644	U			
ROE, mg/L		53	170.77	130	150	191	0	--	--	--	--			
TSS, mg/L		45	61.84	30	46	95	0	--	--	--	--			
NO ₂ + NO ₃ tot., mg/L		36	e 0.11	0.01	0.08	0.19	36	--	--	--	--			
Iron dis., μ g/L		30	e 199.13	56	130	240	30	-30.63	-15.38	0.018	U			
Manganese dis., μ g/L		29	e 72.72	10	30	120	29	--	--	--	--			
Sediment susp., mg/L		44	62.80	30	53	79	0	--	--	--	--			
Sed. susp., %f.t. 62 μ m		45	69.53	54	78	88	0	--	--	--	--			

Station number: 07344300			Station name: Days Creek southeast of Texarkana, Ark.				Longitude: 940016				Drainage area: 78.5 square miles			
Latitude: 331906														
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results							
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, μ S/cm		108	877.54	387	602	1,060	57	-7.95	-0.91	0.308	F			
pH, standard units		137	7.26	7.1	7.3	7.5	70	0.01	0.08	0.485	F			
Oxygen dis., mg/L		134	5.15	3.6	5.2	6.7	71	-0.09	-1.82	0.060	F			
BOD, 5-day, mg/L		110	10.86	7.0	10	13	68	-0.06	-0.59	0.506	F			
Fecal coli., c/100 mL		111	819.79	44	220	600	67	-0.44	-0.05	0.975	F			
Hardness tot., mg/L		74	109.77	58	74	91	47	-0.38	-0.35	0.591	F			
Alkalinity tot., mg/L		20	84.95	38	93	118	0	--	--	--	--			
Sulfate dis., mg/L ***		101	e 32.34	24	31	39	101	-0.63	-1.96	0.304	U			
Chloride dis., mg/L		127	184.25	52	96	170	68	-4.28	-2.32	0.039	F			
ROE, mg/L		89	443.57	193	265	435	0	--	--	--	--			
TSS, mg/L		136	23.58	14	19	28	71	-0.70	-2.95	0.035	F			
NO ₂ + NO ₃ tot., mg/L		81	e 0.31	0.10	0.23	0.47	81	--	--	--	--			
OrthoP tot., mg/L		63	e 1.14	0.390	0.940	1.80	63	--	--	--	--			

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07344350		Station name: Red River near Spring Bank, Ark.				Longitude: 935138		Drainage area: 56,909 square miles				Latitude: 330529	
Water-quality property or constituent		Sample size		Descriptive statistics			Best trend results						
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, μ S/cm	105	694.43	361	600	1,060	60	-7.63	-1.10	0.290	F			
pH, standard units	129	7.85	7.7	7.9	8.0	70	0.00	0.01	0.954	F			
Oxygen dis., mg/L	133	8.60	7.7	8.4	9.5	72	0.02	0.22	0.520	F			
BOD, 5-day, mg/L	131	2.71	1.8	2.6	3.4	72	0.05	1.93	0.053	F			
Fecal coli., c/100 mL	124	97.02	13	36	100	69	-0.53	-0.54	0.790	F			
Hardness tot., mg/L	73	143.89	90	120	190	47	-3.07	-2.13	0.243	F			
Alkalinity tot., mg/L	19	98.26	49	98	120	0	--	--	--	--			
Sulfate dis., mg/L ***	100	e 67.59	33	52	88	100	-2.25	-3.33	0.286	U			
Chloride dis., mg/L	127	102.94	36	70	140	68	-2.02	-1.96	0.213	F			
ROE, mg/L	90	381.94	214	288	474	0	--	--	--	--			
TSS, mg/L	130	113.90	42	70	131	71	-1.29	-1.13	0.424	F			
NO2 + NO3 tot., mg/L	78	e 0.20	0.11	0.21	0.28	78	--	--	--	--			
OrthoP tot., mg/L	66	e 0.05	0.020	0.040	0.090	66	--	--	--	--			

Station number: 07348650		Station name: Bayou Dorcheat near Taylor, Ark.				Longitude: 932253		Drainage area: 389 square miles				Latitude: 330553	
Water-quality property or constituent		Sample size		Descriptive statistics			Best trend results						
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code			
Conductance, μ S/cm	48	237.60	154	236	301	0	--	--	--	--			
pH, standard units	105	6.26	5.8	6.3	6.7	62	-0.06	-1.02	0.000	F			
Oxygen dis., mg/L	105	6.48	4.8	6.3	8.3	61	-0.02	-0.34	0.649	F			
BOD, 5-day, mg/L	103	1.63	1.0	1.4	2.0	59	0.06	3.74	0.013	F			
Fecal coli., c/100 mL	102	134.74	36	66	150	62	-2.46	-1.83	0.100	F			
Hardness tot., mg/L	67	41.40	30	38	52	42	0.96	2.33	0.079	F			
Calcium dis., mg/L	10	8.77	5.0	8.0	12	10	--	--	--	--			
Magnesium dis., mg/L	10	3.34	2.0	3.0	4.0	10	--	--	--	--			
Alkalinity tot., mg/L	14	13.86	7	13	21	9	--	--	--	--			
Sulfate dis., mg/L ***	69	e 9.36	6.0	8.0	10	69	-0.16	-1.74	0.468	U			
Chloride dis., mg/L	105	58.79	37	52	76	59	-0.21	-0.36	0.554	F			
ROE, mg/L	64	175.05	128	167	206	0	--	--	--	--			
TSS, mg/L	110	12.80	6	10	16	62	-0.02	-0.13	0.891	F			
NO2 + NO3 tot., mg/L	67	e 0.08	0.02	0.05	0.10	67	--	--	--	--			
OrthoP tot., mg/L	62	e 0.03	0.010	0.020	0.030	62	--	--	--	--			

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07349440		Station name: Bodcau Creek near Lewisville, Ark.					Longitude: 933300		Drainage area: Unknown		
Latitude: 331536											
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	52	188.92	107	155	220	0	--	--	--	--	
pH, standard units	123	6.31	6.0	6.3	6.6	65	-0.02	-0.33	0.109	U	
Oxygen dis., mg/L	122	6.35	4.8	5.9	7.8	65	-0.02	-0.26	0.721	U	
BOD, 5-day, mg/L	117	1.63	1.0	1.5	2.2	64	0.05	3.28	0.089	U	
Fecal coli., c/100 mL	119	117.59	20	56	130	65	-3.42	-2.91	0.152	U	
Hardness tot., mg/L	71	35.52	24	32	42	43	-0.14	-0.40	0.818	U	
Alkalinity tot., mg/L	15	9.33	6	9	11	9	--	--	--	--	
Sulfate dis., mg/L ***	86	e 8.50	6.0	8.0	11	86	0.25	2.94	0.153	U	
Chloride dis., mg/L	120	51.99	26	41	67	62	-0.31	-0.60	0.508	U	
ROE, mg/L	75	153.44	107	139	181	0	--	--	--	--	
TSS, mg/L	122	14.96	6	11	17	65	-0.39	-2.59	0.160	U	
NO2 + NO3 tot., mg/L	67	e 0.09	0.03	0.07	0.13	67	--	--	--	--	
OrthoP tot., mg/L	69	e 0.05	0.030	0.050	0.070	69	--	--	--	--	

Station number: 07356000		Station name: Ouachita River near Mount Ida, Ark.		Longitude: 934150		Drainage area: 414 square miles				
Latitude: 343636		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	98	60.70	46	58	71	52	0.14	0.23	0.502	F
pH, standard units	120	7.11	6.9	7.1	7.4	64	-0.02	-0.24	0.136	F
Oxygen dis., mg/L	124	9.24	8.0	9.1	10.5	65	0.02	0.17	0.627	F
BOD 5-day, mg/L	119	1.73	1.1	1.6	2.3	64	-0.08	-4.39	0.019	F
Fecal coli., c/100 mL	111	163.41	20	40	120	64	-2.24	-1.37	0.068	F
Hardness tot., mg/L	70	23.80	18	22	28	37	0.31	1.31	0.400	F
Calcium dis., mg/L	10	7.45	5.0	6.3	11	9	--	--	--	--
Magnesium dis., mg/L	10	2.12	1.0	1.0	3.0	9	--	--	--	--
Alkalinity tot., mg/L	17	23.06	15	23	30	9	--	--	--	--
Sulfate dis., mg/L ***	83	e 4.60	3.0	5.0	6.0	83	0.25	5.43	0.044	U
Chloride dis., mg/L	116	4.16	3.5	4.0	5.0	62	-0.14	-3.47	0.002	F
ROE, mg/L	76	44.70	37	45	50	0	--	--	--	--
TSS, mg/L	121	8.15	3	5	9	65	-0.43	-5.30	0.001	F
NO2 + NO3 tot., mg/L	72	e 0.27	0.04	0.17	0.30	72	--	--	--	--
OrthoP tot., mg/L	66	e 0.02	e 0.010	0.010	0.030	66	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07358501		Station name: Ouachita River at Carpenter Dam near Hot Springs, Ark.		Drainage area: 1,459 square miles	
Latitude: 342636		Longitude: 930124			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	67	58.63	53	57	
pH, standard units	127	6.99	6.8	7.0	
Oxygen dis., mg/L	130	8.39	5.9	8.5	
BOD, 5-day, mg/L	123	1.89	1.2	1.6	
Fecal coli., c/100 mL	117	45.24	4	20	
Hardness tot., mg/L	67	23.84	20	24	
Alkalinity tot., mg/L ***	20	21.90	19	22	
Sulfate dis., mg/L	94	e 4.55	3.0	4.0	
Chloride dis., mg/L	121	3.95	3.5	4.0	
ROE, mg/L	83	40.01	35	40	
TSS, mg/L	127	5.24	3	4	
NO ₂ + NO ₃ tot., mg/L	66	e 0.14	0.11	0.14	
OrthoP tot., mg/L	61	e 0.02	e 0.010	e 0.010	
		Best trend results			Trend code
		Units per year	Percent per year	N	
		0	--	59	F
		0.00	0.00	58	F
		0.02	0.25	57	F
		-0.07	-3.86	57	F
		-0.21	-0.47	29	F
		0.20	0.85	0	F
		--	--	94	U
		-0.13	-3.16	66	U
		--	--	0	--
		-0.01	-0.14	57	F
		--	--	66	--
		--	--	61	--

Station number: 07359500		Station name: Ouachita River near Malvern, Ark.		Drainage area: 1,585 square miles	
Latitude: 342310		Longitude: 925020			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	98	122.38	75	103	
pH, standard units	120	7.00	6.9	7.0	
Oxygen dis., mg/L	123	9.06	7.6	9.2	
BOD, 5-day, mg/L	118	2.38	1.1	1.9	
Fecal coli., c/100 mL	126	59.10	4	18	
Hardness tot., mg/L	65	31.75	24	30	
Alkalinity tot., mg/L	19	24.47	16	19	
Sulfate dis., mg/L ***	94	e 10.38	6.0	8.0	
Chloride dis., mg/L	121	13.03	5.5	12	
ROE, mg/L	85	67.99	47	59	
TSS, mg/L	118	8.48	4	6	
NO ₂ + NO ₃ tot., mg/L	72	e 0.29	0.15	0.20	
OrthoP tot., mg/L	64	e 0.02	0.010	0.010	
		Best trend results			Trend code
		Units per year	Percent per year	N	
		-8.62	-7.05	54	F
		0.00	0.04	23	F
		0.16	1.80	66	F
		0.10	4.37	65	F
		-1.23	-2.08	66	F
		-0.84	-2.63	35	F
		--	--	0	--
		-0.63	-6.10	94	U
		-1.59	-12.20	66	F
		--	--	0	--
		-0.34	-4.05	66	F
		--	--	72	--
		--	--	64	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07359580		Station name: Ouachita River near Donaldson, Ark.		Longitude: 925732		Drainage area: 1,732 square miles		
Latitude: 341416								
Water-quality property or constituent		Descriptive statistics				Best trend results		
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	110.79	86	102	125	0	--	--	--
pH, standard units	6.94	6.8	7.0	7.1	66	0.00	-0.05	0.570 F
Oxygen dis., mg/L	8.93	7.6	8.6	9.9	67	0.10	1.09	0.009 F
BOD, 5-day, mg/L	1.95	1.0	1.6	2.6	66	0.08	4.25	0.014 F
Fecal coli., c/100 mL	122.49	15	36	150	65	-1.11	-0.91	0.518 F
Hardness tot., mg/L	29.22	23	27	33	45	-0.61	-2.07	0.152 F
Alkalinity tot., mg/L	17.50	16	18	20	0	--	--	--
Sulfate dis., mg/L ***	e 11.24	5.0	8.0	14	94	-1.00	-8.90	0.004 U
Chloride dis., mg/L	10.91	5.5	9.8	15	65	-0.85	-7.76	0.000 F
ROE, mg/L	59.02	46	55	71	0	--	--	--
TSS, mg/L	12.75	5	9	15	69	-0.72	-5.65	0.000 F
NO2 + NO3 tot., mg/L	e 0.29	0.16	0.21	0.36	70	--	--	--
OrthoP tot., mg/L	e 0.02	e 0.010	0.010	0.030	63	--	--	--

Station number: 07359770		Station name: Caddo River near Amity, Ark.		Longitude: 932500		Drainage area: 291 square miles		
Latitude: 341712								
Water-quality property or constituent		Descriptive statistics				Best trend results		
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	87.25	68	87	109	0	--	--	--
pH, standard units	7.44	7.2	7.4	7.7	61	-0.01	-0.13	0.385 F
Oxygen dis., mg/L	9.96	8.8	9.6	11.0	61	0.04	0.36	0.574 F
BOD, 5-day, mg/L	2.24	1.4	2.1	2.7	59	-0.07	-3.16	0.020 F
Fecal coli., c/100 mL	146.89	10	24	130	59	-2.14	-1.46	0.139 F
Hardness tot., mg/L	38.55	30	36	50	34	0.94	2.45	0.041 F
Alkalinity tot., mg/L	34.74	26	36	44	0	--	--	--
Sulfate dis., mg/L ***	e 6.02	4.0	6.0	8.0	97	0.33	5.53	0.001 U
Chloride dis., mg/L	3.98	3.5	4.0	4.5	61	-0.08	-1.97	0.058 F
ROE, mg/L	64.47	54	64	73	0	--	--	--
TSS, mg/L	9.79	3	5	8	62	-0.09	-0.91	0.537 F
NO2 + NO3 tot., mg/L	e 0.18	0.04	0.14	0.28	72	--	--	--
OrthoP tot., mg/L	e 0.02	e 0.010	0.010	0.030	65	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07360200		Station name: Little Missouri River near Langley, Ark.				Longitude: 935358		Drainage area: 68.4 square miles	
Latitude: 341841									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results			Trend code	
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year		Percent per year
Conductance, µS/cm	56	43.56	31	41	55	0	--	--	--
pH, standard units	110	7.05	6.8	7.1	7.4	58	0.00	0.00	0.560 U
Oxygen dis., mg/L	112	10.11	9.0	10.0	11.2	58	-0.01	-0.05	0.908 U
BOD, 5-day, mg/L	107	1.52	0.9	1.3	2.0	57	-0.13	-8.74	0.000 U
Fecal coli., c/100 mL	105	81.78	8	30	76	59	-0.38	-0.46	0.708 U
Hardness tot., mg/L	57	18.42	12	17	24	32	0.00	0.00	0.573 U
Alkalinity tot., mg/L	16	16.50	11	16	23	9	--	--	--
Sulfate dis., mg/L ***	75	e 3.66	2.0	3.0	5.0	75	0.15	4.23	0.096 U
Chloride dis., mg/L	104	3.38	2.5	3.5	4.0	56	-0.14	-4.22	0.000 U
ROE, mg/L	67	34.49	26	34	41	0	--	--	--
TSS, mg/L	111	3.00	1	2	4	59	-0.15	-5.00	0.012 U
NO2 + NO3 tot., mg/L	62	e 0.07	0.04	0.06	0.09	62	--	--	--
OrthoP tot., mg/L	56	e 0.02	e 0.010	0.010	0.020	56	--	--	--

Station number: 07361600		Station name: Little Missouri River near Boughton, Ark.				Longitude: 931816		Drainage area: 1,079 square miles	
Latitude: 335241									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results			Trend code	
Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year			
Conductance, µS/cm	65	77.49	60	78	89	0	--	--	--
pH, standard units	132	7.06	6.9	7.0	7.2	64	-0.01	-0.08	0.154 F
Oxygen dis., mg/L	134	9.14	8.0	8.9	10.2	64	-0.03	-0.38	0.529 F
BOD, 5-day, mg/L	133	1.48	0.9	1.2	1.9	63	-0.02	-1.18	0.564 F
Fecal coli., c/100 mL	126	151.21	20	49	150	63	-3.80	-2.51	0.137 F
Hardness tot., mg/L	72	30.53	22	28	36	46	0.67	2.18	0.052 U
Alkalinity tot., mg/L	19	18.26	15	18	23	0	--	--	--
Sulfate dis., mg/L ***	99	e 9.07	5.0	9.0	11	99	0.50	5.52	0.019 U
Chloride dis., mg/L	130	5.37	4.0	5.0	6.0	61	-0.21	-3.96	0.001 F
ROE, mg/L	91	66.24	50	63	74	0	--	--	--
TSS, mg/L	134	25.31	10	15	28	63	-1.31	-5.19	0.026 F
NO2 + NO3 tot., mg/L	79	e 0.19	0.14	0.18	0.24	79	--	--	--
OrthoP tot., mg/L	66	e 0.03	0.010	0.020	0.040	66	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07362000		Station name: Ouachita River at Camden, Ark.		Longitude: 924905		Drainage area: 5,357 square miles			
Latitude: 333547									
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	88.98	73	87	100	64	-1.61	-1.81	0.033	F
pH, standard units	7.11	6.9	7.1	7.4	48	0.03	0.36	0.080	F
Oxygen dis., mg/L	8.89	7.4	8.5	10.4	35	0.04	0.49	0.510	F
Fecal coli., c/100 mL	145.60	23	33	52	12	--	--	--	--
Hardness tot., mg/L	25.38	21	25	29	63	-0.51	-2.00	0.001	F
Calcium dis., mg/L	7.67	6.2	7.3	8.9	63	-0.18	-2.36	0.001	F
Magnesium dis., mg/L	1.51	1.3	1.5	1.7	63	-0.02	-1.00	0.059	F
Sodium dis., mg/L	5.65	4.0	5.4	6.6	63	-0.20	-3.52	0.002	F
Potassium dis., mg/L	1.54	1.2	1.5	1.7	63	-0.03	-1.90	0.031	F
Alkalinity tot., mg/L	16.14	13	16	18	50	0.06	0.38	0.887	F
Chloride dis., mg/L	9.03	5.6	7.9	12	63	-0.36	-4.03	0.006	F
ROE, mg/L	58.89	49	58	67	63	-1.08	-1.83	0.137	F
NO2 + NO3 tot., mg/L	e 0.28	0.15	0.23	0.36	80	--	--	--	--
Iron dis., μ g/L	e 214.09	100	160	260	47	10.00	4.67	0.232	U
Manganese dis., μ g/L	e 67.09	39	63	92	46	-3.54	-5.27	0.089	U
Sediment susp., mg/L	43.00	20	29	39	62	-1.07	-2.50	0.003	F
Sed. susp., $\%$ ft. 62 μ m	79.91	75	85	93	63	-0.07	-0.09	0.685	F

Station number: 07362110		Station name: Smackover Creek north of Smackover, Ark.		Longitude: 924309		Drainage area: 411 square miles			
Latitude: 332246									
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	892.45	464	696	1,260	57	-15.68	-1.76	0.308	F
pH, standard units	6.04	5.8	6.1	6.3	70	-0.03	-0.51	0.008	F
Oxygen dis., mg/L	7.12	5.5	6.7	8.9	70	0.09	1.19	0.211	F
BOD, 5-day, mg/L	1.57	0.9	1.2	2.0	69	0.04	2.30	0.225	F
Fecal coli., c/100 mL	113.08	15	44	110	69	-1.02	-0.90	0.766	F
Hardness tot., mg/L	105.79	62	97	150	46	-0.26	-0.24	0.917	F
Alkalinity tot., mg/L	8.29	5	7	12	0	--	--	--	--
Sulfate dis., mg/L ***	e 6.75	5.0	7.0	9.0	88	0.17	2.47	0.332	U
Chloride dis., mg/L	323.19	150	260	430	68	-3.52	-1.09	0.448	F
ROE, mg/L	648.16	381	628	826	0	--	--	--	--
TSS, mg/L	20.45	11	17	24	71	-0.48	-2.34	0.098	F
NO2 + NO3 tot., mg/L	e 0.08	0.03	0.06	0.10	76	--	--	--	--
OrthoP tot., mg/L	e 0.02	e 0.010	0.010	0.020	68	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07362550		Station name: Moro Creek near Banks, Ark.		Longitude: 921900		Drainage area: 385 square miles			
Latitude: 333238									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	67	68.30	48	62	86	0	--	--	--
pH, standard units	129	6.47	6.2	6.5	6.7	67	-0.02	-0.26	0.060 U
Oxygen dis., mg/L	127	7.06	5.4	6.9	8.7	56	-0.07	-0.97	0.402 F
BOD, 5-day, mg/L	117	1.89	1.2	1.6	2.4	55	0.01	0.66	0.843 F
Fecal coli., c/100 mL	119	165.90	42	80	170	55	0.85	0.51	0.907 F
Hardness tot., mg/L	74	22.41	16	20	26	0	--	--	--
Calcium dis., mg/L	15	4.25	3.0	4.0	5.0	15	--	--	--
Magnesium dis., mg/L	15	1.93	1.0	1.1	2.0	15	--	--	--
Alkalinity tot., mg/L	23	14.04	7	11	19	0	--	--	--
Sulfate dis., mg/L ***	90	e 7.28	6.0	7.0	9.0	90	0.00	0.00	0.584 U
Chloride dis., mg/L	126	8.73	6.5	8.0	10	54	-0.09	-1.08	0.218 F
ROE, mg/L	81	85.84	74	84	96	0	--	--	--
TSS, mg/L	124	16.56	8	12	20	55	0.13	0.79	0.876 F
NO ₂ + NO ₃ tot., mg/L	81	e 0.11	0.02	0.06	0.18	81	--	--	--
OrthoP tot., mg/L	65	e 0.04	0.020	0.040	0.050	65	--	--	--
Sediment susp., mg/L	12	49.25	12	17	22	11	--	--	--

Station number: 07363002		Station name: Saline River west of Benton, Ark.		Longitude: 923655		Drainage area: 550 square miles			
Latitude: 343346									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	90	115.31	96	119	133	52	0.04	0.04	0.964 F
pH, standard units	134	7.38	7.2	7.4	7.6	70	-0.02	-0.30	0.004 F
Oxygen dis., mg/L	132	8.90	7.2	8.5	10.4	70	0.04	0.46	0.211 F
BOD, 5-day, mg/L	130	1.16	0.7	1.0	1.4	69	-0.03	-2.88	0.183 F
Fecal coli., c/100 mL	130	195.65	29	70	190	70	-2.96	-1.51	0.337 F
Hardness tot., mg/L	68	55.69	49	53	64	33	-0.38	-0.68	0.199 F
Alkalinity tot., mg/L	19	51.32	43	51	58	0	--	--	--
Sulfate dis., mg/L ***	96	e 7.24	6.0	7.0	9.0	96	0.00	0.00	0.748 U
Chloride dis., mg/L	126	4.50	3.9	4.5	5.0	67	-0.13	-2.80	0.000 F
ROE, mg/L	88	79.22	70	81	87	0	--	--	--
TSS, mg/L	130	10.62	6	8	13	71	-0.39	-3.65	0.002 F
NO ₂ + NO ₃ tot., mg/L	77	e 0.10	0.05	0.09	0.12	77	--	--	--
OrthoP tot., mg/L	69	e 0.01	e 0.010	0.010	0.020	69	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07363270		Station name: Hurricane Creek near Sardis, Ark.		Longitude: 922454		Drainage area: 66 square miles				
Latitude: 343040										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	98	609.86	321	527	828	50	41.74	6.84	0.003	F
pH, standard units	132	6.96	6.5	7.2	7.6	63	0.13	1.81	0.000	F
Oxygen dis., mg/L	131	8.91	7.6	8.5	10.1	63	-0.09	-1.01	0.046	F
BOD, 5-day, mg/L	128	1.27	0.7	1.2	1.6	63	0.02	1.71	0.156	F
Fecal coli., c/100 mL	124	189.64	11	52	120	63	3.24	1.71	0.418	F
Hardness tot., mg/L	68	174.85	74	140	260	18	3.86	2.21	0.338	F
Alkalinity tot., mg/L	19	25.39	13	21	34	0	--	--	--	--
Sulfate dis., mg/L ***	95	e 262.97	100	200	380	95	13.57	5.16	0.249	U
Chloride dis., mg/L	123	7.50	5.5	6.5	8.0	65	0.13	1.67	0.040	U
ROE, mg/L	87	505.90	250	471	665	0	--	--	--	--
TSS, mg/L	126	27.77	8	15	24	63	-1.60	-5.75	0.000	F
NO2 + NO3 tot., mg/L	77	e 0.25	0.16	0.21	0.32	77	--	--	--	--
OrthoP tot., mg/L	70	e 0.02	e 0.010	0.010	0.020	70	--	--	--	--

Station number: 07364012		Station name: Saline River near Fountain Hill, Ark.		Longitude: 915735		Drainage area: 2,642 square miles				
Latitude: 332242										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	64	157.13	83	113	160	0	--	--	--	--
pH, standard units	128	6.97	6.7	7.0	7.3	69	0.00	0.04	0.812	F
Oxygen dis., mg/L	131	8.29	6.9	8.2	9.6	69	0.03	0.39	0.552	F
BOD, 5-day, mg/L	129	1.69	1.1	1.5	2.1	68	-0.02	-1.28	0.172	F
Fecal coli., c/100 mL	131	87.71	12	30	80	66	-3.22	-3.67	0.011	F
Hardness tot., mg/L	67	39.81	30	38	44	0	--	--	--	--
Alkalinity tot., mg/L	17	30.47	17	24	29	0	--	--	--	--
Sulfate dis., mg/L ***	93	e 19.50	11	18	25	93	1.60	8.21	0.002	U
Chloride dis., mg/L	120	13.29	5.0	6.5	7.5	61	-0.19	-1.46	0.019	F
ROE, mg/L	87	94.79	79	95	105	0	--	--	--	--
TSS, mg/L	129	17.40	9	14	20	68	-0.54	-3.12	0.056	F
NO2 + NO3 tot., mg/L	76	e 0.14	0.05	0.10	0.21	76	--	--	--	--
OrthoP tot., mg/L	62	e 0.03	0.010	0.020	0.040	62	--	--	--	--

Table 4.--Statistical summary and trend results of selected water-quality data for the 1975-86 water years--Continued

Station number: 07364115		Station name: Bayou Bartholomew near Ladd, Ark.				Longitude: 915406		Drainage area: Unknown		Latitude: 340624	
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results			Trend		
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	code	
Conductance, μ S/cm		100.65	74	105	133	0	--	--	--	--	
pH, standard units		6.93	6.7	6.9	7.1	52	0.00	-0.06	0.565	F	
Oxygen dis., mg/L		6.54	4.6	6.2	8.1	52	-0.01	-0.16	0.894	F	
BOD, 5-day, mg/L		2.53	1.9	2.4	3.1	51	-0.02	-0.80	0.500	F	
Fecal coli., c/100 mL		262.18	39	88	280	50	-5.00	-1.91	0.077	F	
Hardness tot., mg/L		37.99	26	34	43	0	--	--	--	--	
Alkalinity tot., mg/L		34.11	24	35	41	0	--	--	--	--	
Sulfate dis., mg/L ***		e 10.56	7.0	10	14	95	0.57	5.41	0.002	U	
Chloride dis., mg/L		8.68	6.5	8.0	11	49	-0.01	-0.16	0.924	F	
ROE, mg/L		108.84	88	100	118	0	--	--	--	--	
TSS, mg/L		39.92	23	35	46	52	-1.04	-2.60	0.170	F	
NO2 + NO3 tot., mg/L		e 0.20	0.07	0.15	0.22	78	--	--	--	--	
OrthoP tot., mg/L		e 0.12	0.070	0.120	0.180	69	--	--	--	--	

Station number: 07364600		Station name: Bayou de Loutre near El Dorado, Ark.				Longitude: 923532		Drainage area: 78.2 square miles		Latitude: 330555	
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results			Trend		
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	code	
Conductance, μ S/cm		3,310.11	1,690	2,980	4,380	0	--	--	--	--	
pH, standard units		7.09	6.8	7.1	7.4	70	-0.01	-0.19	0.319	U	
Oxygen dis., mg/L		5.94	3.6	5.3	8.1	72	-0.07	-1.23	0.103	U	
BOD, 5-day, mg/L		2.95	1.6	2.4	3.7	66	-0.15	-5.09	0.005	U	
Fecal coli., c/100 mL		357.82	91	180	310	70	13.33	3.73	0.016	U	
Hardness tot., mg/L		343.68	170	280	450	46	-5.56	-1.62	0.756	U	
Alkalinity tot., mg/L		70.90	30	61	107	0	--	--	--	--	
Sulfate dis., mg/L ***		e 61.50	33	52	80	90	2.20	3.58	0.552	U	
Chloride dis., mg/L		1,070.45	480	890	1,500	68	-41.43	-3.87	0.107	U	
ROE, mg/L		1,952.67	926	1,510	2,600	0	--	--	--	--	
TSS, mg/L		24.15	12	20	30	72	-0.67	-2.76	0.076	U	
NO2 + NO3 tot., mg/L		e 0.93	0.41	0.77	1.3	71	--	--	--	--	
OrthoP tot., mg/L		e 0.08	0.030	0.060	0.100	63	--	--	--	--	

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period

[Refer to table 3 for the time period used for each water-quality property or constituent in this analysis. The "best" trend result is calculated from flow-adjusted values, unless flow adjustment could not be performed for that property or constituent. N, number of observations selected for trend analysis; p, significance level; Trend codes, F is flow adjusted, U is unadjusted; μ S/cm, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; dis, dissolved; mg/L, milliliters per liter; --, insufficient data to calculate value; coli., coliform; * indicates use of 0.70 micrometer pore-diameter filter, all other fecal coliform data are for use of 0.45 micrometer pore-diameter filter; c/100 mL, colonies per 100 milliliters; strp., streptococci; tot., total; e, parameter is estimated for censored constituent using a log-probability regression procedure; ROE, residue on evaporation at 180 degrees Celsius; TSS, total suspended residue at 105 degrees Celsius (total suspended solids); NO2, nitrite; NO3, nitrate; NH3, ammonia, OrgN, organic nitrogen; OrthoP, orthophosphate; μ g/L, micrograms per liter; susp., suspended; μ t. 62 μ m, percent finer than 62 micrometers in diameter; BOD, biochemical oxygen demand. The nitrogen and phosphorus species are reported as nitrogen and phosphorus, respectively. Trend slopes computed from sets of data containing censored values (which can be identified because they have estimated means) are less reliable than slopes computed from data containing no censored values]

Station number: 07032000		Station name: Mississippi River at Memphis, Tenn.								
Latitude: 350737		Longitude: 900425								
		Drainage area: 932,800 square miles								
		Best trend results								
		Descriptive statistics								
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	118	395.97	350	392	443	76	1.38	0.35	0.233	F
pH, standard units	118	7.85	7.7	7.9	8.1	76	0.02	0.22	0.022	F
Turbidity, NTU	48	59.63	23	42	84	40	-2.24	-3.76	0.295	F
Oxygen dis., mg/L	85	8.76	7.3	8.2	10.0	0	--	--	--	--
Fecal coli., c/100 mL*	89	933.72	210	500	1,000	63	-33.22	-3.56	0.028	F
Fecal strp., c/100 mL	79	959.76	44	270	800	57	19.76	2.06	0.241	F
Hardness tot., mg/L	118	153.13	140	150	170	76	0.33	0.22	0.612	F
Calcium dis., mg/L	118	40.43	37	41	44	76	0.07	0.16	0.542	F
Magnesium dis., mg/L	117	12.62	11	13	14	75	0.13	0.99	0.036	F
Sodium dis., mg/L	118	18.74	14	18	22	76	0.05	0.24	0.493	F
Potassium dis., mg/L	118	3.11	2.7	3.1	3.5	76	0.00	-0.04	0.939	F
Alkalinity tot., mg/L	81	103.67	93	106	112	0	--	--	--	--
Sulfate dis., mg/L	30	e 60.97	49	57	75	30	-2.50	-4.10	0.339	U
Chloride dis., mg/L	118	17.18	14	17	20	76	0.04	0.22	0.780	F
ROE, mg/L	81	239.52	214	238	268	58	-0.14	-0.06	0.795	F
NO2 dis., mg/L	18	e 0.02	e 0.010	0.010	0.030	18	--	--	--	--
NO2 + NO3 tot., mg/L	43	e 1.47	1.1	1.4	1.7	43	--	--	--	--
NO2 + NO3 dis., mg/L	60	e 1.47	0.97	1.4	2.0	60	-0.05	-3.39	0.111	U
OrgN tot., mg/L	56	1.00	0.71	0.92	1.4	38	-0.02	-2.03	0.242	F
OrgN + NH3 tot., mg/L	36	e 0.85	0.50	0.80	1.0	36	0.01	1.08	0.723	U
Phosphorus tot., mg/L	36	e 0.19	0.130	0.160	0.230	36	0.00	2.70	0.791	U
Phosphorus dis., mg/L	36	e 0.07	0.050	0.070	0.100	36	0.00	-6.67	0.012	U
OrthoP dis., mg/L	36	e 0.07	0.040	0.060	0.080	36	0.00	-5.81	0.057	U
Aluminum dis., μ g/L	29	e 23.76	10	20	30	29	0.00	0.00	0.797	U
Barium dis., μ g/L	38	97.50	59	70	89	35	-3.48	-3.57	0.012	F
Iron dis., μ g/L	60	e 37.42	12	20	40	60	0.00	0.00	0.935	U
Manganese dis., μ g/L	60	e 9.77	1	3	11	60	0.00	0.00	0.887	U
Nickel dis., μ g/L	41	e 4.41	2	3	6	41	0.00	0.00	0.515	U
Strontium dis., μ g/L	29	193.79	160	180	230	14	-4.42	-2.28	0.243	F
Sediment susp., mg/L	111	169.65	93	139	199	72	0.02	0.01	1.000	F
Sed. susp., μ ft. 62 μ m	110	86.74	83	90	95	72	-0.81	-0.94	0.006	F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07040100		Station name: St. Francis River at St. Francis, Ark.				Longitude: 900813		Drainage area: 1,772 square miles			
Latitude: 362721											
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	168	200.68	145	189	251	81	1.61	0.80	0.250	F	
pH, standard units	193	7.74	7.5	7.8	8.0	81	0.03	0.37	0.000	F	
Turbidity, NTU	32	36.75	21	30	49	17	--	--	--	--	
Oxygen dis., mg/L	192	9.14	7.5	8.9	10.8	81	0.04	0.46	0.214	F	
BOD, 5-day, mg/L	87	3.01	2.2	3.0	3.6	0	--	--	--	--	
Fecal coli., c/100 mL	93	350.96	20	50	130	0	--	--	--	--	
Hardness tot., mg/L	51	93.69	74	90	120	0	--	--	--	--	
Calcium dis., mg/L	11	20.27	13	18	25	10	--	--	--	--	
Magnesium dis., mg/L	11	10.26	7.4	9.4	13	11	--	--	--	--	
Alkalinity tot., mg/L	23	80.91	53	71	100	0	--	--	--	--	
Sulfate dis., mg/L	9	e 10.11	8.0	10	12	9	--	--	--	--	
Chloride dis., mg/L	96	7.79	4.6	6.0	7.5	0	--	--	--	--	
ROE, mg/L	54	144.76	114	134	163	0	--	--	--	--	
TSS, mg/L	87	126.34	48	80	122	0	--	--	--	--	
NO ₂ + NO ₃ tot., mg/L	42	e 0.14	0.02	0.09	0.23	42	--	--	--	--	
Phosphorus tot., mg/L	19	e 0.13	0.090	0.130	0.140	19	--	--	--	--	
Orthop tot., mg/L	31	e 0.03	0.010	0.010	0.050	31	--	--	--	--	
Sediment susp., mg/L	128	211.64	86	139	205	0	--	--	--	--	

Station number: 07040450		Station name: St. Francis River at Lake City, Ark.				Longitude: 902556		Drainage area: 2,374 square miles			
Latitude: 354916											
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	205	218.59	156	211	284	88	-1.38	-0.63	0.084	F	
pH, standard units	216	7.67	7.5	7.7	7.9	89	-0.01	-0.13	0.109	F	
Turbidity, NTU	36	64.17	30	40	65	0	--	--	--	--	
Oxygen dis., mg/L	215	7.97	6.2	7.5	9.8	89	-0.02	-0.31	0.580	F	
BOD, 5-day, mg/L	104	2.68	2.1	2.6	3.2	0	--	--	--	--	
Fecal coli., c/100 mL	96	192.14	30	76	210	0	--	--	--	--	
Hardness tot., mg/L	50	96.90	72	93	130	0	--	--	--	--	
Alkalinity tot., mg/L	21	100.10	63	107	136	0	--	--	--	--	
Sulfate dis., mg/L	11	e 10.00	8.0	10	12	11	--	--	--	--	
Chloride dis., mg/L	99	7.36	5.5	6.5	8.0	0	--	--	--	--	
ROE, mg/L	56	166.93	137	164	191	0	--	--	--	--	
TSS, mg/L	97	77.48	38	67	101	0	--	--	--	--	
NO ₂ + NO ₃ tot., mg/L	44	e 0.16	0.05	0.09	0.23	44	--	--	--	--	

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07040450		Station name: St. Francis River at Lake City, Ark.--Continued		Longitude: 902556		Drainage area: 2,374 square miles		Latitude: 354916	
Water-quality property or constituent		Sample size		Descriptive statistics		Best trend results			
				Mean	25th percentile	50th percentile (median)	75th percentile	N	Trend
OrgN tot., mg/L		54		0.77	0.47	0.69	0.98	0	--
OrgN + NH3 tot., mg/L		21		e 0.74	0.40	0.60	1.1	21	--
Phosphorus tot., mg/L		21		e 0.18	0.120	0.150	0.220	21	--
Orthop tot., mg/L		33		e 0.07	0.020	0.050	0.090	33	--
Sediment susp., mg/L		141		113.35	60	93	134	0	--
Sed. susp., %f.t. 62µm		14		65.14	47	73	82	8	--
Station number: 07047800									
Station name: St. Francis River at Parkin, Ark.		Longitude: 903333		Drainage area: Indeterminate		Latitude: 351623			
Water-quality property or constituent		Sample size		Descriptive statistics		Best trend results			
				Mean	25th percentile	50th percentile (median)	75th percentile	N	Trend
Conductance, µS/cm		125		306.26	216	311	398	81	-0.73 0.226 F
pH, standard units		124		7.80	7.6	7.8	8.0	80	0.26 0.007 F
Turbidity, NTU		52		115.17	33	61	180	45	-5.66 0.134 F
Oxygen dis., mg/L		110		7.81	6.1	7.5	9.2	75	-0.55 0.138 F
Fecal coli., c/100 mL*		97		464.01	67	190	520	68	0.74 0.548 F
Fecal strp., c/100 mL		84		2,926.76	200	410	1,100	62	40.84 1.40 0.005 F
Hardness tot., mg/L		124		140.25	95	150	180	81	-0.99 0.113 F
Calcium dis., mg/L		124		38.89	26	40	51	81	-1.10 0.050 F
Magnesium dis., mg/L		124		10.52	6.8	11	14	81	-0.43 0.351 F
Sodium dis., mg/L		124		8.51	6.7	8.9	10	81	0.67 0.305 F
Potassium dis., mg/L		124		2.69	2.3	2.7	3.0	81	-1.28 0.103 F
Alkalinity tot., mg/L		85		133.31	93	135	175	0	--
Sulfate dis., mg/L		34		e 17.94	15	18	22	34	0.38 2.09 0.831 U
Chloride dis., mg/L		124		6.34	4.5	6.1	8.1	81	0.77 0.328 F
ROB, mg/L		87		187.83	137	187	241	63	-1.45 0.066 F
NO2 dis., mg/L		21		e 0.02	e 0.010	0.010	0.020	21	--
NO2 + NO3 tot., mg/L		47		e 0.49	0.15	0.38	0.67	47	--
NO2 + NO3 dis., mg/L		64		e 0.46	0.08	0.33	0.58	64	0.00 0.736 U
OrgN tot., mg/L		62		1.14	0.65	1.1	1.6	41	-3.48 0.268 F
OrgN + NH3 tot., mg/L		38		e 1.02	0.60	0.80	1.3	38	0.14 0.883 U
Phosphorus tot., mg/L		39		e 0.27	0.160	0.220	0.330	39	-0.01 0.493 U
Phosphorus dis., mg/L		39		e 0.13	0.080	0.090	0.130	39	0.00 0.887 U
Orthop dis., mg/L		39		e 0.11	0.060	0.070	0.110	39	0.00 0.674 U
Aluminum dis., µg/L		27		e 76.35	10	20	110	27	13.10 0.030 U
Barium dis., µg/L		36		274.47	200	250	340	34	-0.96 0.866 F
Iron dis., µg/L		59		e 158.95	19	40	100	59	0.00 0.915 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07047800		Station name: St. Francis River at Parkin, Ark.--Continued				Longitude: 903333		Drainage area:		Indeterminate	
Latitude: 351623											
Water-quality property or constituent		Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Descriptive statistics											
Best trend results											
Manganese dis., µg/L	58	e 45.04	3	12	35	58	0.00	0.00	0.782	U	U
Nickel dis., µg/L	39	e 3.35	2	2	4	39	-0.13	-3.73	0.172	U	U
Strontium dis., µg/L	27	152.63	95	160	210	14	-7.83	-5.13	0.111	F	F
Sediment susp., mg/L	119	269.51	93	158	353	78	-2.86	-1.06	0.304	F	F
Sed. susp., %f.t. 62µm	118	90.41	89	96	98	78	-0.18	-0.20	0.129	F	F
Station number: 07047900											
Station name: St. Francis Bay at Riverfront, Ark.											
Latitude: 351534						Longitude: 904048		Drainage area:		Indeterminate	
Water-quality property or constituent		Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Descriptive statistics											
Best trend results											
Conductance, µS/cm	223	259.65	185	246	332	87	-0.65	-0.25	0.687	F	F
pH, standard units	222	7.81	7.5	7.9	8.1	87	0.01	0.08	0.433	F	F
Turbidity, NTU	60	61.90	20	41	91	51	-1.92	-3.10	0.182	F	F
Oxygen dis., mg/L	206	8.74	7.3	8.5	9.8	84	-0.01	-0.09	0.720	U	U
Fecal coli., c/100 mL*	103	215.90	33	67	190	75	4.77	2.21	0.078	F	F
Fecal strp., c/100 mL	92	1,206.35	61	300	1,200	68	28.00	2.32	0.016	F	F
Hardness tot., mg/L	130	117.89	78	110	160	84	-0.21	-0.18	0.789	F	F
Calcium dis., mg/L	131	31.87	20	29	43	84	-0.06	-0.20	0.824	F	F
Magnesium dis., mg/L	130	9.34	6.3	9.0	12	84	0.02	0.24	0.593	F	F
Sodium dis., mg/L	131	7.48	5.2	7.0	9.2	84	-0.04	-0.58	0.246	F	F
Potassium dis., mg/L	131	2.23	1.8	2.2	2.5	84	-0.01	-0.33	0.532	F	F
Alkalinity tot., mg/L	89	109.46	68	98	155	0	--	--	--	--	--
Sulfate dis., mg/L	42	e 16.15	11	17	21	42	0.63	3.92	0.522	U	U
Chloride dis., mg/L	131	6.62	5.0	6.1	8.0	84	0.01	0.19	0.894	F	F
ROE, mg/L	96	164.57	111	159	217	69	-0.07	-0.04	0.953	F	F
NO2 dis., mg/L	23	e 0.01	e 0.010	e 0.010	0.020	23	--	--	--	--	--
NO2 + NO3 tot., mg/L	47	e 0.23	0.03	0.17	0.33	47	--	--	--	--	--
NO2 + NO3 dis., mg/L	72	e 0.28	e 0.10	0.13	0.25	72	0.00	0.00	0.177	U	U
OrgN tot., mg/L	62	0.91	0.54	0.86	1.2	41	-0.02	-2.55	0.292	F	F
OrgN + NH3 tot., mg/L	47	e 0.75	0.40	0.60	1.0	47	0.00	0.00	0.862	U	U
Phosphorus tot., mg/L	48	e 0.18	0.130	0.160	0.200	48	0.00	-2.53	0.356	U	U
Phosphorus dis., mg/L	48	e 0.10	0.060	0.080	0.120	48	0.00	4.30	0.062	U	U
Orthop dis., mg/L	47	e 0.08	0.050	0.070	0.090	47	0.00	2.05	0.120	U	U
Aluminum dis., µg/L	27	e 108.50	20	30	110	27	15.00	13.83	0.002	U	U
Barium dis., µg/L	37	208.65	120	190	290	32	7.16	3.43	0.151	F	F
Iron dis., µg/L	58	e 118.19	19	55	120	58	2.23	1.89	0.139	U	U
Manganese dis., µg/L	58	e 27.40	4	13	30	58	0.00	0.00	0.281	U	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07047900		Station name: St. Francis Bay at Riverfront, Ark.--Continued				Drainage area:		Indeterminate	
Latitude: 351534		Longitude: 904048							
		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Nickel dis., µg/L	39	e 3.03	1	2	3	39	-0.29	-9.63	0.035 U
Strontium dis., µg/L	27	112.19	67	95	170	14	0.99	0.88	1.000 F
Sediment susp., mg/L	216	173.40	72	136	210	85	-2.77	-1.60	0.054 F
Sed. susp., %f.t. 62µm	128	79.76	70	84	93	81	-0.48	-0.61	0.250 F
Station number: 07047942		Station name: L'Anguille River near Colt, Ark.				Drainage area:		535 square miles	
Latitude: 350840		Longitude: 905242							
		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	197	237.81	114	181	321	86	-1.64	-0.69	0.302 F
pH, standard units	195	7.45	7.2	7.4	7.7	86	0.01	0.12	0.322 F
Oxygen dis., mg/L	188	6.40	4.5	5.8	8.1	86	-0.05	-0.80	0.197 F
BOD, 5-day, mg/L	117	3.31	2.3	3.1	3.9	79	-0.05	-1.47	0.056 F
Fecal coli., c/100 mL	98	417.03	110	200	390	68	-2.53	-0.61	0.674 F
Fecal strp., c/100 mL	84	1,615.55	160	410	1,200	60	27.84	1.72	0.270 F
Hardness tot., mg/L	74	101.01	47	73	160	26	-0.88	-0.87	0.608 F
Calcium dis., mg/L	74	24.90	12	19	37	26	-0.10	-0.39	0.669 F
Magnesium dis., mg/L	74	9.41	4.2	6.1	15	26	-0.06	-0.62	0.494 F
Sodium dis., mg/L	74	12.32	6.0	9.3	20	26	0.00	0.01	1.000 F
potassium dis., mg/L	74	3.66	2.4	3.3	4.7	26	0.00	0.12	0.932 F
Alkalinity tot., mg/L	54	95.80	44	61	153	19	-2.74	-2.86	0.236 F
Sulfate dis., mg/L	42	e 16.02	11	15	21	42	0.00	0.00	0.949 U
Chloride dis., mg/L	75	12.55	6.5	11	18	26	-0.13	-1.02	0.441 F
ROE, mg/L	19	147.89	107	124	196	15	--	--	--
NO2 dis., mg/L	52	e 0.02	0.010	0.020	0.030	52	0.00	0.00	0.127 U
NO2 + NO3 tot., mg/L	62	e 0.40	0.21	0.32	0.46	62	--	--	--
NO2 + NO3 dis., mg/L	62	e 0.39	0.13	0.23	0.43	62	-0.02	-4.04	0.197 U
OrgN tot., mg/L	62	1.03	0.70	0.98	1.2	0	--	--	--
OrgN + NH3 tot., mg/L	45	e 1.07	0.72	1.0	1.3	45	-0.05	-4.69	0.032 U
Nitrogen tot., mg/L	11	1.77	1.0	1.7	1.9	11	--	--	--
Phosphorus tot., mg/L	46	e 0.28	0.180	0.200	0.340	46	-0.01	-4.60	0.014 U
Phosphorus dis., mg/L	47	e 0.15	0.070	0.090	0.130	47	0.00	0.00	0.704 U
Orthop tot., mg/L	6	e 0.13	0.060	0.130	0.250	6	--	--	--
Orthop dis., mg/L	23	e 0.12	0.060	0.080	0.110	23	--	--	--
Iron dis., µg/L	6	e 140.00	30	80	380	6	--	--	--
Manganese dis., µg/L	6	e 335.00	180	180	1,100	6	--	--	--
Sediment susp., mg/L	124	147.62	82	121	178	0	--	--	--
Sed. susp., %f.t. 62µm	39	88.67	84	92	95	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07047964		Station name: L'Anguille River at Marianna, Ark.				Drainage area: Unknown				
Latitude: 344712		Longitude: 904500								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	65	231.72	98	173	330	0	--	--	--	--
pH, standard units	169	7.34	7.1	7.3	7.6	58	0.00	-0.02	0.819	F
Turbidity, NTU	90	80.17	40	68	96	22	-4.50	-5.61	0.090	F
Oxygen dis., mg/L	168	7.26	5.9	6.9	8.7	57	0.07	0.94	0.172	F
BOD, 5-day, mg/L	158	2.88	2.0	2.7	3.4	55	-0.01	-0.46	0.541	F
Fecal coli., c/100 mL	130	417.11	51	120	340	72	-2.58	-0.62	0.537	U
Hardness tot., mg/L	92	107.32	48	79	150	30	-0.09	-0.08	1.000	F
Magnesium dis., mg/L	10	13.60	8.3	13	17	8	--	--	--	--
Alkalinity tot., mg/L	22	91.86	32	95	133	0	--	--	--	--
Sulfate dis., mg/L	74	e 14.31	10	12	17	74	0.33	2.33	0.521	U
Chloride dis., mg/L	166	12.33	6.5	11	16	55	-0.19	-1.54	0.128	F
ROE, mg/L	125	201.09	152	182	237	0	--	--	--	--
TSS, mg/L	153	78.74	36	60	103	56	-3.89	-4.94	0.001	F
NO2 + NO3 tot., mg/L	113	e 0.30	0.15	0.25	0.42	113	0.00	-1.69	0.213	U
NH3 tot., mg/L	130	e 0.20	0.080	0.120	0.200	130	-0.01	-3.06	0.024	U
Phosphorus tot., mg/L	83	e 0.31	0.230	0.270	0.320	83	0.00	0.00	0.838	U
OrthoP tot., mg/L	99	e 0.14	0.090	0.130	0.180	99	0.00	2.37	0.289	U
Station number: 07048550		Station name: West Fork White River east of Fayetteville, Ark.				Drainage area: Unknown				
Latitude: 360300		Longitude: 940442								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	67	160.90	116	151	191	0	--	--	--	--
pH, standard units	169	7.59	7.5	7.6	7.7	73	0.02	0.28	0.003	F
Turbidity, NTU	96	28.68	8.0	20	25	38	-1.23	-4.28	0.380	F
Oxygen dis., mg/L	165	8.86	7.0	8.5	10.7	71	0.00	-0.02	1.000	F
BOD, 5-day, mg/L	154	2.51	1.3	2.0	3.4	71	-0.07	-2.78	0.028	F
Fecal coli., c/100 mL	126	256.06	23	98	230	59	-5.89	-2.30	0.305	F
Hardness tot., mg/L	93	75.83	58	67	98	42	2.16	2.85	0.000	F
Calcium dis., mg/L	10	22.60	13	20	26	9	--	--	--	--
Magnesium dis., mg/L	10	2.50	1.8	2.5	3.0	9	--	--	--	--
Alkalinity tot., mg/L	22	58.32	40	53	82	0	--	--	--	--
Sulfate dis., mg/L	72	e 19.35	13	18	25	72	-0.25	-1.29	0.655	U
Chloride dis., mg/L	160	6.84	4.5	6.0	8.0	70	-0.11	-1.60	0.080	F
ROE, mg/L	119	119.82	91	111	143	49	1.13	0.95	0.108	F

Table 5. - Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07048550		Station name: West Fork White River east of Fayetteville, Ark.--Continued								
Latitude: 360300		Longitude: 940442		Drainage area: Unknown						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
TSS, mg/L	162	28.33	12	20	31	72	-0.06	-0.22	0.848	F
NO2 + NO3 tot., mg/L	103	e 0.49	0.20	0.36	0.60	103	0.00	0.00	0.757	U
NH3 tot., mg/L	131	e 0.10	0.020	0.060	0.090	131	0.00	-3.42	0.008	U
OrgN tot., mg/L	20	0.46	0.20	0.32	0.55	13	--	--	--	--
OrgN + NH3 tot., mg/L	31	e 0.64	0.30	0.50	0.70	31	--	--	--	--
Nitrogen tot., mg/L	27	1.00	0.74	0.90	1.1	17	--	--	--	--
Phosphorus tot., mg/L	76	e 0.09	0.050	0.070	0.090	76	0.00	0.00	0.710	U
OrthoP tot., mg/L	93	e 0.06	0.010	0.040	0.060	93	0.00	6.77	0.103	U
Station number: 07048700		Station name: White River near Goshen, Ark.								
Latitude: 360622		Longitude: 940041		Drainage area: 412 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm	94	162.44	88	120	204	30	0.55	0.34	0.726	U
pH, standard units	190	7.43	7.3	7.4	7.6	82	0.02	0.27	0.001	F
Turbidity, NTU	119	22.54	9.0	15	25	52	-0.50	-2.23	0.347	F
Oxygen dis., mg/L	187	8.01	5.7	8.1	10.5	82	-0.01	-0.06	0.982	F
BOD, 5-day, mg/L	166	3.11	1.8	2.7	4.0	80	0.01	0.31	0.582	F
Fecal coli., c/100 mL	118	249.18	5	48	150	67	-5.30	-2.13	0.130	F
Hardness tot., mg/L	127	60.45	40	50	79	24	1.74	2.88	0.013	F
Calcium dis., mg/L	37	18.38	12	16	26	23	0.31	1.67	0.296	U
Magnesium dis., mg/L	37	2.43	1.5	2.2	3.0	23	0.02	0.82	0.502	U
Alkalinity tot., mg/L	52	49.27	30	40	56	26	0.61	1.24	0.084	U
Sulfate dis., mg/L	77	e 16.18	10	13	23	77	0.00	0.00	0.796	U
Chloride dis., mg/L	166	11.60	4.5	7.0	12	78	-0.02	-0.21	0.711	F
ROE, mg/L	111	115.91	76	89	154	0	--	--	--	--
TSS, mg/L	156	27.89	14	20	34	82	-0.67	-2.42	0.007	F
NO2 + NO3 tot., mg/L	137	e 0.80	0.46	0.63	0.95	137	0.00	0.00	0.849	U
OrgN tot., mg/L	40	0.54	0.16	0.46	0.75	18	0.02	3.11	0.716	U
OrgN + NH3 tot., mg/L	40	e 1.06	0.49	0.80	1.2	40	0.10	9.44	0.371	U
Nitrogen tot., mg/L	34	2.10	1.1	1.5	2.4	8	--	--	--	--
Phosphorus tot., mg/L	105	e 0.59	0.140	0.260	0.680	105	-0.02	-3.53	0.156	U
OrthoP tot., mg/L	118	e 0.50	0.080	0.190	0.570	118	-0.01	-1.76	0.606	U

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07049691		Station name: White River at Beaver Dam near Eureka Springs,		Longitude: 935050		Drainage area: 1,192 square miles				
Latitude: 362515		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	184	138.17	130	140	149	90	1.15	0.84	0.023	U
pH, standard units	182	7.61	7.4	7.6	7.9	90	0.00	0.00	0.390	U
Turbidity, NTU	27	1.97	0.60	1.0	2.0	18	0.10	5.08	0.156	U
Oxygen dis., mg/L	184	9.59	8.0	9.8	11.5	90	0.07	0.69	0.240	U
BOD, 5-day, mg/L	37	1.08	0.8	1.1	1.3	0	--	--	--	--
Fecal coli., c/100 mL	36	21.99	2	5	20	24	0.24	1.08	0.464	U
Hardness tot., mg/L	41	66.34	62	66	72	27	-0.33	-0.50	0.436	U
Calcium dis., mg/L	27	22.19	21	23	23	0	--	--	--	--
Magnesium dis., mg/L	27	2.54	2.2	2.5	3.0	0	--	--	--	--
Alkalinity tot., mg/L	36	60.86	54	59	64	24	-0.20	-0.33	0.732	U
Chloride dis., mg/L	26	3.45	2.8	3.2	3.6	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	35	e 0.35	0.20	0.31	0.40	35	0.01	3.50	0.063	U
OrgN tot., mg/L	17	0.62	0.22	0.29	0.91	17	--	--	--	--
Phosphorus tot., mg/L	21	e 0.01	e 0.010	0.010	0.020	21	0.00	0.00	0.276	U
OrthoP tot., mg/L	26	e 0.01	e 0.010	e 0.010	0.020	26	0.00	0.00	0.190	U

Station number: 07050390		Station name: Osage Creek southwest of Berryville, Ark.		Longitude: 933526		Drainage area: Unknown				
Latitude: 362055		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, $\mu\text{S}/\text{cm}$	34	255.68	209	266	298	0	--	--	--	--
pH, standard units	69	7.91	7.8	7.9	8.0	0	--	--	--	--
Turbidity, NTU	64	7.62	3.1	5.3	7.9	0	--	--	--	--
Oxygen dis., mg/L	70	9.08	7.1	8.8	11.1	0	--	--	--	--
BOD, 5-day, mg/L	64	2.23	1.2	1.8	3.0	0	--	--	--	--
Fecal coli., c/100 mL	42	245.45	30	84	210	0	--	--	--	--
Hardness tot., mg/L	46	129.35	110	140	150	8	--	--	--	--
Sulfate dis., mg/L	61	e 7.52	6.0	7.0	10	61	0.00	0.00	0.665	U
Chloride dis., mg/L	66	4.50	3.5	4.0	5.1	0	--	--	--	--
ROE, mg/L	64	149.11	129	151	172	0	--	--	--	--
TSS, mg/L	68	11.99	4	9	14	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	68	e 0.54	0.26	0.47	0.80	68	--	--	--	--
NH ₃ tot., mg/L	63	e 0.05	0.010	0.030	0.060	63	--	--	--	--
OrgN tot., mg/L	36	0.44	0.15	0.35	0.64	0	--	--	--	--
OrgN + NH ₃ tot., mg/L	64	e 0.39	0.10	0.30	0.60	64	--	--	--	--
Nitrogen tot., mg/L	49	0.94	0.58	0.83	1.2	12	0.13	13.89	0.032	U
Phosphorus tot., mg/L	65	e 0.05	0.020	0.040	0.060	65	--	--	--	--
OrthoP tot., mg/L	66	e 0.03	0.010	0.020	0.030	66	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07050420			Station name: Osage Creek west of Berryville, Ark.			Drainage area: Unknown		
Latitude: 362150			Longitude: 933626					
Water-quality property or constituent			Descriptive statistics			Best trend results		
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	317.12	250	323	391	15	--	--	--
pH, standard units	7.92	7.7	7.9	8.1	0	--	--	--
Turbidity, NTU	7.55	3.0	4.0	6.0	0	--	--	--
Oxygen dis., mg/L	9.18	7.1	9.9	11.1	0	--	--	--
BOD, 5-day, mg/L	2.52	1.5	2.2	3.7	0	--	--	--
Fecal coli., c/100 mL	319.52	35	88	560	0	--	--	--
Hardness tot., mg/L	142.21	130	150	160	8	--	--	--
Sulfate dis., mg/L	e 14.94	8.0	12	20	53	0.00	0.00	1.000 U
Chloride dis., mg/L	9.66	4.5	7.3	14	0	--	--	--
ROE, mg/L	175.45	138	166	216	0	--	--	--
TSS, mg/L	9.04	3	7	11	0	--	--	--
NO2 + NO3 tot., mg/L	e 1.14	0.71	0.99	1.5	58	--	--	--
NH3 tot., mg/L	e 0.38	0.070	0.130	0.510	49	--	--	--
OrgN tot., mg/L	0.71	0.22	0.40	0.61	0	--	--	--
OrgN + NH3 tot., mg/L	e 0.83	0.20	0.50	0.90	50	--	--	--
Nitrogen tot., mg/L	2.00	1.1	1.5	2.3	11	0.11	5.51	0.451 U
Phosphorus tot., mg/L	e 0.46	0.090	0.170	0.690	55	--	--	--
OrthoP tot., mg/L	e 0.37	0.060	0.140	0.570	56	--	--	--

Station number: 07050500			Station name: Kings River near Berryville, Ark.			Drainage area: 527 square miles		
Latitude: 362536			Longitude: 933715					
Water-quality property or constituent			Descriptive statistics			Best trend results		
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	241.42	209	235	270	0	--	--	--
pH, standard units	8.02	7.9	8.0	8.2	89	-0.01	-0.08	0.151 F
Turbidity, NTU	5.85	2.4	3.8	5.8	53	0.00	0.03	0.965 F
Oxygen dis., mg/L	9.92	8.3	9.7	11.2	89	-0.08	-0.83	0.001 F
BOD, 5-day, mg/L	2.10	1.2	2.0	2.6	87	-0.07	-3.45	0.003 F
Fecal coli., c/100 mL	147.46	16	48	130	73	-2.00	-1.35	0.097 F
Hardness tot., mg/L	119.83	100	120	140	46	0.53	0.44	0.382 F
Calcium dis., mg/L	37.30	32	38	41	9	--	--	--
Magnesium dis., mg/L	7.55	4.9	7.0	9.5	9	--	--	--
Alkalinity tot., mg/L	115.55	96	122	133	0	--	--	--
Sulfate dis., mg/L	e 9.20	6.0	8.0	10	74	0.00	0.00	0.696 U
Chloride dis., mg/L	5.91	4.0	5.0	7.0	85	-0.10	-1.63	0.016 F
ROE, mg/L	144.92	125	143	164	22	-1.72	-1.19	0.474 F
TSS, mg/L	10.26	3	6	11	85	-0.18	-1.77	0.171 F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07050500		Station name: Kings River near Berryville, Ark.--Continued								
Latitude: 362536		Longitude: 933715		Drainage area: 527 square miles						
		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
NO2 + NO3 tot., mg/L	110	e 0.47	0.28	0.43	0.60	110	-0.02	-3.55	0.176	U
NH3 tot., mg/L	137	e 0.06	0.020	0.040	0.070	137	0.00	0.00	0.004	U
OrgN tot., mg/L	60	e 0.51	0.10	0.33	0.58	0	--	--	--	--
OrgN + NH3 tot., mg/L	51	e 0.88	e 0.10	0.10	0.40	51	--	--	--	--
Nitrogen tot., mg/L	17	e 0.94	0.42	0.68	0.95	12	--	--	--	--
Phosphorus tot., mg/L	88	e 0.09	0.040	0.070	0.090	88	0.00	0.00	0.797	U
Orthoph tot., mg/L	100	e 0.08	0.020	0.050	0.080	100	0.00	0.00	0.893	U

Station number: 07053230		Station name: Long Creek near Denver, Ark.								
Latitude: 362546		Longitude: 931822		Drainage area: Unknown						
Water-quality property or constituent		Descriptive statistics				Best trend results				
		Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units		69	7.96	7.9	8.0	8.1	0	--	--	--
Turbidity, NTU		65	5.62	2.0	2.5	6.0	0	--	--	--
Oxygen dis., mg/L		69	10.10	8.5	10.0	11.1	0	--	--	--
BOD, 5-day, mg/L		66	1.33	1.0	1.2	1.6	0	--	--	--
Fecal coli., c/100 mL		43	85.77	32	68	110	0	--	--	--
Hardness tot., mg/L		46	145.17	130	150	160	8	--	--	--
Sulfate dis., mg/L		61	e 10.25	8.0	9.0	13	61	1.00	9.76	0.009 U
Chloride dis., mg/L		66	7.27	5.0	6.9	9.3	0	--	--	--
ROE, mg/L		65	178.55	161	182	200	0	--	--	--
TSS, mg/L		69	7.79	3	4	8	0	--	--	--
NO2 + NO3 tot., mg/L		69	e 1.40	1.1	1.3	1.7	69	--	--	--
NH3 tot., mg/L		62	e 0.07	0.020	0.040	0.080	62	--	--	--
Phosphorus tot., mg/L		64	e 0.05	0.030	0.040	0.050	64	--	--	--
OrthoP tot., mg/L		61	e 0.03	0.010	0.030	0.050	61	--	--	--

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07054501		Station name: White River at Bull Shoals Dam near Flippin, Ark.			Longitude: 923430		Drainage area: 6,051 square miles			
Latitude: 362154										
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend code
Conductance, $\mu\text{S}/\text{cm}$	197	254.96	245	255	266	89	0.37	0.14	0.422	U
pH, standard units	215	7.91	7.7	7.9	8.1	89	0.00	0.00	0.819	U
Turbidity, NTU	54	1.35	0.57	1.0	1.6	17	-0.11	-8.33	0.003	U
Oxygen dis., mg/L	217	9.12	7.4	9.4	11.0	89	-0.03	-0.37	0.274	U
BOD, 5-day, mg/L	116	1.32	0.7	1.2	1.8	29	-0.05	-3.46	0.172	U
Fecal coli., c/100 mL*	35	5.44	--	1	4	24	0.00	0.00	0.723	U
Hardness tot., mg/L	79	135.44	130	140	140	28	0.00	0.00	0.457	U
Calcium dis., mg/L	33	36.73	35	36	38	0	--	--	--	--
Magnesium dis., mg/L	33	10.40	9.6	10	11	0	--	--	--	--
Alkalinity tot., mg/L	51	122.94	118	123	130	24	-1.00	-0.81	0.010	U
Sulfate dis., mg/L	10	e 7.30	6.0	8.0	10	10	--	--	--	--
Chloride dis., mg/L	106	5.98	5.0	5.8	6.8	0	--	--	--	--
ROE, mg/L	51	151.10	142	153	158	0	--	--	--	--
TSS, mg/L	86	3.06	1	2	4	0	--	--	--	--
NO2 + NO3 tot., mg/L	73	e 0.28	0.18	0.23	0.35	73	0.00	0.00	0.352	U
OrgN tot., mg/L	18	0.34	0.14	0.27	0.41	0	--	--	--	--
OrgN + NH3 tot., mg/L	8	e 0.33	0.20	0.24	0.52	8	--	--	--	--
Phosphorus tot., mg/L	34	e 0.01	e 0.010	0.010	0.010	34	--	--	--	--

Station number: 07055565		Station name: Crooked Creek at Harrison, Ark.				Longitude: 930528		Drainage area: Unknown		
Latitude: 361357										
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	34	314.32	284	326	348	0	--	--	--	--
pH, standard units	70	7.72	7.6	7.7	7.8	0	--	--	--	--
Turbidity, NTU	66	8.67	3.0	4.9	9.0	0	--	--	--	--
Oxygen dis., mg/L	70	10.19	9.0	10.0	11.5	0	--	--	--	--
BOD, 5-day, mg/L	66	1.52	1.1	1.4	1.9	0	--	--	--	--
Fecal coli., c/100 mL	42	338.10	32	170	430	0	--	--	--	--
Hardness tot., mg/L	47	155.87	140	160	170	8	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07055565		Station name: Crooked Creek at Harrison, Ark.--Continued				Longitude: 930528		Drainage area: Unknown	
Latitude: 361357									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Sulfate dis., mg/L	62	e 5.38	4.0	5.0	7.0	62	0.00	0.00	0.613 U
Chloride dis., mg/L	67	6.07	5.0	6.0	7.0	0	--	--	--
ROE, mg/L	66	187.48	174	191	205	0	--	--	--
TSS, mg/L	70	10.84	5	8	14	0	--	--	--
NO2 + NO3 tot., mg/L	70	e 1.39	1.2	1.4	1.5	70	--	--	--
NH3 tot., mg/L	64	e 0.03	0.010	0.030	0.050	64	--	--	--
OrgN tot., mg/L	30	0.41	0.18	0.33	0.55	0	--	--	--
OrgN + NH3 tot., mg/L	64	e 0.32	e 0.10	0.20	0.50	64	--	--	--
Nitrogen tot., mg/L	42	1.83	1.5	1.8	2.0	12	-0.17	-9.58	0.232 U
Phosphorus tot., mg/L	66	e 0.05	0.030	0.050	0.060	66	--	--	--
OrthoP tot., mg/L	65	e 0.04	0.020	0.030	0.040	65	--	--	--

Station number: 07055569		Station name: Crooked Creek near Harrison, Ark.				Longitude: 930438		Drainage area: Unknown	
Latitude: 361438									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, µS/cm	32	340.09	312	348	374	0	--	--	--
pH, standard units	70	7.78	7.7	7.8	7.9	0	--	--	--
Turbidity, NTU	65	8.34	3.8	5.0	9.2	0	--	--	--
Oxygen dis., mg/L	70	9.53	7.9	9.4	10.7	0	--	--	--
BOD, 5-day, mg/L	65	1.87	1.2	1.7	2.3	0	--	--	--
Fecal coli., c/100 mL	40	136.75	2	2	50	0	--	--	--
Hardness tot., mg/L	47	159.19	150	160	170	8	--	--	--
Sulfate dis., mg/L	62	e 10.00	7.0	9.0	13	62	1.00	10.00	0.010 U
Chloride dis., mg/L	67	10.57	7.5	10	13	0	--	--	--
ROE, mg/L	66	206.94	188	212	229	0	--	--	--
TSS, mg/L	70	11.02	5	8	13	0	--	--	--
NO2 + NO3 tot., mg/L	70	e 1.94	1.6	1.9	2.2	70	--	--	--
NH3 tot., mg/L	61	e 0.28	0.080	0.140	0.270	61	--	--	--
OrgN tot., mg/L	36	0.41	0.19	0.35	0.54	0	--	--	--
OrgN + NH3 tot., mg/L	63	e 0.68	0.20	0.50	0.80	63	--	--	--
Nitrogen tot., mg/L	53	2.62	2.1	2.5	2.9	12	-0.07	-2.55	0.410 U
Phosphorus tot., mg/L	65	e 0.43	0.240	0.420	0.620	65	--	--	--
OrthoP tot., mg/L	64	e 0.37	0.180	0.380	0.550	64	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07055608		Station name: Crooked Creek at Yellville, Ark.		Drainage area: 406 square miles	
Latitude: 361323		Longitude: 924047			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	12	324.83	314	336	344
pH, standard units	112	8.15	8.1	8.2	8.3
Turbidity, NTU	96	3.59	1.5	2.0	3.5
Oxygen dis., mg/L	110	10.47	9.2	10.6	11.7
BOD, 5-day, mg/L	108	1.60	0.9	1.5	2.0
Fecal coli., c/100 mL	80	60.46	4	20	59
Hardness tot., mg/L	70	166.14	150	170	180
Sulfate dis., mg/L	71	e 6.67	6.0	7.0	8.0
Chloride dis., mg/L	107	6.73	5.0	6.5	8.0
ROE, mg/L	106	189.48	176	190	198
TSS, mg/L	110	6.18	3	4	8
NO ₂ + NO ₃ tot., mg/L	84	e 0.41	0.13	0.31	0.69
NH ₃ tot., mg/L	104	e 0.04	0.010	0.020	0.050
Phosphorus tot., mg/L	81	e 0.03	0.010	0.020	0.030
OrthoP tot., mg/L	94	e 0.01	e 0.010	0.010	0.020
		Best trend results			Trend code
		Units per year	Percent per year	Percent per year	
		N			
		8	--	--	--
		0	--	--	--
		49	-0.14	-3.92	0.145 F
		0	--	--	--
		0	--	--	--
		0	--	--	--
		0	--	--	--
		71	0.00	0.00	0.889 U
		0	--	--	--
		0	--	--	--
		0	--	--	--
		84	--	--	--
		104	0.00	0.00	0.086 U
		81	0.00	0.00	0.909 U
		94	0.00	0.00	0.089 U

Station number: 07056000		Station name: Buffalo River near St. Joe, Ark.		Drainage area: 829 square miles	
Latitude: 355902		Longitude: 924444			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	111	206.97	172	209	243
pH, standard units	171	7.97	7.9	8.0	8.1
Turbidity, NTU	100	5.50	1.5	2.1	4.5
Oxygen dis., mg/L	173	9.82	8.6	9.7	11.1
BOD, 5-day, mg/L	171	1.50	0.9	1.3	2.0
Fecal coli., c/100 mL	141	73.12	4	12	44
Hardness tot., mg/L	93	104.68	86	100	120
Alkalinity tot., mg/L	21	101.00	82	100	120
Sulfate dis., mg/L	74	e 5.93	4.0	6.0	8.0
Chloride dis., mg/L	164	3.74	3.0	3.5	4.5
ROE, mg/L	122	120.13	104	120	137
TSS, mg/L	171	6.26	2	4	7
NO ₂ + NO ₃ tot., mg/L	102	e 0.12	0.05	0.09	0.17
NH ₃ tot., mg/L	131	e 0.04	0.010	0.030	0.050
OrgN tot., mg/L	52	0.35	0.11	0.28	0.51
OrgN + NH ₃ tot., mg/L	51	e 0.21	e 0.10	0.10	0.30
Nitrogen tot., mg/L	14	0.34	0.22	0.25	0.46
Phosphorus tot., mg/L	83	e 0.03	0.010	0.020	0.030
OrthoP tot., mg/L	99	e 0.01	e 0.010	0.010	0.020
		Best trend results			Trend code
		Units per year	Percent per year	Percent per year	
		N			
		0	--	--	--
		89	0.01	0.16	0.012 F
		53	-0.10	-1.79	0.316 F
		88	0.09	0.91	0.010 F
		89	0.06	3.91	0.003 F
		75	-1.15	-1.57	0.022 F
		45	0.26	0.25	0.575 F
		0	--	--	--
		74	-0.08	-1.40	0.376 U
		85	-0.16	-4.37	0.000 F
		65	0.04	0.03	0.974 F
		89	-0.24	-3.85	0.000 F
		102	0.00	0.00	0.065 U
		131	0.00	0.00	0.316 U
		0	--	--	--
		51	--	--	--
		12	--	--	--
		83	0.00	0.00	0.627 U
		99	0.00	0.00	0.828 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07057310		Station name: Hicks Creek near Mountain Home, Ark.				Longitude: 922234		Drainage area: Unknown	
Latitude: 361732									
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
pH, standard units	7.99	7.9	8.0	8.1	0	--	--	--	--
Turbidity, NTU	6.45	2.0	3.0	4.0	0	--	--	--	--
Oxygen dis., mg/L	8.79	6.2	8.5	11.6	0	--	--	--	--
BOD, 5-day, mg/L	4.33	2.0	3.3	6.5	0	--	--	--	--
Fecal coli., c/100 mL	108.07	5	47	100	0	--	--	--	--
Hardness tot., mg/L	223.46	210	230	240	0	--	--	--	--
Sulfate dis., mg/L	e 23.81	20	23	26	63	-1.00	-4.20	0.052	U
Chloride dis., mg/L	35.15	15	37	51	0	--	--	--	--
ROE, mg/L	316.72	271	326	367	0	--	--	--	--
TSS, mg/L	8.58	3	5	8	0	--	--	--	--
NO2 + NO3 tot., mg/L	e 3.40	1.5	2.0	3.3	55	--	--	--	--
NH3 tot., mg/L	e 1.59	0.060	0.550	2.85	62	--	--	--	--
OrgN tot., mg/L	0.88	0.29	0.71	1.2	17	--	--	--	--
OrgN + NH3 tot., mg/L	e 2.10	0.60	0.98	3.3	33	--	--	--	--
Nitrogen tot., mg/L	6.34	3.4	5.4	7.6	17	--	--	--	--
Phosphorus tot., mg/L	e 2.44	0.720	2.65	4.00	64	--	--	--	--
OrthoP tot., mg/L	e 2.13	0.550	2.20	3.55	62	--	--	--	--

Station number: 07057370		Station name: White River near Norfolk, Ark.				Longitude: 921806		Drainage area: Unknown	
Latitude: 361324									
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	253.99	239	257	278	0	--	--	--	--
pH, standard units	8.05	7.9	8.1	8.2	89	0.00	-0.03	0.498	F
Turbidity, NTU	4.32	1.8	2.3	3.9	54	-0.06	-1.43	0.371	F
Oxygen dis., mg/L	10.11	9.2	10.2	11.1	89	-0.05	-0.53	0.015	F
BOD, 5-day, mg/L	1.05	0.7	1.0	1.3	89	-0.02	-1.61	0.097	F
Fecal coli., c/100 mL	42.24	4	12	33	74	0.26	0.62	0.537	F
Hardness tot., mg/L	131.28	120	130	140	24	-0.30	-0.23	0.442	F
Alkalinity tot., mg/L	125.41	118	127	140	0	--	--	--	--
Sulfate dis., mg/L	e 7.34	6.0	7.0	9.0	73	0.00	0.00	0.949	U
Chloride dis., mg/L	5.22	4.5	5.0	6.0	86	-0.09	-1.80	0.001	F
ROE, mg/L	149.08	142	149	156	65	-0.78	-0.52	0.086	F
TSS, mg/L	6.58	3	4	8	88	-0.27	-4.05	0.000	F
NO2 + NO3 tot., mg/L	e 0.28	0.20	0.26	0.35	98	0.01	4.01	0.039	U
NH3 tot., mg/L	e 0.04	0.010	0.030	0.050	131	0.00	0.00	0.352	U
Phosphorus tot., mg/L	e 0.03	0.010	0.020	0.040	82	0.00	0.00	0.365	U
OrthoP tot., mg/L	e 0.01	e 0.010	e 0.030	0.010	95	0.00	0.00	1.000	U

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07060000		Station name: North Fork River at Norfolk Dam near Norfolk, Ark.				Longitude: 921418		Drainage area: 1,808 square miles		
Latitude: 361457										
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
Conductance, µS/cm	181	315.90	300	320	339	90	0.00	0.00	0.776	U
pH, standard units	179	7.94	7.7	7.9	8.2	90	0.00	0.00	0.568	U
Turbidity, NTU	26	1.82	0.50	0.80	1.8	17	-0.04	-2.09	0.373	U
Oxygen dis., mg/L	181	9.95	8.0	10.2	12.0	90	-0.02	-0.23	0.530	U
BOD, 5-day, mg/L	37	1.42	0.9	1.3	1.8	0	--	--	--	--
Fecal coli., c/100 mL*	36	11.33	2	10	18	24	0.35	3.13	0.434	U
Hardness tot., mg/L	42	172.14	160	180	180	28	-2.22	-1.29	0.001	U
Calcium dis., mg/L	27	34.96	32	35	37	0	--	--	--	--
Magnesium dis., mg/L	27	20.89	19	21	22	0	--	--	--	--
Alkalinity tot., mg/L	36	162.33	155	167	175	24	-1.21	-0.75	0.220	U
Chloride dis., mg/L	26	5.92	2.3	2.5	3.5	0	--	--	--	--
NO2 + NO3 tot., mg/L	36	e 0.26	0.16	0.20	0.34	36	0.00	0.00	0.731	U
OrgN tot., mg/L	18	0.42	0.14	0.33	0.57	0	--	--	--	--
OrgN + NH3 tot., mg/L	8	e 0.40	0.20	0.26	0.80	8	--	--	--	--
Phosphorus tot., mg/L	23	e 0.04	0.010	0.020	0.050	23	0.00	5.23	0.373	U
OrthoP tot., mg/L	27	e 0.01	e 0.010	e 0.010	0.020	27	0.00	0.00	0.237	U

Station number: 07060500		Station name: White River at Calico Rock, Ark.				Longitude: 920835		Drainage area: 9,978 square miles		
Latitude: 360658										
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code			
Conductance, µS/cm	120	278.42	260	276	294	82	0.50	0.18	0.474	F
pH, standard units	120	7.94	7.8	8.0	8.1	82	0.00	0.02	0.908	F
Oxygen dis., mg/L	122	9.84	8.6	9.6	10.4	83	-0.01	-0.06	0.820	F
BOD, 5-day, mg/L	115	1.43	0.8	1.2	1.7	80	-0.02	-1.72	0.065	F
Fecal coli., c/100 mL*	97	67.90	10	35	93	71	-1.70	-2.50	0.189	F
Fecal strp., c/100 mL	84	99.83	21	61	120	65	-1.98	-1.98	0.284	F
Hardness tot., mg/L	74	142.97	130	140	150	0	--	--	--	--
Calcium dis., mg/L	74	35.81	34	36	37	0	--	--	--	--
Magnesium dis., mg/L	75	12.93	11	12	15	26	0.14	1.08	0.321	F
Sodium dis., mg/L	74	2.44	2.0	2.4	2.8	25	0.04	1.66	0.133	F
Potassium dis., mg/L	74	1.28	1.2	1.4	1.5	0	--	--	--	--
Alkalinity tot., mg/L	56	134.43	122	133	146	21	0.50	0.37	0.177	F
Sulfate dis., mg/L	41	e 7.42	6.8	7.6	8.1	41	-0.20	-2.70	0.042	U

Table 3.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07060500			Station name: White River at Calico Rock, Ark.--Continued			Longitude: 920835			Drainage area: 9,978 square miles		
Latitude: 360658											
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Chloride dis., mg/L			3.87	3.4	3.7	4.4	26	0.03	0.79	0.321	F
ROE, mg/L			154.25	148	153	166	16	--	--	--	--
NO2 + NO3 tot., mg/L			e 0.25	0.18	0.24	0.35	61	--	--	--	--
NO2 + NO3 dis., mg/L			e 0.25	0.17	0.24	0.35	61	0.01	3.34	0.328	U
OrgN tot., mg/L			e 0.51	0.27	0.43	0.66	0	--	--	--	--
OrgN + NH3 tot., mg/L			e 0.46	0.20	0.40	0.60	41	0.00	0.00	1.000	U
Nitrogen tot., mg/L			0.97	0.60	0.80	1.1	11	--	--	--	--
Phosphorus tot., mg/L			e 0.02	e 0.100	0.010	0.020	47	0.00	0.00	0.171	U
Phosphorus dis., mg/L			e 0.02	e 0.010	0.010	0.010	47	0.00	0.00	0.806	U
Sediment susp., mg/L			5.87	3	5	8	0	--	--	--	--
Sed. susp., %f.t. 62 µm			76.49	66	77	86	0	--	--	--	--
Station number: 07060590			Station name: Mill Creek near Melbourne, Ark.			Longitude: 915458			Drainage area: Unknown		
Latitude: 360313											
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
pH, standard units			7.77	7.7	7.8	7.9	0	--	--	--	--
Turbidity, NTU			8.00	2.5	3.5	5.3	0	--	--	--	--
Oxygen dis., mg/L			8.74	7.6	8.7	10.0	0	--	--	--	--
BOD, 5-day, mg/L			1.74	0.9	1.4	2.4	0	--	--	--	--
Fecal coli., c/100 mL			591.62	130	290	600	0	--	--	--	--
Hardness tot., mg/L			171.91	170	180	180	8	--	--	--	--
Sulfate dis., mg/L			e 5.20	4.0	6.0	7.0	64	0.00	0.00	0.936	U
Chloride dis., mg/L			10.64	6.0	8.0	14	0	--	--	--	--
ROE, mg/L			206.52	189	208	224	0	--	--	--	--
TSS, mg/L			9.51	3	6	10	0	--	--	--	--
NO2 + NO3 tot., mg/L			e 1.38	0.91	1.1	1.3	59	--	--	--	--
NH3 tot., mg/L			e 0.15	0.070	0.110	0.160	62	--	--	--	--
OrgN tot., mg/L			0.39	0.19	0.33	0.49	13	--	--	--	--
OrgN + NH3 tot., mg/L			e 0.42	0.10	0.30	0.60	35	--	--	--	--
Nitrogen tot., mg/L			1.41	1.1	1.3	1.6	16	--	--	--	--
Phosphorus tot., mg/L			e 0.12	0.030	0.080	0.180	64	--	--	--	--
OrthoP tot., mg/L			e 0.06	0.010	0.040	0.090	64	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07060710		Station name: North Sylamore Creek near Fifty-Six, Ark.		Longitude: 921245		Drainage area: 58.1 square miles				
Latitude: 355943										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	131	266.71	253	271	284	87	-1.38	-0.52	0.001	F
pH, standard units	132	8.07	7.9	8.1	8.2	88	0.01	0.17	0.017	F
Turbidity, NTU	42	0.68	0.30	0.50	1.0	0	--	--	--	--
Oxygen dis., mg/L	134	9.85	8.6	9.7	11.0	88	-0.02	-0.16	0.602	F
Fecal coli., c/100 mL*	106	29.20	3	6	27	70	-0.75	-2.57	0.006	F
Fecal strp., c/100 mL	95	133.87	11	54	160	68	2.58	1.92	0.164	F
Hardness tot., mg/L	132	136.98	130	140	150	30	0.10	0.07	0.753	F
Calcium dis., mg/L	133	44.65	42	46	48	88	-0.09	-0.20	0.348	F
Magnesium dis., mg/L	131	6.09	5.4	6.1	6.9	87	-0.01	-0.22	0.280	F
Sodium dis., mg/L	131	1.62	1.2	1.5	1.9	87	0.03	1.54	0.027	F
Potassium dis., mg/L	132	0.76	0.70	0.80	0.90	87	-0.02	-2.08	0.012	F
Alkalinity tot., mg/L	88	133.08	127	136	144	0	--	--	--	--
Sulfate dis., mg/L	41	6.13	5.0	6.0	7.0	41	-0.07	-1.16	0.393	U
Chloride dis., mg/L	132	2.17	1.7	2.0	2.3	88	-0.02	-0.84	0.118	F
ROE, mg/L	96	149.02	141	152	158	69	-0.42	-0.28	0.285	F
NO ₂ + NO ₃ tot., mg/L	55	e 0.06	0.02	0.05	0.06	55	--	--	--	--
OrgN tot., mg/L	30	0.63	0.26	0.33	0.67	0	--	--	--	--
OrgN + NH ₃ tot., mg/L	44	e 0.49	0.20	0.30	0.40	44	0.03	5.09	0.157	U
Phosphorus tot., mg/L	51	e 0.02	e 0.010	e 0.010	0.020	51	0.00	0.00	0.242	U
Barium dis., μ g/L	26	59.23	23	30	99	22	8.48	14.32	0.001	F
Iron dis., μ g/L	27	e 13.77	e 10	5	10	27	--	--	--	--
Manganese dis., μ g/L	27	e 4.34	2	4	5	27	--	--	--	--
Nickel dis., μ g/L	20	e 1.89	e 1	1	3	20	--	--	--	--
Strontium dis., μ g/L	20	37.10	32	38	41	13	-0.19	-0.50	0.907	F
Sediment susp., mg/L	131	6.35	2	5	9	80	0.10	1.61	0.476	F
Sed. susp., $\frac{1}{8}$ ft. 62 μ m	67	58.30	44	54	71	0	--	--	--	--

Station number: 07061105		Station name: White River at Oil Trough, Ark.		Longitude: 912742		Drainage area: 11,234 square miles				
Latitude: 353836										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, μ S/cm	58	273.45	254	278	295	0	--	--	--	--
pH, standard units	162	8.07	8.0	8.1	8.2	87	0.00	0.00	0.402	U
Turbidity, NTU	98	12.74	3.5	5.0	8.3	52	-0.11	-0.89	0.416	U
Oxygen dis., mg/L	160	10.15	9.2	9.8	11.3	87	0.02	0.20	0.382	U
BOD, 5-day, mg/L	160	1.98	1.1	1.7	2.6	85	-0.09	-4.63	0.001	U

Station number: 07061105			Station name: White River at Oil Trough, Ark.			Drainage area: 11,234 square miles			
Latitude: 353836			Longitude: 912742						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, μ S/cm	58	273.45	254	278	295	0	--	--	--
pH, standard units	162	8.07	8.0	8.1	8.2	87	0.00	0.00	0.402 U
Turbidity, NTU	98	12.74	3.5	5.0	8.3	52	-0.11	-0.89	0.416 U
Oxygen dis., mg/L	160	10.15	9.2	9.8	11.3	87	0.02	0.20	0.382 U
BOD, 5-day, mg/L	160	1.98	1.1	1.7	2.6	85	-0.09	-4.63	0.001 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07061105		Station name: White River at Oil Trough, Ark.--Continued								
Latitude: 353836		Longitude: 912742		Drainage area: 11,234 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Fecal coli., c/100 mL	134	179.64	12	34	170	74	-2.87	-1.60	0.139	U
Hardness tot., mg/L	95	140.01	130	140	150	45	0.00	0.00	0.694	U
Alkalinity tot., mg/L	20	136.95	129	136	150	0	--	--	--	--
Sulfate dis., mg/L	70	e 7.67	6.0	8.0	9.0	70	-0.37	-4.78	0.205	U
Chloride dis., mg/L	159	5.23	4.0	5.0	6.0	85	-0.07	-1.37	0.011	U
ROE, mg/L	120	159.21	148	159	170	64	-0.12	-0.07	0.816	U
TSS, mg/L	159	17.94	7	11	20	86	-0.40	-2.23	0.013	U
NO2 + NO3 tot., mg/L	103	e 0.27	0.18	0.27	0.34	103	0.01	2.46	0.305	U
NH3 tot., mg/L	129	e 0.05	0.010	0.030	0.060	129	0.00	0.00	0.622	U
Phosphorus tot., mg/L	83	e 0.06	0.030	0.040	0.060	83	0.00	0.00	0.655	U
OrthoP tot., mg/L	96	e 0.02	e 0.010	0.010	0.030	96	0.00	0.00	0.062	U

Station number: 07068850		Station name: Current River near Pochontas, Ark.								
Latitude: 361755		Longitude: 905130		Drainage area: 2,606 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, µS/cm	62	269.92	230	290	315	0	--	--	--	--
pH, standard units	165	8.01	7.9	8.1	8.2	89	0.01	0.12	0.012	F
Turbidity, NTU	101	13.19	4.0	6.0	10	54	-0.18	-1.39	0.097	F
Oxygen dis., mg/L	163	9.55	8.5	9.3	10.5	89	0.01	0.14	0.727	F
BOD, 5-day, mg/L	163	1.49	0.8	1.3	1.9	87	-0.05	-3.02	0.006	F
Fecal coli., c/100 mL	139	93.26	8	20	80	77	-1.49	-1.60	0.072	F
Hardness tot., mg/L	95	147.92	130	150	170	45	1.47	1.00	0.042	F
Alkalinity tot., mg/L	20	142.30	124	144	163	0	--	--	--	--
Sulfate dis., mg/L	70	e 5.15	4.0	5.0	6.0	70	-0.08	-1.62	0.594	U
Chloride dis., mg/L	163	3.75	2.5	4.0	4.5	86	-0.13	-3.50	0.000	F
ROE, mg/L	119	161.63	149	165	177	66	0.45	0.28	0.266	F
TSS, mg/L	162	19.31	9	14	22	90	-0.41	-2.13	0.018	F
NO2 + NO3 tot., mg/L	101	e 0.26	0.17	0.23	0.32	101	-0.01	-1.95	0.526	U
NH3 tot., mg/L	133	e 0.06	0.020	0.040	0.070	133	0.00	0.00	0.107	U
Phosphorus tot., mg/L	84	e 0.05	0.030	0.040	0.060	84	0.00	0.00	0.738	U
OrthoP tot., mg/L	101	e 0.03	0.010	0.020	0.040	101	0.00	0.00	0.169	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07069000		Station name: Black River at Pocahontas, Ark.		Drainage area: 4,845 square miles						
Latitude: 361514		Longitude: 905812								
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	29	249.90	207	258	301	0	--	--	--	--
pH, standard units	136	7.95	7.8	8.0	8.2	0	--	--	--	--
Turbidity, NTU	101	22.96	10	20	30	54	-0.45	-1.96	0.187	F
Oxygen dis., mg/L	133	9.11	7.9	8.8	10.1	0	--	--	--	--
BOD, 5-day, mg/L	131	1.85	1.1	1.6	2.4	0	--	--	--	--
Fecal coli., c/100 mL	104	134.75	19	44	130	0	--	--	--	--
Hardness tot., mg/L	86	133.74	110	140	160	0	--	--	--	--
Alkalinity tot., mg/L	12	133.00	103	135	168	6	--	--	--	--
Sulfate dis., mg/L	70	e 6.00	4.0	6.0	8.0	70	0.00	0.00	0.584	U
Chloride dis., mg/L	138	3.96	2.8	4.0	5.0	0	--	--	--	--
ROE, mg/L	121	152.79	136	157	173	66	0.21	0.14	0.679	F
TSS, mg/L	132	33.24	16	28	40	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	101	e 0.22	0.16	0.21	0.26	101	0.00	-1.86	0.655	U
NH ₃ tot., mg/L	130	e 0.05	0.010	0.040	0.070	130	0.00	0.00	0.048	U
Phosphorus tot., mg/L	85	e 0.07	0.050	0.060	0.080	85	0.00	0.00	0.517	U
OrthoP tot., mg/L	101	e 0.03	0.010	0.030	0.040	101	0.00	7.45	0.002	U

Station number: 07069295

Station name: South Fork Spring River at Saddle, Ark.

Latitude: 362100

Longitude: 913800

Drainage area: Unknown

		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	60	364.35	341	376	402	0	--	--	--	--
pH, standard units	170	8.10	8.0	8.1	8.2	83	-0.01	-0.12	0.062	F
Turbidity, NTU	99	5.35	2.5	3.5	4.8	54	-0.05	-0.86	0.766	F
Oxygen dis., mg/L	168	9.49	7.7	9.4	11.1	84	-0.05	-0.54	0.408	F
BOD, 5-day, mg/L	162	1.56	0.9	1.2	2.0	82	-0.06	-4.00	0.000	F
Fecal coli., c/100 mL	136	172.93	12	44	120	70	-1.79	-1.04	0.147	F
Hardness tot., mg/L	95	203.93	180	210	220	45	-0.83	-0.41	0.218	U
Alkalinity tot., mg/L	19	209.58	197	213	222	0	--	--	--	--
Sulfate dis., mg/L	73	e 4.26	3.0	4.0	6.0	73	0.00	0.00	0.696	U
Chloride dis., mg/L	163	4.17	3.0	4.5	5.0	84	-0.13	-3.18	0.000	F
ROE, mg/L	125	202.53	185	205	225	65	0.77	0.38	0.163	F
TSS, mg/L	171	12.53	4	7	14	83	-0.43	-3.45	0.010	F
NO ₂ + NO ₃ tot., mg/L	99	e 0.29	0.11	0.20	0.39	99	0.00	0.00	1.000	U
NH ₃ tot., mg/L	131	e 0.05	0.020	0.040	0.060	131	0.00	0.00	0.210	U
Phosphorus tot., mg/L	83	e 0.03	0.010	0.020	0.040	83	0.00	0.00	0.436	U
OrthoP tot., mg/L	98	e 0.02	e 0.010	0.010	0.020	98	0.00	0.00	0.804	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07069370		Station name: Spring River at Ravenenden, Ark.				Longitude: 911503		Drainage area: Unknown	
Latitude: 361330									
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	402.19	387	409	438	0	--	--	--	
pH, standard units	8.24	8.2	8.3	8.3	89	0.00	0.04	0.157 F	
Turbidity, NTU	8.37	3.5	5.0	7.2	54	0.08	0.96	0.580 F	
Oxygen dis., mg/L	9.68	8.4	9.2	10.9	88	0.00	-0.05	0.819 F	
BOD, 5-day, mg/L	1.68	1.0	1.5	2.1	87	-0.06	-3.39	0.000 F	
Fecal coli., c/100 mL	101.75	8	24	80	74	-1.32	-1.30	0.199 F	
Hardness tot., mg/L	222.00	210	220	240	45	0.52	0.24	0.214 F	
Alkalinity tot., mg/L	206.10	220	226	238	0	--	--	--	
Sulfate dis., mg/L	e 3.99	2.0	4.0	5.0	70	0.00	0.00	0.893 U	
Chloride dis., mg/L	3.94	2.5	3.5	4.5	86	-0.18	-4.58	0.000 F	
ROE, mg/L	227.47	222	233	239	66	-0.07	-0.03	0.975 F	
TSS, mg/L	15.19	6	11	16	89	-0.22	-1.47	0.038 F	
NO2 + NO3 tot., mg/L	e 0.41	0.28	0.39	0.50	102	0.01	2.03	0.704 U	
NH3 tot., mg/L	e 0.04	0.010	0.030	0.050	133	0.00	0.00	0.299 U	
Phosphorus tot., mg/L	e 0.03	0.020	0.030	0.040	83	0.00	0.00	0.393 U	
OrthoP tot., mg/L	e 0.01	e 0.010	0.010	0.020	101	0.00	0.00	0.233 U	

Station number: 07072100

Station name: Eleven Point River near Pocahontas, Ark.

Longitude: 910505

Drainage area: 1,192 square miles

Latitude: 361443		Station name: Eleven Point River near Pocahontas, Ark.				Longitude: 910505		Drainage area: 1,192 square miles	
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code	
Conductance, $\mu\text{S}/\text{cm}$	342.52	320	357	373	0	--	--	--	
pH, standard units	8.10	8.0	8.1	8.2	89	0.00	0.01	0.821 F	
Turbidity, NTU	8.47	3.4	5.0	6.5	54	-0.08	-0.90	0.523 F	
Oxygen dis., mg/L	9.60	8.5	9.4	10.6	88	0.01	0.07	0.786 F	
BOD, 5-day, mg/L	1.47	0.8	1.3	1.8	87	-0.05	-3.49	0.000 F	
Fecal coli., c/100 mL	99.69	14	31	74	73	-0.51	-0.51	0.743 F	
Hardness tot., mg/L	186.91	170	190	210	45	0.59	0.31	0.499 F	
Alkalinity tot., mg/L	183.95	171	181	197	0	--	--	--	
Sulfate dis., mg/L	e 3.64	2.0	4.0	5.0	70	0.00	0.00	1.000 U	
Chloride dis., mg/L	3.28	2.0	3.5	4.0	86	-0.18	-5.52	0.000 F	
ROE, mg/L	195.62	183	199	211	66	-0.56	-0.29	0.391 F	
TSS, mg/L	14.31	7	12	19	88	-0.52	-3.66	0.001 F	
NO2 + NO3 tot., mg/L	e 0.46	0.36	0.45	0.57	102	0.00	-0.54	0.949 U	
NH3 tot., mg/L	e 0.04	0.020	0.030	0.050	131	0.00	0.00	0.029 U	
Phosphorus tot., mg/L	e 0.03	0.010	0.020	0.040	82	0.00	0.00	0.565 U	
OrthoP tot., mg/L	e 0.01	e 0.010	0.010	0.020	102	0.00	0.00	0.288 U	

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07072500		Station name: Black River at Black Rock, Ark.		Longitude: 910550		Drainage area: 7,369 square miles			
Latitude: 360615		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	110	289.45	245	297	334	79	-0.49	-0.17	0.273 F
pH, standard units	110	7.92	7.7	8.0	8.2	79	0.00	0.03	0.575 F
Oxygen dis., mg/L	106	8.77	7.5	8.5	10.0	79	-0.08	-0.88	0.002 F
BOD, 5-day, mg/L	100	1.73	1.2	1.5	2.0	74	-0.04	-2.58	0.013 F
Fecal coli., c/100 mL*	84	211.34	18	40	140	65	-6.05	-2.86	0.004 F
Fecal strp., c/100 mL	76	508.24	44	140	480	59	-3.32	-0.65	0.550 F
Hardness tot., mg/L	67	147.78	120	150	180	0	--	--	--
Calcium dis., mg/L	67	30.78	26	31	36	0	--	--	--
Magnesium dis., mg/L	67	17.17	14	18	21	0	--	--	--
Sodium dis., mg/L	66	2.36	2.0	2.3	2.8	0	--	--	--
Potassium dis., mg/L	66	1.21	0.97	1.1	1.4	0	--	--	--
Alkalinity tot., mg/L	50	148.30	126	150	177	0	--	--	--
Sulfate dis., mg/L	41	e 6.32	5.1	5.9	7.0	41	-0.06	-0.92	0.915 U
Chloride dis., mg/L	67	3.11	2.5	3.0	3.3	0	--	--	--
ROE, mg/L	18	168.22	156	164	191	15	--	--	--
NO2 + NO3 tot., mg/L	54	e 0.27	0.20	0.26	0.30	54	--	--	--
NO2 + NO3 dis., mg/L	59	e 0.23	0.19	0.22	0.27	59	0.00	-2.13	0.136 U
OrgN tot., mg/L	48	0.54	0.29	0.42	0.59	0	--	--	--
OrgN + NH3 tot., mg/L	40	e 0.44	0.25	0.40	0.50	40	0.00	0.00	1.000 U
Nitrogen tot., mg/L	11	0.75	0.60	0.70	0.90	11	--	--	--
Phosphorus tot., mg/L	46	e 0.05	0.030	0.040	0.060	46	0.00	-9.56	0.474 U
Phosphorus dis., mg/L	45	e 0.04	0.020	0.020	0.040	45	0.00	0.00	0.782 U
OrthoP tot., mg/L	6	e 0.04	0.010	0.050	0.100	6	--	--	--
OrthoP dis., mg/L	23	e 0.03	e 0.010	0.010	0.030	23	--	--	--

Station number: 07074100		Station name: Strawberry River near Smithville, Ark.		Longitude: 911931		Drainage area: 539 square miles			
Latitude: 360140		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	57	369.56	340	382	396	0	--	--	--
pH, standard units	164	8.15	8.1	8.2	8.2	89	0.00	-0.02	0.566 F
Turbidity, NTU	102	11.60	4.5	7.0	11	54	-0.19	-1.62	0.371 F
Oxygen dis., mg/L	164	9.60	8.2	9.1	11.0	88	0.04	0.42	0.139 F
BOD, 5-day, mg/L	160	1.27	0.8	1.2	1.5	87	-0.03	-2.35	0.008 F
Fecal coli., c/100 mL	133	173.54	14	40	140	74	0.61	0.35	0.708 F
Hardness tot., mg/L	94	200.83	190	210	220	25	0.40	0.20	0.682 F

Station number: 07074100 Station name: Strawberry River near Smithville, Ark.

Latitude: 360140 Longitude: 911931 Drainage area: 539 square miles

Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	57	369.56	340	382	396	0	--	--	--
pH, standard units	164	8.15	8.1	8.2	8.2	89	0.00	-0.02	0.566 F
Turbidity, NTU	102	11.60	4.5	7.0	11	54	-0.19	-1.62	0.371 F
Oxygen dis., mg/L	164	9.60	8.2	9.1	11.0	88	0.04	0.42	0.139 F
BOD, 5-day, mg/L	160	1.27	0.8	1.2	1.5	87	-0.03	-2.35	0.008 F
Fecal coli., c/100 mL	133	173.54	14	40	140	74	0.61	0.35	0.708 F
Hardness tot., mg/L	94	200.83	190	210	220	25	0.40	0.20	0.682 F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07074100			Station name: Strawberry River near Smithville, Ark.--Continued			Longitude: 911931			Drainage area: 539 square miles		
Latitude: 360140											
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results						
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend	
Alkalinity tot., mg/L	17	209.41	200	210	217	0	--	--	--	--	--
Sulfate dis., mg/L	70	e 5.63	4.0	6.0	7.0	70	0.00	0.00	0.789	U	
Chloride dis., mg/L	162	4.11	2.5	4.0	5.0	86	-0.24	-5.75	0.000	F	
ROE, mg/L	120	207.43	196	211	225	66	-0.73	-0.35	0.105	F	
TSS, mg/L	158	22.69	10	16	25	89	-0.59	-2.62	0.001	F	
NO2 + NO3 tot., mg/L	101	e 0.25	0.08	0.20	0.37	101	-0.02	-6.04	0.146	U	
NH3 tot., mg/L	131	e 0.05	0.010	0.040	0.060	131	0.00	0.00	0.001	U	
Phosphorus tot., mg/L	83	e 0.04	0.020	0.030	0.050	83	0.00	0.00	1.000	U	
Orthop tot., mg/L	101	e 0.03	e 0.010	0.010	0.020	101	0.00	0.00	0.470	U	

Station number: 07074500			Station name: White River at Newport, Ark.			Longitude: 911719			Drainage area: 19,860 square miles		
Latitude: 353618											
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results						
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend	
Conductance, µS/cm	85	277.12	257	282	307	0	--	--	--	--	--
pH, standard units	85	8.09	8.0	8.1	8.3	0	--	--	--	--	--
Turbidity, NTU	54	17.47	7.1	15	23	50	-0.56	-3.21	0.074	F	
Oxygen dis., mg/L	84	9.36	8.2	9.0	10.4	0	--	--	--	--	--
Fecal coli., c/100 mL*	80	181.09	19	56	130	65	-3.58	-1.98	0.109	F	
Fecal strp., c/100 mL	83	570.61	30	68	230	67	-2.76	-0.48	0.516	F	
Hardness tot., mg/L	82	140.63	130	150	160	0	--	--	--	--	--
Calcium dis., mg/L	82	33.40	30	34	37	0	--	--	--	--	--
Magnesium dis., mg/L	83	13.99	12	14	16	0	--	--	--	--	--
Sodium dis., mg/L	82	2.82	2.2	2.7	3.3	0	--	--	--	--	--
Potassium dis., mg/L	84	1.38	1.2	1.4	1.5	0	--	--	--	--	--
Alkalinity tot., mg/L	48	132.31	119	132	150	0	--	--	--	--	--
Sulfate dis., mg/L	43	e 7.46	6.5	7.6	8.5	43	0.15	2.08	0.669	U	
Chloride dis., mg/L	84	4.15	3.4	4.1	4.7	0	--	--	--	--	--
ROE, mg/L	83	154.86	138	157	172	66	-0.35	-0.22	0.430	F	
NO2 + NO3 tot., mg/L	37	e 0.24	0.17	0.25	0.34	37	--	--	--	--	--
NO2 + NO3 dis., mg/L	65	e 0.26	0.19	0.24	0.29	65	0.00	0.00	0.901	U	
OrgN tot., mg/L	52	0.52	0.34	0.48	0.69	39	-0.01	-1.73	0.379	F	
OrgN + NH3 tot., mg/L	46	e 0.51	0.30	0.40	0.70	46	0.02	4.25	0.149	U	
Phosphorus tot., mg/L	47	e 0.06	0.030	0.050	0.070	47	0.00	-3.28	0.177	U	
Phosphorus dis., mg/L	48	e 0.02	0.010	0.020	0.020	48	0.00	0.00	0.951	U	
Orthop dis., mg/L	48	e 0.01	e 0.010	0.010	0.020	48	0.00	0.00	0.210	U	

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07074500		Station name: White River at Newport, Ark.--Continued		Drainage area: 19,860 square miles				
Latitude: 353618		Longitude: 911719						
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Aluminum dis., µg/L	e 28.37	e 10	10	20	27	0.00	0.00	0.403 U
Arsenic dis., mg/L	e 1.05	1	1	1	26	--	--	--
Barium dis., µg/L	42.37	37	40	45	20	-0.69	-1.62	0.088 F
Iron dis., µg/L	e 33.64	9	20	38	45	--	--	--
Manganese dis., µg/L	e 7.57	2	5	8	45	--	--	--
Nickel dis., µg/L	e 1.78	e 1	1	3	39	-0.29	-16.34	0.217 U
Strontium dis., µg/L	35.85	33	35	39	14	-0.54	-1.50	0.339 F
Sediment susp., mg/L	64.98	36	58	75	0	--	--	--
Sed. susp., %f.t. 62µm	77.06	69	80	90	0	--	--	--

Station number: 07074990		Station name: Middle Fork Little Red River near Shirley, Ark.		Drainage area: Unknown				
Latitude: 353906		Longitude: 921920						
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	90.04	76	84	105	0	--	--	--
pH, standard units	7.42	7.2	7.4	7.6	88	0.02	0.28	0.005 F
Turbidity, NTU	9.07	4.0	5.0	7.3	54	0.01	0.11	1.000 F
Oxygen dis., mg/L	9.60	8.1	9.2	11.0	87	0.00	-0.05	0.949 F
BOD, 5-day, mg/L	1.45	0.7	1.1	2.0	88	-0.04	-2.45	0.021 F
Fecal coli., c/100 mL	83.54	4	17	63	72	0.30	0.35	0.468 F
Hardness tot., mg/L	40.12	34	40	44	45	-0.34	-0.85	0.079 F
Alkalinity tot., mg/L	34.95	27	32	42	0	--	--	--
Sulfate dis., mg/L	e 6.41	4.0	7.0	8.0	74	-0.23	-3.51	0.316 U
Chloride dis., mg/L	3.47	2.5	3.5	4.0	85	-0.14	-3.95	0.000 F
ROE, mg/L	58.42	50	57	64	65	-1.02	-1.75	0.025 F
TSS, mg/L	8.80	4	6	9	88	-0.12	-1.39	0.066 F
NO2 + NO3 tot., mg/L	e 0.06	0.02	0.03	0.08	106	0.00	0.00	0.092 U
NH3 tot., mg/L	e 0.05	0.010	0.030	0.050	128	0.00	0.00	0.233 U
Phosphorus tot., mg/L	e 0.05	0.020	0.040	0.050	84	0.00	0.00	0.591 U
Orthop tot., mg/L	e 0.02	e 0.010	0.010	0.020	99	0.00	0.00	1.000 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07076000		Station name: Little Red River near Heber Springs, Ark.				Longitude: 915950		Drainage area: 1,153 square miles		
Latitude: 353102										
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
Conductance, $\mu\text{S}/\text{cm}$	180	40.31	37	41	45	90	0.20	0.50	0.246	U
pH, standard units	179	7.03	6.7	7.0	7.3	90	0.00	-0.02	0.451	U
Turbidity, NTU	27	2.82	0.50	1.0	3.0	18	-0.02	-0.65	0.597	U
Oxygen dis., mg/L	179	10.13	8.8	10.6	11.6	90	0.12	1.16	0.012	U
BOD, 5-day, mg/L	37	1.34	0.9	1.4	1.8	0	--	--	--	--
Fecal coli., c/100 mL*	35	10.30	1	3	10	24	-0.23	-2.18	0.281	U
Hardness tot., mg/L	42	17.31	15	16	19	28	-0.27	-1.55	0.100	U
Calcium dis., mg/L	27	5.01	4.4	4.8	5.3	0	--	--	--	--
Magnesium dis., mg/L	27	1.01	0.90	1.0	1.1	0	--	--	--	--
Alkalinity tot., mg/L	35	13.66	12	13	14	24	0.00	0.00	0.654	U
Chloride dis., mg/L	26	1.60	1.4	1.5	1.7	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	36	e 0.21	0.16	0.20	0.27	36	-0.01	-4.77	0.046	U
OrgN tot., mg/L	18	e 0.46	0.11	0.27	0.56	0	--	--	--	--
OrgN + NH ₃ tot., mg/L	8	e 0.65	0.28	0.40	0.50	8	--	--	--	--
Phosphorus tot., mg/L	20	e 0.03	0.010	0.030	0.040	20	--	--	--	--
OrthoP tot., mg/L	27	e 0.02	e 0.010	0.010	0.030	27	0.00	0.00	0.082	U

Station number: 07076626		Station name: Little Red River above Searcy, Ark.				Longitude: 914226		Drainage area: Unknown		
Latitude: 351612										
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
pH, standard units	51	7.19	6.8	7.2	7.5	0	--	--	--	--
Turbidity, NTU	48	6.09	3.6	5.0	6.7	0	--	--	--	--
Oxygen dis., mg/L	48	9.94	8.6	9.9	11.0	0	--	--	--	--
BOD, 5-day, mg/L	50	0.99	0.7	0.9	1.2	0	--	--	--	--
Fecal coli., c/100 mL	30	144.33	8	16	42	17	--	--	--	--
Hardness tot., mg/L	35	19.09	16	18	22	7	--	--	--	--
Sulfate dis., mg/L	50	e 4.17	3.0	4.0	5.0	50	0.00	0.00	0.575	U
Chloride dis., mg/L	51	2.87	2.0	2.5	4.0	0	--	--	--	--
ROE, mg/L	50	34.48	29	37	41	0	--	--	--	--
TSS, mg/L	51	6.16	4	6	8	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	51	e 0.17	0.08	0.14	0.21	51	--	--	--	--
NH ₃ tot., mg/L	51	e 0.05	0.010	0.030	0.050	51	--	--	--	--
OrgN tot., mg/L	19	0.37	0.18	0.29	0.47	14	--	--	--	--
OrgN + NH ₃ tot., mg/L	31	e 0.34	0.10	0.30	0.47	31	--	--	--	--
Nitrogen tot., mg/L	24	0.51	0.33	0.45	0.68	15	--	--	--	--
Phosphorus tot., mg/L	47	e 0.04	0.020	0.030	0.040	47	--	--	--	--
OrthoP tot., mg/L	48	e 0.01	e 0.010	0.010	0.010	48	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07076632		Station name: Little Red River below Searcy, Ark.		Drainage area:		Unknown			
Latitude: 351519		Longitude: 914034							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	65	7.16	6.9	7.2	7.5	0	--	--	--
Turbidity, NTU	62	7.56	4.0	5.2	7.0	0	--	--	--
Oxygen dis., mg/L	62	9.78	8.6	9.7	10.8	0	--	--	--
BOD, 5-day, mg/L	63	1.27	0.9	1.1	1.5	0	--	--	--
Fecal coli., c/100 mL	40	290.67	27	60	420	0	--	--	--
Hardness tot., mg/L	48	18.96	16	18	22	8	--	--	--
Sulfate dis., mg/L	61	e 4.79	3.0	5.0	6.0	61	0.00	0.00	1.000
Chloride dis., mg/L	66	3.39	2.1	2.8	4.2	0	--	--	--
ROE, mg/L	63	37.68	31	38	44	0	--	--	--
TSS, mg/L	66	7.80	4	7	10	0	--	--	--
NO2 + NO3 tot., mg/L	65	e 0.17	0.09	0.15	0.19	65	--	--	--
NH3 tot., mg/L	63	e 0.09	0.030	0.050	0.110	63	--	--	--
OrgN tot., mg/L	22	0.60	0.21	0.39	0.74	14	--	--	--
OrgN + NH3 tot., mg/L	35	e 0.56	0.20	0.40	0.70	35	--	--	--
Nitrogen tot., mg/L	28	0.78	0.40	0.58	0.99	16	--	--	--
Phosphorus tot., mg/L	61	e 0.09	0.040	0.050	0.090	61	--	--	--
OrthoP tot., mg/L	62	e 0.05	0.010	0.020	0.060	62	--	--	--

Station number: 07076950		Station name: Wattensaw Bayou near Hazen, Ark.		Drainage area:		192 square miles			
Latitude: 345234		Longitude: 913356							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	65	7.33	7.1	7.4	7.6	0	--	--	--
Turbidity, NTU	60	46.51	25	40	63	0	--	--	--
Oxygen dis., mg/L	65	6.70	4.3	6.4	8.5	0	--	--	--
BOD, 5-day, mg/L	58	2.70	1.5	2.4	3.4	0	--	--	--
Fecal coli., c/100 mL	44	600.68	60	170	410	0	--	--	--
Hardness tot., mg/L	45	74.40	32	60	120	8	--	--	--
Sulfate dis., mg/L	64	e 9.98	6.0	9.0	11	64	0.25	2.50	0.367
Chloride dis., mg/L	68	14.26	5.6	12	19	0	--	--	--
ROE, mg/L	66	149.85	113	139	185	0	--	--	--
TSS, mg/L	56	39.04	17	24	43	0	--	--	--
NO2 + NO3 tot., mg/L	69	e 0.21	0.09	0.16	0.26	69	--	--	--
NH3 tot., mg/L	62	e 0.09	0.050	0.070	0.120	62	--	--	--
Phosphorus tot., mg/L	61	e 0.21	0.140	0.190	0.260	61	--	--	--
OrthoP tot., mg/L	66	e 0.10	0.060	0.090	0.140	66	--	--	--

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued

Station number: 07077000		Station name: White River at Devalls Bluff, Ark.		Longitude: 912645		Drainage area: 23,431 square miles			
Latitude: 344725									
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	63	237.29	207	243	271	0	--	--	--
pH, standard units	165	7.97	7.8	8.0	8.2	86	0.01	0.11	0.126 F
Turbidity, NTU	91	29.78	20	25	35	49	-1.51	-5.06	0.015 F
Oxygen dis., mg/L	165	9.59	8.4	9.5	10.5	85	0.06	0.67	0.036 F
BOD, 5-day, mg/L	164	2.07	1.4	2.0	2.7	86	-0.05	-2.53	0.008 F
Fecal coli., c/100 mL	135	78.63	8	36	90	73	-0.14	-0.17	0.934 F
Hardness tot., mg/L	89	124.54	110	130	150	39	-0.53	-0.42	0.315 F
Calcium dis., mg/L	10	31.50	29	31	33	8	--	--	--
Magnesium dis., mg/L	10	13.90	13	13	15	8	--	--	--
Alkalinity tot., mg/L	21	122.00	113	120	136	0	--	--	--
Sulfate dis., mg/L	73	e 6.66	5.0	6.0	8.0	73	0.37	5.51	0.030 U
Chloride dis., mg/L	159	5.49	4.5	5.5	6.5	82	-0.09	-1.67	0.011 F
ROE, mg/L	123	149.59	137	147	161	0	--	--	--
TSS, mg/L	150	42.73	27	36	47	84	-0.34	-0.79	0.285 F
$\text{NO}_2 + \text{NO}_3$ tot., mg/L	111	e 0.20	0.12	0.19	0.27	111	0.00	0.00	0.909 U
NH_3 tot., mg/L	128	e 0.05	0.020	0.040	0.060	128	0.00	0.00	0.015 U
Phosphorus tot., mg/L	82	e 0.09	0.060	0.070	0.110	82	0.00	3.62	0.045 U
OrthoP tot., mg/L	98	e 0.03	0.010	0.020	0.040	98	0.00	0.00	0.125 U

Station number: 07077500

Station name: Cache River at Patterson, Ark.

Longitude: 911415

Drainage area: 1,037 square miles

Latitude: 351610									
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	153	172.19	84	133	244	87	0.24	0.14	0.751 F
pH, standard units	150	7.25	6.9	7.2	7.5	87	0.01	0.19	0.122 F
Turbidity, NTU	29	161.00	77	140	250	5	--	--	--
Oxygen dis., mg/L	144	7.14	5.3	6.9	8.5	83	-0.03	-0.45	0.322 F
BOD, 5-day, mg/L	119	2.70	2.1	2.5	3.2	85	-0.02	-0.85	0.220 F
Fecal coli., c/100 mL*	96	214.72	78	130	270	73	0.13	0.06	0.978 F
Fecal strp., c/100 mL	84	789.11	190	330	780	67	29.24	3.71	0.027 F
Hardness tot., mg/L	140	62.45	25	43	96	86	-0.08	-0.14	0.796 F
Calcium dis., mg/L	140	15.33	6.0	10	23	86	-0.08	-0.50	0.366 F
Magnesium dis., mg/L	140	5.66	2.4	4.0	8.4	86	0.02	0.27	0.667 F
Sodium dis., mg/L	142	9.76	5.6	8.2	12	87	0.01	0.15	0.783 F
Potassium dis., mg/L	142	3.07	2.4	2.9	3.8	87	-0.02	-0.72	0.340 F
Alkalinity tot., mg/L	118	63.27	24	40	95	66	0.37	0.59	0.391 F
Sulfate dis., mg/L	61	e 11.26	7.7	11	14	61	0.27	2.37	0.712 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07077500		Station name: Cache River at Patterson, Ark.--Continued				Longitude: 911415		Drainage area: 1,037 square miles	
Latitude: 351610									
		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Chloride dis., mg/L	142	7.42	4.7	7.0	9.7	87	0.02	0.29	0.687 F
ROE, mg/L	37	115.97	78	103	143	0	--	--	--
TSS, mg/L	23	72.74	39	64	98	7	--	--	--
NO2 dis., mg/L	53	e 0.02	e 0.010	0.010	0.030	53	0.00	0.00	0.347 U
NO2 + NO3 tot., mg/L	63	e 0.36	0.17	0.33	0.50	63	--	--	--
NO2 + NO3 dis., mg/L	64	e 0.30	0.13	0.23	0.40	64	-0.01	-4.68	0.217 U
OrgN tot., mg/L	82	1.09	0.75	1.00	1.3	0	--	--	--
OrgN + NH3 tot., mg/L	67	e 1.09	0.80	1.0	1.4	67	-0.01	-0.59	0.608 U
Nitrogen tot., mg/L	11	1.83	1.3	1.6	2.4	11	--	--	--
Phosphorus tot., mg/L	67	e 0.24	0.170	0.220	0.285	67	0.00	-1.59	0.646 U
phosphorus dis., mg/L	48	e 0.10	0.070	0.090	0.110	48	0.00	2.40	0.199 U
OrthoP tot., mg/L	6	e 0.19	0.120	0.170	0.360	6	--	--	--
OrthoP dis., mg/L	24	e 0.10	0.060	0.070	0.100	24	--	--	--
Iron dis., µg/L	32	e 23.44	--	1	20	32	-7.69	-32.82	0.310 U
Manganese dis., µg/L	32	e 67.60	--	--	--	32	-36.67	-54.24	0.119 U
Sediment susp., mg/L	61	98.13	58	83	133	0	--	--	--
Sed. susp., %f.t. 62µm	44	89.58	84	94	97	0	--	--	--

Station number: 07077660		Station name: Bayou Devieu near Gibson, Ark.				Longitude: 905018		Drainage area: Unknown	
Latitude: 354736									
		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	59	236.20	117	190	352	0	--	--	--
pH, standard units	158	7.53	7.2	7.5	7.8	76	0.02	0.25	0.036 F
Turbidity, NTU	100	79.40	25	50	95	50	1.31	1.65	0.368 F
Oxygen dis., mg/L	161	8.26	6.2	8.4	10.4	74	0.22	2.63	0.003 F
BOD, 5-day, mg/L	143	5.56	2.6	3.8	6.1	84	-0.41	-7.30	0.000 U
Fecal coli., c/100 mL	119	2,502.01	68	300	1,100	70	-26.75	-1.07	0.026 U
Hardness tot., mg/L	93	67.27	40	58	92	35	-0.08	-0.12	0.772 U
Alkalinity tot., mg/L	19	75.00	34	68	107	0	--	--	--
Sulfate dis., mg/L	69	e 17.71	12	16	24	69	-0.45	-2.54	0.792 U
Chloride dis., mg/L	157	20.90	9.3	16	32	85	-0.19	-0.90	0.404 U
ROE, mg/L	117	205.88	150	198	249	64	-3.69	-1.79	0.220 U
TSS, mg/L	149	71.99	26	39	75	72	-0.23	-0.32	0.719 F
NO2 + NO3 tot., mg/L	99	e 1.07	0.44	0.74	1.6	99	0.05	4.67	0.341 U
NH3 tot., mg/L	128	e 0.69	0.070	0.160	0.330	128	-0.02	-2.54	0.032 U
Phosphorus tot., mg/L	82	e 1.72	0.490	1.10	2.40	82	0.01	0.78	0.917 U
OrthoP tot., mg/L	95	e 1.44	0.340	0.800	2.00	95	-0.01	-0.87	0.793 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07077700			Station name: Bayou Devieu at Morton, Ark.			Longitude: 910637		Drainage area: 421 square miles		
Latitude: 351507										
Water-quality property or constituent			Sample size	Descriptive statistics			Best trend results			
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	123		198.89	98	150	277	28	1.83	0.92	0.445 F
pH, standard units	123		7.31	7.0	7.3	7.6	28	0.00	0.00	1.000 F
Oxygen dis., mg/L	112		6.27	4.2	5.6	8.3	27	-0.03	-0.46	0.566 F
BOD, 5-day, mg/L	119		3.73	2.9	3.6	4.4	28	-0.10	-2.65	0.038 F
Fecal coli., c/100 mL*	97		274.10	56	130	350	76	0.00	0.00	1.000 U
Fecal strp., c/100 mL	82		974.73	120	330	1,100	68	13.10	1.34	0.301 U
Hardness tot., mg/L	123		70.07	30	45	99	28	0.19	0.27	0.743 F
Calcium dis., mg/L	123		18.07	7.6	11	26	28	-0.02	-0.09	0.913 F
Magnesium dis., mg/L	123		5.99	2.7	4.1	8.5	28	0.02	0.41	0.743 F
Sodium dis., mg/L	122		10.74	6.5	9.3	14	28	0.00	0.01	1.000 F
Potassium dis., mg/L	123		3.54	2.3	3.1	4.5	28	-0.02	-0.58	0.743 F
Alkalinity tot., mg/L	98		67.63	27	43	95	28	0.26	0.39	0.585 F
Sulfate dis., mg/L	42		e 15.04	9.6	15	20	42	0.75	4.99	0.075 F
Chloride dis., mg/L	122		9.57	5.6	8.6	12	27	0.12	1.26	0.368 F
ROE, mg/L	33		126.82	88	117	147	0	--	--	--
NO2 dis., mg/L	51		e 0.04	e 0.010	0.020	0.050	51	0.00	0.00	0.419 U
NO2 + NO3 tot., mg/L	63		e 0.36	0.17	0.32	0.47	63	--	--	--
NO2 + NO3 dis., mg/L	61		e 0.28	0.12	0.22	0.43	61	0.00	-1.76	0.082 U
OrgN tot., mg/L	63		1.17	0.78	1.1	1.5	0	--	--	--
OrgN + NH3 tot., mg/L	48		e 1.21	0.80	1.1	1.7	48	-0.07	-5.89	0.046 U
Nitrogen tot., mg/L	11		1.75	1.4	1.8	2.3	11	--	--	--
Phosphorus tot., mg/L	48		e 0.24	0.160	0.220	0.280	48	-0.01	-3.14	0.105 U
Phosphorus dis., mg/L	48		e 0.11	0.070	0.090	0.120	48	0.00	3.06	0.166 U
OrthoP tot., mg/L	6		e 0.32	0.140	0.310	0.860	6	--	--	--
OrthoP dis., mg/L	22		e 0.10	0.050	0.080	0.110	22	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	8		e 127.41	60	160	230	8	--	--	--
Manganese dis., $\mu\text{g}/\text{L}$	8		e 350.00	100	330	550	8	--	--	--
Sediment susp., mg/L	41		110.27	59	88	120	0	--	--	--
Sed. susp., $\text{\%t. } 62\mu\text{m}$	40		91.72	90	94	97	0	--	--	--

Station number: 07077800 Station name: White River at Clarendon, Ark.
 Latitude: 344108 Longitude: 911855 Drainage area: 25,555 square miles

Water-quality property or constituent		Descriptive statistics					Best trend results			
		Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	100		237.82	206	240	278	0	--	--	--
pH, standard units	99		7.86	7.6	7.9	8.1	0	--	--	--
Turbidity, NTU	34		30.11	9.5	25	41	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07077800		Station name: White River at Clarendon, Ark.--Continued		Drainage area: 25,555 square miles					
Latitude: 344108		Longitude: 911855							
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Oxygen dis., mg/L	8.78	7.5	8.4	10.1	0	--	--	--	--
BOD, 5-day, mg/L	1.69	1.4	1.6	1.9	8	--	--	--	--
Fecal coli., c/100 mL*	57.44	11	32	59	0	--	--	--	--
Fecal strp., c/100 mL	241.27	38	110	250	0	--	--	--	--
Hardness tot., mg/L	116.14	100	120	140	0	--	--	--	--
Calcium dis., mg/L	27.84	24	28	32	0	--	--	--	--
Magnesium dis., mg/L	11.33	9.5	11	13	0	--	--	--	--
Sodium dis., mg/L	3.70	2.7	3.4	4.3	0	--	--	--	--
Potassium dis., mg/L	1.58	1.4	1.5	1.7	0	--	--	--	--
Alkalinity tot., mg/L	108.44	91	110	128	0	--	--	--	--
Sulfate dis., mg/L	e 7.64	6.5	7.8	9.2	16	--	--	--	--
Chloride dis., mg/L	4.83	3.7	4.6	5.5	0	--	--	--	--
ROE, mg/L	135.95	118	130	155	0	--	--	--	--
NO2 + NO3 tot., mg/L	e 0.33	0.14	0.23	0.28	44	--	--	--	--
NO2 + NO3 dis., mg/L	e 0.29	0.12	0.20	0.31	45	--	--	--	--
OrgN tot., mg/L	0.72	0.46	0.58	0.82	0	--	--	--	--
OrgN + NH3 tot., mg/L	e 0.60	0.40	0.50	0.70	22	--	--	--	--
Phosphorus tot., mg/L	e 0.08	0.050	0.070	0.110	22	--	--	--	--
Phosphorus dis., mg/L	e 0.03	0.020	0.030	0.040	22	--	--	--	--
OrthoP dis., mg/L	e 0.02	e 0.010	0.020	0.020	22	--	--	--	--
Aluminum dis., µg/L	e 40.33	10	30	70	14	--	--	--	--
Barium dis., µg/L	69.07	40	45	54	0	--	--	--	--
Iron dis., µg/L	e 55.45	16	50	89	52	--	--	--	--
Manganese dis., µg/L	e 14.63	2	9	20	52	--	--	--	--
Nickel dis., µg/L	e 1.90	e 1	1	3	29	--	--	--	--
Strontium dis., µg/L	36.47	32	35	40	8	--	--	--	--
Sediment susp., mg/L	79.17	46	63	98	0	--	--	--	--
Sed. susp., %f.t. 62µm	81.68	76	88	94	0	--	--	--	--

Station number: 07077820		Station name: White River at St. Charles, Ark.		Drainage area: 25,809 square miles					
Latitude: 342242		Longitude: 910736							
Water-quality property or constituent		Descriptive statistics			Best trend results				
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	224.46	187	232	267	0	--	--	--	--
pH, standard units	7.90	7.7	7.9	8.1	70	0.01	0.13	0.063	F
Turbidity, NTU	34.41	20	30	43	36	-1.85	-5.39	0.049	F
Oxygen dis., mg/L	9.08	7.8	8.8	10.4	69	0.02	0.23	0.574	F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07077820		Station name: White River at St. Charles, Ark.--Continued		Longitude: 910736		Drainage area: 25,809 square miles		
Latitude: 342242								
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
BOD, 5-day, mg/L	2.18	1.4	2.0	2.7	72	-0.09	-4.11	0.000 F
Fecal coli., c/100 mL	45.14	9	24	56	75	-1.25	-2.77	0.096 U
Hardness tot., mg/L	120.21	100	120	140	21	0.92	0.77	0.378 F
Calcium dis., mg/L	27.96	20	31	32	10	--	--	--
Magnesium dis., mg/L	11.09	7.5	12	15	10	--	--	--
Alkalinity tot., mg/L	104.91	80	104	125	0	--	--	--
Sulfate dis., mg/L	e 8.51	7.0	8.0	9.0	74	0.17	1.96	0.184 U
Chloride dis., mg/L	5.68	4.5	5.5	7.0	65	-0.13	-2.33	0.000 F
ROE, mg/L	145.54	132	146	162	48	0.02	0.01	0.960 F
TSS, mg/L	49.03	24	42	66	70	-1.32	-2.69	0.011 F
NO2 + NO3 tot., mg/L	e 0.19	0.10	0.18	0.27	116	0.00	-1.72	0.062 U
NH3 tot., mg/L	e 0.04	0.020	0.040	0.060	134	0.00	0.00	0.034 U
Phosphorus tot., mg/L	e 0.09	0.070	0.080	0.120	84	0.00	5.43	0.479 U
OrthoP tot., mg/L	e 0.03	0.010	0.020	0.050	102	0.00	0.00	0.328 U

Station number: 07077862		Station name: Boat Gunwale Slash near Holly Grove, Ark.		Longitude: 910845		Drainage area: Unknown		
Latitude: 343429								
Water-quality property or constituent		Descriptive statistics			Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	7.05	6.9	7.1	7.3	0	--	--	--
Turbidity, NTU	20.35	5.1	15	25	0	--	--	--
Oxygen dis., mg/L	4.11	1.3	3.6	6.4	0	--	--	--
BOD, 5-day, mg/L	2.60	1.3	2.1	3.8	0	--	--	--
Fecal coli., c/100 mL	311.47	40	70	210	0	--	--	--
Hardness tot., mg/L	64.91	30	57	100	8	--	--	--
Sulfate dis., mg/L	e 7.05	3.0	5.0	7.0	60	0.00	0.00	0.666 U
Chloride dis., mg/L	5.48	2.5	4.5	7.5	0	--	--	--
ROE, mg/L	108.30	72	103	147	0	--	--	--
TSS, mg/L	18.66	4	8	16	0	--	--	--
NO2 + NO3 tot., mg/L	e 0.04	0.01	0.02	0.05	68	--	--	--
NH3 tot., mg/L	e 0.21	0.030	0.060	0.140	62	--	--	--
Phosphorus tot., mg/L	e 0.30	0.140	0.200	0.310	62	--	--	--
OrthoP tot., mg/L	e 0.11	0.070	0.100	0.140	66	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07077980		Station name: Prairie Cypress Creek near Cross Roads, Ark.		Longitude: 910311		Drainage area: Unknown		Latitude: 342600	
Water-quality property or constituent		Sample size		Descriptive statistics		Best trend results			
				Mean	25th percentile	50th percentile (median)	75th percentile	N	Trend
								Units per year	Percent per year
pH, standard units	63			7.07	6.8	7.0	7.3	0	--
Turbidity, NTU	64			27.40	6.0	10	30	0	--
Oxygen dis., mg/L	61			4.32	1.1	4.0	6.0	0	--
BOD, 5-day, mg/L	58			2.59	1.1	1.7	3.1	0	--
Fecal coli., c/100 mL	44			178.32	40	82	250	0	--
Hardness tot., mg/L	45			51.87	29	42	67	8	--
Sulfate dis., mg/L	60			e 8.53	4.0	6.0	9.0	60	-7.03 0.019 U
Chloride dis., mg/L	59			6.69	2.0	5.0	7.5	0	--
ROE, mg/L	63			113.56	67	113	140	0	--
TSS, mg/L	58			26.95	6	11	33	0	--
NO2 + NO3 tot., mg/L	68			e 0.06	0.01	0.03	0.06	68	--
NH3 tot., mg/L	62			e 0.21	0.030	0.060	0.150	62	--
Phosphorus tot., mg/L	62			e 0.31	0.120	0.210	0.300	62	--
OrthoP tot., mg/L	65			e 0.12	0.070	0.090	0.160	65	--

Station number: 07188910		Station name: Butler Creek near Sulphur Springs, Ark.		Longitude: 942854		Drainage area: 34.9 square miles		Latitude: 363044	
Water-quality property or constituent		Sample size		Descriptive statistics		Best trend results			
				Mean	25th percentile	50th percentile (median)	75th percentile	N	Trend
								Units per year	Percent per year
Conductance, µS/cm	63			301.21	270	307	328	0	--
pH, standard units	169			7.97	7.9	8.0	8.1	57	-0.01 -0.06 0.398 F
Turbidity, NTU	102			2.40	1.2	1.6	2.3	54	0.00 0.00 0.931 U
Oxygen dis., mg/L	164			10.01	8.6	9.9	11.4	58	-1.37 0.008 F
BOD, 5-day, mg/L	159			1.38	0.5	1.2	2.0	57	-0.14 -5.81 0.001 F
Fecal coli., c/100 mL	137			202.00	8	62	200	46	0.27 0.569 F
Hardness tot., mg/L	98			150.15	140	150	160	31	0.00 0.00 0.796 F
Alkalinity tot., mg/L	21			131.71	115	139	149	0	--
Sulfate dis., mg/L	77			e 9.24	7.0	9.0	11	77	0.00 0.00 1.000 U
Chloride dis., mg/L	163			7.92	5.5	7.5	10	54	-2.72 0.001 F
ROE, mg/L	124			185.66	170	186	200	66	-0.73 0.104 U
TSS, mg/L	162			4.82	1	3	6	59	-0.41 0.584 F
NO2 + NO3 tot., mg/L	113			e 1.18	0.88	1.0	1.4	113	1.70 0.113 U
NH3 tot., mg/L	137			e 0.07	0.020	0.030	0.060	137	0.00 0.00 0.006 U
Phosphorus tot., mg/L	84			e 0.04	0.020	0.040	0.050	84	0.00 9.88 0.005 U
OrthoP tot., mg/L	97			e 0.03	0.010	0.020	0.040	97	0.00 0.00 0.001 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07191179		Station name: Spavinaw Creek near Cherokee City, Ark.								
Latitude: 362031		Longitude: 943515		Drainage area: 104 square miles						
		Descriptive statistics		Best trend results						
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	62	283.87	267	285	305	0	--	--	--	--
pH, standard units	128	7.92	7.8	7.9	8.0	0	--	--	--	--
Turbidity, NTU	103	1.65	1.0	1.5	2.0	54	0.00	-0.09	0.966	F
Oxygen dis., mg/L	122	10.09	8.8	9.9	11.2	0	--	--	--	--
BOD, 5-day, mg/L	120	1.11	0.5	0.9	1.5	0	--	--	--	--
Fecal coli., c/100 mL	102	50.72	8	20	53	0	--	--	--	--
Hardness tot., mg/L	84	125.24	110	130	140	0	--	--	--	--
Sulfate dis., mg/L	77	e 5.64	4.0	6.0	8.0	77	0.00	0.00	0.947	U
Chloride dis., mg/L	128	11.44	9.5	11	14	0	--	--	--	--
ROE, mg/L	115	170.59	156	173	184	0	--	--	--	--
TSS, mg/L	127	2.90	1	2	4	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	123	e 2.20	1.9	2.2	2.6	123	0.09	3.91	0.000	U
NH ₃ tot., mg/L	125	e 0.05	0.020	0.030	0.050	125	0.00	0.00	0.386	U
OrgN tot., mg/L	42	0.40	0.16	0.29	0.57	0	--	--	--	--
OrgN + NH ₃ tot., mg/L	44	e 0.27	e 0.10	0.20	0.40	44	--	--	--	--
Nitrogen tot., mg/L	18	3.06	2.6	2.8	3.4	11	--	--	--	--
Phosphorus tot., mg/L	83	e 0.10	0.070	0.090	0.110	83	0.01	4.96	0.009	U
OrthoP tot., mg/L	98	e 0.09	0.050	0.070	0.100	98	0.01	8.44	0.000	U

Station number: 07194800		Station name: Illinois River at Savoy, Ark.								
Latitude: 360611		Longitude: 942039		Drainage area: 167 square miles						
		Descriptive statistics		Best trend results						
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	81	248.20	222	260	285	0	--	--	--	--
pH, standard units	175	7.80	7.7	7.8	7.9	78	0.00	-0.05	0.432	F
Turbidity, NTU	107	10.30	4.4	6.0	10	47	0.45	4.33	0.020	F
Oxygen dis., mg/L	171	9.55	7.9	9.2	11.0	78	-0.07	-0.68	0.076	F
BOD, 5-day, mg/L	166	2.41	1.4	2.2	3.2	77	-0.15	-6.32	0.000	F
Fecal coli., c/100 mL	128	465.83	37	110	350	63	-1.91	-0.41	0.483	F
Hardness tot., mg/L	101	112.78	99	120	130	38	-0.11	-0.10	0.962	F
Alkalinity tot., mg/L	21	102.14	89	107	120	0	--	--	--	--
Sulfate dis., mg/L	83	e 10.57	7.0	10	14	83	0.00	0.00	0.848	U
Chloride dis., mg/L	173	9.70	7.5	9.5	11	77	-0.16	-1.68	0.001	F
ROE, mg/L	131	156.78	141	160	174	59	-0.06	-0.04	0.853	F
TSS, mg/L	169	15.29	6	10	19	76	-0.36	-2.35	0.025	F
NO₂ + NO₃ tot., mg/L	115	e 1.65	1.1	1.6	2.0	115	0.02	1.21	0.260	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07194800		Station name: Illinois River at Savoy, Ark.--Continued								
Latitude: 360611		Longitude: 942039		Drainage area: 167 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
NH3 tot., mg/L	143	e 0.07	0.020	0.040	0.080	143	0.00	0.00	0.440	U
OrgN tot., mg/L	16	0.45	0.18	0.33	0.66	10	--	--	--	--
OrgN + NH3 tot., mg/L	18	e 0.40	0.10	0.30	0.50	18	--	--	--	--
Nitrogen tot., mg/L	14	2.24	1.8	2.3	2.6	7	--	--	--	--
Phosphorus tot., mg/L	90	e 0.15	0.070	0.090	0.140	90	0.00	-1.50	0.303	U
OrthoP tot., mg/L	101	e 0.10	0.030	0.050	0.080	101	0.00	3.67	0.063	U
Station number: 07195000		Station name: Osage Creek near Elm Springs, Ark.								
Latitude: 361319		Longitude: 941718		Drainage area: 130 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code	
Conductance, µS/cm	84	295.75	263	299	337	0	--	--	--	--
pH, standard units	173	7.78	7.6	7.8	7.9	49	-0.01	-0.10	0.140	F
Turbidity, NTU	99	7.34	3.5	4.0	6.5	53	-0.23	-3.16	0.080	U
Oxygen dis., mg/L	173	9.22	7.6	9.0	10.7	50	-0.09	-0.98	0.084	F
BOD, 5-day, mg/L	156	2.96	1.8	2.7	3.9	48	0.02	0.74	0.770	F
Fecal coli., c/100 mL	119	517.58	36	180	410	40	-24.59	-4.75	0.011	F
Hardness tot., mg/L	94	121.20	110	120	130	17	1.39	1.15	0.021	F
Alkalinity tot., mg/L	21	104.33	97	110	115	0	--	--	--	--
Sulfate dis., mg/L	79	e 12.01	8.0	11	15	79	0.33	2.78	0.669	U
Chloride dis., mg/L	165	15.28	11	15	19	46	0.02	0.16	0.832	F
ROE, mg/L	123	192.03	172	191	210	66	-0.75	-0.39	0.342	U
TSS, mg/L	166	13.58	6	11	16	50	-0.01	-0.05	1.000	F
NO2 + NO3 tot., mg/L	110	e 3.78	3.0	3.9	4.6	110	-0.02	-0.59	0.488	U
NH3 tot., mg/L	138	e 0.22	0.030	0.080	0.210	138	0.00	0.00	0.470	U
OrgN tot., mg/L	19	0.51	0.16	0.35	0.69	10	--	--	--	--
OrgN + NH3 tot., mg/L	17	e 0.54	0.20	0.40	0.70	17	--	--	--	--
Nitrogen tot., mg/L	16	4.73	4.1	4.8	5.4	7	--	--	--	--
Phosphorus tot., mg/L	85	e 0.96	0.600	0.820	1.20	85	-0.05	-5.19	0.120	U
OrthoP tot., mg/L	96	e 0.82	0.480	0.760	1.10	96	-0.05	-6.41	0.009	U

Table 5. --Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07195400		Station name: Illinois River near Siloam Springs, Ark.				Drainage area: 509 square miles			
Latitude: 360841		Longitude: 942941							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	20	247.35	227	263	290	14	--	--	--
pH, standard units	79	7.74	7.6	7.8	7.9	0	--	--	--
Turbidity, NTU	72	9.00	4.0	6.0	7.7	0	--	--	--
Oxygen dis., mg/L	77	8.93	7.7	8.5	10.2	0	--	--	--
BOD, 5-day, mg/L	66	1.12	0.7	1.0	1.3	0	--	--	--
Fecal coli., c/100 mL	41	217.12	29	64	190	0	--	--	--
Hardness tot., mg/L	51	109.33	100	110	120	8	--	--	--
Sulfate dis., mg/L	71	e 9.41	8.0	10	11	71	0.00	0.00 0.740	U
Chloride dis., mg/L	76	10.31	7.5	9.5	13	0	--	--	--
ROE, mg/L	73	158.62	143	157	173	0	--	--	--
TSS, mg/L	74	14.14	6	10	16	0	--	--	--
NO ₂ + NO ₃ tot., mg/L	75	e 2.66	1.8	2.2	2.8	75	--	--	--
NH ₃ tot., mg/L	76	e 0.04	0.010	0.020	0.040	76	0.00	0.00 0.420	U
OrgN tot., mg/L	16	0.31	0.11	0.22	0.47	10	--	--	--
OrgN + NH ₃ tot., mg/L	17	e 0.28	0.10	0.20	0.50	17	--	--	--
Nitrogen tot., mg/L	14	2.61	2.4	2.4	2.9	6	--	--	--
Phosphorus tot., mg/L	69	e 0.31	0.200	0.290	0.380	69	--	--	--
OrthoP tot., mg/L	68	e 0.25	0.150	0.230	0.340	68	--	--	--

Station number: 07196900		Station name: Baron Fork at Dutch Mills, Ark.				Drainage area: 46 square miles			
Latitude: 355248		Longitude: 942911							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	78	283.00	256	283	317	0	--	--	--
pH, standard units	169	7.82	7.7	7.8	8.0	86	0.00	0.01 0.880	F
Turbidity, NTU	102	6.31	2.5	3.5	5.5	53	0.07	1.11 0.512	F
Oxygen dis., mg/L	165	9.07	7.2	8.8	10.8	87	0.03	0.30 0.567	F
BOD, 5-day, mg/L	160	2.20	1.1	1.8	2.8	85	-0.08	-3.58 0.000	F
Fecal coli., c/100 mL	123	271.52	38	110	270	72	-3.23	-1.19 0.359	F
Hardness tot., mg/L	99	136.86	130	140	150	46	1.59	1.16 0.002	F
Alkalinity tot., mg/L	21	119.29	117	120	131	0	--	--	--
Sulfate dis., mg/L	78	e 14.31	11	14	17	78	-0.63	-4.43 0.393	U
Chloride dis., mg/L	163	8.97	7.0	8.1	11	84	-0.05	-0.57 0.230	F
ROE, mg/L	122	181.74	166	180	199	63	0.53	0.29 0.295	F
TSS, mg/L	164	10.32	4	6	11	86	-0.14	-1.37 0.197	F
NO ₂ + NO ₃ tot., mg/L	113	e 1.71	0.46	1.7	2.6	113	0.01	0.59 0.707	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07196900		Station name: Baron Fork at Dutch Mills, Ark.--Continued		Drainage area: 46 square miles	
Latitude: 355248		Longitude: 942911			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
NH3 tot., mg/L	137	e 0.07	0.020	0.040	0.00 0.514 U
OrgN tot., mg/L	11	0.46	0.06	0.19	0.65 -- --
OrgN + NH3 tot., mg/L	17	e 0.38	e 0.10	0.10	0.60 -- --
Nitrogen tot., mg/L	12	2.85	2.2	2.8	3.4 -- --
Phosphorus tot., mg/L	86	e 0.18	0.090	0.120	0.170 -3.01 0.181 U
OrthoP tot., mg/L	96	e 0.11	0.060	0.090	0.140 0.00 0.930 U
		Best trend results			
		Units per year	Percent per year	N	p
		0.00	0.00	137	0.00 0.514 U
		--	--	7	-- --
		--	--	17	-- --
		--	--	7	-- --
		-0.01	-0.01	86	-3.01 0.181 U
		0.00	0.00	96	0.00 0.930 U
Station number: 07246940		Station name: Poteau River east of Waldron, Ark.		Drainage area: Unknown	
Latitude: 345346		Longitude: 940357			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
pH, standard units	67	7.24	6.9	7.2	7.5 0 -- --
Turbidity, NTU	63	31.31	15	20	35 0 -- --
Oxygen dis., mg/L	59	8.19	5.3	8.0	10.6 0 -- --
BOD, 5-day, mg/L	58	2.84	1.6	2.5	4.0 0 -- --
Fecal coli., c/100 mL	35	345.57	40	150	260 0 -- --
Hardness tot., mg/L	43	30.49	18	30	40 8 -- --
Sulfate dis., mg/L	57	e 13.33	10	12	16 57 -0.90 -6.75 0.284 U
Chloride dis., mg/L	63	10.77	5.3	7.6	12 0 -- --
ROE, mg/L	63	93.35	60	85	113 0 -- --
TSS, mg/L	65	26.72	10	15	33 0 -- --
NO2 + NO3 tot., mg/L	64	e 0.33	0.03	0.12	0.24 -- --
NH3 tot., mg/L	63	e 0.44	0.030	0.060	0.240 63 -- --
OrgN tot., mg/L	26	0.64	0.26	0.56	0.82 17 -- --
OrgN + NH3 tot., mg/L	34	e 1.22	0.40	0.70	1.3 34 -- --
Nitrogen tot., mg/L	30	1.49	0.47	0.77	1.5 0 -- --
Phosphorus tot., mg/L	60	e 0.84	0.070	0.140	0.580 -- --
OrthoP tot., mg/L	67	e 0.63	0.010	0.060	0.440 -- --
		Best trend results			
		Units per year	Percent per year	N	p
		--	--	0	-- --
		--	--	0	-- --
		--	--	0	-- --
		--	--	0	-- --
		--	--	8	-- --
		-0.90	-0.90	57	-6.75 0.284 U
		--	--	0	-- --
		--	--	0	-- --
		--	--	0	-- --
		--	--	64	-- --
		--	--	63	-- --
		--	--	17	-- --
		--	--	34	-- --
		--	--	0	-- --
		--	--	60	-- --
		--	--	67	-- --

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued

Station number: 07246950		Station name: Poteau River northwest of Waldron, Ark.				Longitude: 940628		Drainage area: Unknown	
Latitude: 345447									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units	69	7.12	7.0	7.1	7.3	0	--	--	--
Turbidity, NTU	63	27.48	15	20	30	0	--	--	--
Oxygen dis., mg/L	60	6.27	2.6	6.1	9.7	0	--	--	--
BOD, 5-day, mg/L	58	7.35	2.0	5.0	8.4	0	--	--	--
Fecal coli., c/100 mL	24	4,281.88	610	980	8,400	17	--	--	--
Hardness tot., mg/L	46	37.57	22	34	50	8	--	--	--
Sulfate dis., mg/L	58	e 23.09	12	18	28	58	-0.10	-0.43	0.892 U
Chloride dis., mg/L	66	25.67	6.5	14	47	0	--	--	--
ROE, mg/L	64	145.41	66	104	213	0	--	--	--
TSS, mg/L	66	29.33	12	23	33	0	--	--	--
NO2 + NO3 tot., mg/L	65	e 0.55	0.13	0.23	0.49	65	--	--	--
NH3 tot., mg/L	66	e 3.03	0.280	1.75	4.65	66	--	--	--
OrgN tot., mg/L	27	1.32	0.46	0.96	1.6	17	--	--	--
OrgN + NH3 tot., mg/L	32	e 2.69	1.0	1.6	4.0	32	--	--	--
Nitrogen tot., mg/L	32	3.54	1.2	2.3	5.0	0	--	--	--
Phosphorus tot., mg/L	57	e 4.96	0.640	2.25	8.80	57	--	--	--
Orthop tot., mg/L	65	e 3.96	0.310	1.80	6.70	65	--	--	--

Station number: 07249400		Station name: James Fork near Hackett, Ark.		Longitude: 942425		Drainage area: 147 square miles				
Latitude: 350945		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	114	395.10	227	380	527	0	--	--	--	--
pH, standard units	183	7.37	7.1	7.4	7.6	78	0.00	0.06	0.331	F
Turbidity, NTU	65	20.05	8.8	18	25	0	--	--	--	--
Oxygen dis., mg/L	175	8.18	6.3	7.8	10.1	76	-0.10	-1.19	0.001	F
BOD, 5-day, mg/L	117	1.70	1.0	1.3	2.3	64	-0.04	-2.15	0.154	F
Fecal coli., c/100 mL	95	190.58	24	63	170	51	5.56	2.92	0.006	F
Hardness tot., mg/L	102	122.12	71	120	170	23	0.35	0.28	0.918	F
Calcium dis., mg/L	49	25.55	16	26	34	0	--	--	--	--
Magnesium dis., mg/L	49	18.02	12	18	24	0	--	--	--	--
Sodium dis., mg/L	42	36.99	13	21	49	0	--	--	--	--
Potassium dis., mg/L	42	2.48	1.9	2.4	3.0	0	--	--	--	--
Alkalinity tot., mg/L	55	80.31	28	54	98	0	--	--	--	--
Sulfate dis., mg/L	59	e 73.79	49	77	97	59	-1.75	-2.37	0.690	U
Chloride dis., mg/L	150	7.57	5.0	7.0	9.1	73	-0.19	-2.56	0.000	F
ROE, mg/L	115	243.02	140	215	324	60	-7.67	-3.16	0.000	F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07249400		Station name: James Fork near Hackett, Ark.--Continued				Drainage area: 147 square miles			
Latitude: 350945		Longitude: 942425							
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
TSS, mg/L	121	22.91	10	15	26	65	-0.24	-1.03	0.256 F
NO2 + NO3 tot., mg/L	101	e 0.21	0.05	0.15	0.30	101	0.00	0.00	0.259 U
NO2 + NO3 dis., mg/L	16	e 0.17	0.02	0.19	0.26	16	--	--	--
NH3 tot., mg/L	111	e 0.08	0.020	0.050	0.090	111	0.00	0.00	0.390 U
OrgN tot., mg/L	24	0.72	0.45	0.59	0.96	15	--	--	--
Phosphorus tot., mg/L	61	e 0.05	0.040	0.050	0.070	61	--	--	--
Orthop tot., mg/L	69	e 0.02	0.010	0.020	0.030	69	--	--	--
Iron dis., µg/L	74	e 92.84	30	60	130	74	--	--	--
Manganese dis., µg/L	74	e 223.99	120	200	310	74	--	--	--
Nickel dis., µg/L	11	e 5.31	3	5	7	11	--	--	--
Sediment susp., mg/L	66	39.53	17	28	52	0	--	--	--
Sed. susp., %f.t. 62µm	66	90.23	86	94	96	0	--	--	--

Station number: 07250500		Station name: Arkansas River at Van Buren, Ark.		Drainage area: 150,482 square miles					
Latitude: 352542		Longitude: 942137							
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	109	578.74	445	544	707	0	--	--	--
pH, standard units	167	7.94	7.7	8.0	8.2	85	0.00	0.05	0.500 F
Turbidity, NTU	95	34.11	15	25	50	50	-0.93	-2.72	0.094 F
Oxygen dis., mg/L	165	10.07	8.5	9.9	11.3	83	0.03	0.32	0.289 F
BOD, 5-day, mg/L	159	2.94	2.1	2.9	3.7	84	-0.10	-3.39	0.000 F
Fecal coli., c/100 mL	133	2,355.98	34	400	2,500	70	-191.09	-8.11	0.000 F
Hardness tot., mg/L	93	133.16	110	130	160	25	0.05	0.04	0.964 F
Calcium dis., mg/L	10	36.60	32	37	42	9	--	--	--
Magnesium dis., mg/L	10	11.39	8.7	11	15	9	--	--	--
Alkalinity tot., mg/L	20	94.70	90	93	105	0	--	--	--
Sulfate dis., mg/L	71	e 52.20	36	49	62	71	-0.75	-1.44	0.915 U
Chloride dis., mg/L	160	104.14	65	90	140	81	1.51	1.45	0.147 F
ROE, mg/L	121	362.64	287	357	436	62	2.17	0.60	0.407 F
TSS, mg/L	160	31.82	16	24	44	84	-0.28	-0.88	0.388 F
NO2 + NO3 tot., mg/L	105	e 0.33	0.13	0.30	0.53	105	-0.01	-2.04	0.111 U
NH3 tot., mg/L	132	e 0.08	0.030	0.070	0.100	132	0.00	0.00	0.630 U
OrgN tot., mg/L	79	0.72	0.36	0.64	0.94	0	--	--	--
OrgN + NH3 tot., mg/L	51	e 0.62	0.40	0.50	0.80	51	--	--	--
Nitrogen tot., mg/L	26	0.93	0.61	0.84	1.1	17	--	--	--
Phosphorus tot., mg/L	77	e 0.13	0.100	0.120	0.150	77	0.00	-2.73	0.533 U
OrthoP tot., mg/L	101	e 0.05	0.020	0.040	0.070	101	0.01	13.25	0.005 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07250550		Station name: Arkansas River Dam No. 13 near Van Buren, Ark.			Drainage area: 150,547 square miles					
Latitude: 352056		Longitude: 941754								
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	137	647.31	482	635	810	84	10.99	1.70	0.044	F
pH, standard units	137	7.89	7.7	7.9	8.2	84	0.04	0.54	0.000	F
Turbidity, NTU	59	19.69	4.7	15	27	49	-1.27	-6.46	0.023	F
Oxygen dis., mg/L	134	9.46	7.7	9.0	10.6	84	0.01	0.12	0.740	F
BOD, 5-day, mg/L	11	1.55	1.0	1.4	2.0	7	--	--	--	--
Fecal coli., c/100 mL*	103	524.30	20	120	560	72	-15.65	-2.98	0.090	F
Fecal strp., c/100 mL	86	209.27	16	68	140	62	1.56	0.74	0.782	F
Hardness tot., mg/L	136	135.85	120	140	160	60	1.36	1.00	0.051	F
Calcium dis., mg/L	126	39.46	35	40	45	84	0.26	0.66	0.120	F
Magnesium dis., mg/L	126	9.40	7.7	9.0	11	84	0.18	1.96	0.000	F
Sodium dis., mg/L	125	75.38	51	71	95	84	1.41	1.87	0.069	F
Potassium dis., mg/L	126	3.72	3.2	3.7	4.2	84	0.00	-0.09	0.824	F
Alkalinity tot., mg/L	86	93.06	83	93	102	0	--	--	--	--
Sulfate dis., mg/L	42	55.60	44	51	65	42	3.00	5.40	0.025	U
Chloride dis., mg/L	135	113.10	74	100	140	84	2.01	1.77	0.101	F
ROE, mg/L	91	388.93	302	384	461	66	4.85	1.25	0.233	F
NO2 dis., mg/L	25	e 0.01	e 0.010	e 0.010	0.010	25	--	--	--	--
NO2 + NO3 tot., mg/L	45	e 0.31	0.08	0.28	0.51	45	--	--	--	--
NO2 + NO3 dis., mg/L	71	e 0.33	0.07	0.29	0.49	71	--	--	--	--
OrgN tot., mg/L	63	0.83	0.61	0.78	0.99	39	--	--	--	--
OrgN + NH3 tot., mg/L	48	e 0.85	0.50	0.60	1.0	48	0.00	0.00	0.513	F
Phosphorus tot., mg/L	48	e 0.10	0.070	0.100	0.110	48	-0.01	-6.25	0.041	U
Phosphorus dis., mg/L	48	e 0.05	0.030	0.060	0.070	48	0.00	-9.22	0.046	U
OrthoP dis., mg/L	47	e 0.05	0.030	0.050	0.070	47	0.00	-5.19	0.061	U
Aluminum dis., $\mu\text{g}/\text{L}$	27	e 28.19	e 10	20	40	27	0.00	0.00	0.840	U
Barium dis., $\mu\text{g}/\text{L}$	39	93.21	80	96	100	33	-0.80	-0.86	0.560	F
Iron dis., $\mu\text{g}/\text{L}$	61	e 39.64	11	24	38	61	-0.59	-1.48	0.412	U
Manganese dis., $\mu\text{g}/\text{L}$	61	e 7.02	e 10	2	8	61	0.00	0.00	0.659	U
Nickel dis., $\mu\text{g}/\text{L}$	39	e 2.51	1	2	3	39	0.00	0.00	0.953	U
Strontium dis., $\mu\text{g}/\text{L}$	27	337.78	270	320	390	14	14.81	4.39	0.111	F
Sediment susp., mg/L	122	35.74	19	30	48	79	-0.42	-1.16	0.214	F
Sed. susp., %t. 62 μm	123	75.78	65	79	92	81	-1.67	-2.20	0.000	F

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07252030		Station name: Mulberry River at I-40 near Mulberry, Ark.				Longitude: 940212		Drainage area: Unknown	
Latitude: 353210									
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results		
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	68	7.33	7.1	7.3	7.5	0	--	--	--
Turbidity, NTU	64	10.00	3.5	6.3	10	0	--	--	--
Oxygen dis., mg/L	60	9.92	8.9	9.9	11.0	0	--	--	--
BOD, 5-day, mg/L	65	1.20	0.6	1.1	1.6	0	--	--	--
Fecal coli., c/100 mL	38	72.97	4	12	43	0	--	--	--
Hardness tot., mg/L	46	15.43	12	16	18	8	--	--	--
Sulfate dis., mg/L	58	e 4.66	3.0	4.0	6.0	58	0.00	0.00	0.582 U
Chloride dis., mg/L	66	2.80	2.0	2.5	3.5	0	--	--	--
ROE, mg/L	63	32.29	28	33	36	0	--	--	--
TSS, mg/L	66	6.69	2	4	8	0	--	--	--
NO2 + NO3 tot., mg/L	67	e 0.11	0.06	0.09	0.13	67	--	--	--
NH3 tot., mg/L	64	e 0.04	0.010	0.020	0.050	64	--	--	--
Phosphorus tot., mg/L	59	e 0.06	0.020	0.030	0.040	59	--	--	--
OrthoP tot., mg/L	70	e 0.01	e 0.010	0.010	0.020	70	--	--	--

Station number: 07252406		Station name: Arkansas River at Ozark Dam at Ozark, Ark.				Longitude: 934846		Drainage area: 151,801 square miles	
Latitude: 352821									
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results		
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	67	601.34	459	560	745	0	--	--	--
pH, standard units	172	7.99	7.8	8.0	8.2	86	0.02	0.23	0.001 F
Turbidity, NTU	95	28.67	10	25	40	49	-1.44	-5.03	0.003 F
Oxygen dis., mg/L	165	9.78	7.8	9.6	11.3	83	0.04	0.46	0.100 F
BOD, 5-day, mg/L	165	2.24	1.5	2.1	2.9	85	0.03	1.46	0.156 F
Fecal coli., c/100 mL	132	187.29	8	30	180	69	-6.89	-3.68	0.008 F
Hardness tot., mg/L	93	133.12	110	130	160	43	3.65	2.74	0.001 F
Alkalinity tot., mg/L	20	94.20	83	97	108	0	--	--	--
Sulfate dis., mg/L	71	e 53.23	40	51	59	71	1.95	3.66	0.195 U
Chloride dis., mg/L	163	108.94	67	96	160	82	1.81	1.66	0.128 F
ROE, mg/L	117	376.50	292	374	449	60	0.15	0.04	0.884 F
TSS, mg/L	164	28.53	14	21	38	86	-0.64	-2.24	0.005 F
NO2 + NO3 tot., mg/L	105	e 0.36	0.15	0.34	0.61	105	0.00	-0.61	0.376 U
NH3 tot., mg/L	133	e 0.08	0.030	0.070	0.100	133	0.00	-3.77	0.017 U
Phosphorus tot., mg/L	80	e 0.11	0.090	0.110	0.140	80	0.00	-4.42	0.288 U
OrthoP tot., mg/L	102	e 0.05	0.020	0.040	0.070	102	0.01	16.38	0.000 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07257006		Station name: Big Piney Creek at Highway 164 near Dover, Ark.				Longitude: 931051		Drainage area: Unknown	
Latitude: 353049									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units	65	7.30	7.0	7.3	7.6	0	--	--	--
Turbidity, NTU	67	7.14	2.7	5.5	8.5	0	--	--	--
Oxygen dis., mg/L	64	10.15	9.0	9.8	11.4	0	--	--	--
BOD, 5-day, mg/L	65	1.44	0.8	1.4	1.8	0	--	--	--
Fecal coli., c/100 mL	43	77.95	8	28	80	0	--	--	--
Hardness tot., mg/L	49	23.00	18	20	29	9	--	--	--
Sulfate dis., mg/L	63	e 3.86	3.0	3.0	5.0	63	0.20	5.19	0.283 U
Chloride dis., mg/L	64	2.45	1.5	2.0	3.0	0	--	--	--
ROE, mg/L	65	41.63	35	40	48	0	--	--	--
TSS, mg/L	68	3.33	1	2	4	0	--	--	--
NO2 + NO3 tot., mg/L	60	e 0.05	0.03	0.05	0.08	60	--	--	--
NH3 tot., mg/L	61	e 0.04	0.010	0.020	0.050	61	--	--	--
Phosphorus tot., mg/L	58	e 0.03	0.010	0.020	0.030	58	--	--	--
OrthoP tot., mg/L	66	e 0.02	e 0.010	0.010	0.020	66	--	--	--

Station number: 07257690		Station name: Illinois Bayou near Dover, Ark.				Longitude: 930801		Drainage area: Unknown	
Latitude: 352439									
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units	66	7.10	6.8	7.2	7.4	0	--	--	--
Turbidity, NTU	67	8.51	3.5	6.0	8.5	0	--	--	--
Oxygen dis., mg/L	64	9.76	8.1	9.4	11.4	0	--	--	--
BOD, 5-day, mg/L	65	1.80	0.8	1.5	2.3	0	--	--	--
Fecal coli., c/100 mL	43	95.65	10	32	96	0	--	--	--
Hardness tot., mg/L	49	14.73	12	14	18	9	--	--	--
Sulfate dis., mg/L	63	e 3.40	2.0	3.0	4.0	63	0.00	0.00	0.566 U
Chloride dis., mg/L	64	3.16	2.0	2.5	4.0	0	--	--	--
ROE, mg/L	65	33.75	29	34	39	0	--	--	--
TSS, mg/L	69	4.63	1	2	5	0	--	--	--
NO2 + NO3 tot., mg/L	60	e 0.10	0.04	0.07	0.16	60	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07257690		Station name: Illinois Bayou near Dover, Ark.--Continued							
Latitude: 352439		Longitude: 930801		Drainage area: Unknown					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
NH3 tot., mg/L	62	e 0.04	0.010	0.020	0.050	62	--	--	--
Phosphorus tot., mg/L	57	e 0.04	0.010	0.030	0.040	57	--	--	--
OrthoP tot., mg/L	65	e 0.02	e 0.010	0.010	0.020	65	--	--	--
Station number: 07258000		Station name: Arkansas River at Dardanelle, Ark.							
Latitude: 351334		Longitude: 930858		Drainage area: 153,670 square miles					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, µS/cm	73	601.11	423	543	728	0	--	--	--
pH, standard units	159	7.93	7.8	7.9	8.1	84	0.01	0.16	0.098 F
Turbidity, NTU	101	28.26	10	25	40	53	-0.70	-2.46	0.239 F
Oxygen dis., mg/L	170	9.69	7.4	9.6	11.8	89	-0.01	-0.14	0.758 F
BOD, 5-day, mg/L	158	2.10	1.4	1.9	2.6	84	-0.04	-1.72	0.064 F
Fecal coli., c/100 mL	125	200.60	16	88	220	68	-2.28	-1.13	0.606 F
Hardness tot., mg/L	96	131.53	100	140	160	45	6.06	4.61	0.000 F
Alkalinity tot., mg/L	17	86.94	75	89	98	9	--	--	--
Sulfate dis., mg/L	76	e 56.38	43	53	64	76	3.38	5.99	0.006 U
Chloride dis., mg/L	160	107.51	70	94	140	82	2.25	2.09	0.049 F
ROE, mg/L	126	372.35	288	379	441	66	4.64	1.25	0.266 F
TSS, mg/L	163	25.06	14	19	30	84	-0.56	-2.24	0.001 F
NO2 + NO3 tot., mg/L	106	e 0.35	0.16	0.32	0.56	106	-0.01	-1.42	0.574 U
NH3 tot., mg/L	131	e 0.08	0.050	0.070	0.100	131	0.00	0.00	0.391 U
Phosphorus tot., mg/L	81	e 0.12	0.090	0.110	0.140	81	0.00	0.00	0.785 U
OrthoP tot., mg/L	102	e 0.05	0.020	0.050	0.080	102	0.01	18.96	0.000 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07258500		Station name: Petit Jean River near Booneville, Ark.			Longitude: 935525		Drainage area: 241 square miles			
Latitude: 350625		Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, µS/cm	62	102.48	76	96	121	0	--	--	--	--
pH, standard units	170	7.17	6.9	7.2	7.4	86	0.02	0.29	0.017	F
Turbidity, NTU	98	26.41	15	25	31	51	-0.16	-0.60	0.360	F
Oxygen dis., mg/L	162	8.11	6.0	8.1	10.3	84	-0.02	-0.29	0.609	F
BOD, 5-day, mg/L	154	2.26	1.2	2.0	3.0	85	0.00	0.13	0.862	F
Fecal coli., c/100 mL	132	262.05	32	80	190	72	-2.05	-0.78	0.343	F
Hardness tot., mg/L	96	28.47	22	26	34	45	-0.27	-0.93	0.270	F
Alkalinity tot., mg/L	70	29.25	19	22	41	0	--	--	--	--
Sulfate dis., mg/L	20	12.05	9.0	11	13	70	-0.27	-2.21	0.587	U
Chloride dis., mg/L	156	6.46	5.0	6.0	7.5	83	-0.20	-3.07	0.000	F
ROE, mg/L	116	74.22	63	71	81	62	-0.20	-0.27	0.837	F
TSS, mg/L	166	22.21	8	14	23	87	0.00	0.00	1.000	F
NO2 + NO3 tot., mg/L	106	e 0.14	0.03	0.09	0.19	106	0.00	0.00	0.958	U
NH3 tot., mg/L	134	e 0.07	0.030	0.050	0.090	134	0.00	0.00	0.024	U
OrgN tot., mg/L	23	0.47	0.25	0.46	0.72	17	--	--	--	--
OrgN + NH3 tot., mg/L	35	e 0.50	0.30	0.50	0.70	35	--	--	--	--
Nitrogen tot., mg/L	28	0.69	0.41	0.63	0.91	0	--	--	--	--
Phosphorus tot., mg/L	80	e 0.07	0.050	0.060	0.080	80	0.00	-5.00	0.235	U
Orthop tot., mg/L	105	e 0.02	0.010	0.020	0.030	105	0.00	0.00	0.019	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07259001		Station name: Petit Jean River near Waveland, Ark.--Continued		Drainage area: 488 square miles	
Latitude: 350606		Longitude: 933902			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
OrgN tot., mg/L	19	0.57	0.34	0.54	0.67
OrgN + NH3 tot., mg/L	8	e 0.67	0.37	0.50	1.4
Phosphorus tot., mg/L	24	e 0.07	0.040	0.050	0.060
OrthoP tot., mg/L	26	e 0.04	0.010	0.020	0.040
		Best trend results			
		Units per year	Percent per year	N	p
		--	--	0	--
		--	--	8	--
		0.00	1.08	24	0.587 U
		0.00	0.00	26	0.551 U

Station number: 07260020		Station name: Dutch Creek at Shark, Ark.		Drainage area: 107 square miles	
Latitude: 345958		Longitude: 933052			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
pH, standard units	64	7.10	6.9	7.2	7.3
Turbidity, NTU	67	18.51	9.0	15	25
Oxygen dis., mg/L	61	8.05	5.6	8.3	10.3
BOD, 5-day, mg/L	62	1.74	0.9	1.3	2.1
Fecal coli., c/100 mL	42	240.93	75	170	320
Hardness tot., mg/L	47	24.51	16	20	30
Sulfate dis., mg/L	61	e 5.70	4.0	6.0	7.0
Chloride dis., mg/L	61	5.41	4.0	5.0	6.5
ROE, mg/L	64	62.22	50	60	73
TSS, mg/L	68	12.63	5	10	14
NO2 + NO3 tot., mg/L	59	e 0.37	0.15	0.30	0.55
NH3 tot., mg/L	61	e 0.07	0.030	0.060	0.100
Phosphorus tot., mg/L	57	e 0.08	0.060	0.070	0.100
OrthoP tot., mg/L	64	e 0.04	0.020	0.040	0.060
		Best trend results			
		Units per year	Percent per year	N	p
		--	--	0	--
		--	--	0	--
		0.25	4.38	61	0.216 U
		--	--	0	--
		--	--	0	--
		--	--	0	--
		--	--	59	--
		--	--	61	--
		--	--	57	--
		--	--	64	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07260620		Station name: Chickalah Creek near Chickalah, Ark.		Longitude: 931732		Drainage area: 39.1 square miles				
Latitude: 350936										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
pH, standard units	64	7.01	6.8	7.1	7.3	0	--	--	--	--
Turbidity, NTU	65	21.27	15	20	25	0	--	--	--	--
Oxygen dis., mg/L	62	7.91	4.5	8.6	10.7	0	--	--	--	--
BOD, 5-day, mg/L	54	1.34	0.7	0.9	1.8	0	--	--	--	--
Fecal coli., c/100 mL	42	207.55	35	100	260	0	--	--	--	--
Hardness tot., mg/L	48	29.15	14	20	41	9	--	--	--	--
Sulfate dis., mg/L	61	e 5.59	4.0	5.0	7.0	61	0.00	0.00	0.358	U
Chloride dis., mg/L	62	6.25	4.0	5.0	7.0	0	--	--	--	--
ROE, mg/L	63	67.00	47	56	89	0	--	--	--	--
TSS, mg/L	67	12.81	6	10	17	0	--	--	--	--
NO2 + NO3 tot., mg/L	59	e 0.29	0.10	0.25	0.44	59	--	--	--	--
NH3 tot., mg/L	60	e 0.12	0.040	0.070	0.170	60	--	--	--	--
Phosphorus tot., mg/L	57	e 0.08	0.050	0.070	0.100	57	--	--	--	--
OrthoP tot., mg/L	62	e 0.03	0.010	0.030	0.040	62	--	--	--	--

Station number: 07260660		Station name: Arkansas River at Dam No. 9 near Oppelo, Ark.		Longitude: 924711		Drainage area: 154,949 square miles				
Latitude: 350726										
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
Conductance, µS/cm	68	580.06	423	528	691	0	--	--	--	--
pH, standard units	167	7.95	7.7	8.0	8.2	88	0.01	0.14	0.235	F
Turbidity, NTU	103	29.89	10	25	40	53	-1.07	-3.57	0.061	F
Oxygen dis., mg/L	168	9.60	8.0	9.3	11.0	89	-0.01	-0.10	0.697	F
BOD, 5-day, mg/L	168	2.01	1.4	1.8	2.5	88	-0.03	-1.56	0.108	F
Fecal coli., c/100 mL	139	75.42	5	28	100	73	-4.99	-6.61	0.000	F
Hardness tot., mg/L	98	130.67	100	140	160	48	4.07	3.11	0.001	F
Alkalinity tot., mg/L	20	86.65	75	86	98	0	--	--	--	--
Sulfate dis., mg/L	75	e 53.33	39	50	61	75	3.40	6.37	0.023	U
Chloride dis., mg/L	161	106.96	67	96	140	83	2.14	2.00	0.063	F
ROE, mg/L	125	356.82	273	359	426	66	4.47	1.25	0.240	F
TSS, mg/L	173	27.45	14	22	35	89	-0.74	-2.70	0.001	F
NO2 + NO3 tot., mg/L	106	e 0.32	0.11	0.29	0.52	106	0.00	0.00	0.733	U
NH3 tot., mg/L	130	e 0.09	0.040	0.070	0.100	130	0.00	0.00	0.773	U
Phosphorus tot., mg/L	81	e 0.11	0.090	0.110	0.140	81	0.00	0.00	0.826	U
OrthoP tot., mg/L	102	e 0.05	0.020	0.050	0.070	102	0.01	17.41	0.000	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07260675		Station name: White Oak Creek near Atkins, Ark.				Longitude: 925338		Drainage area: Unknown			
Latitude: 351516											
		Descriptive statistics				Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
pH, standard units	63	7.47	7.1	7.5	7.8	0	--	--	--	--	
Turbidity, NTU	65	31.22	20	30	35	0	--	--	--	--	
Oxygen dis., mg/L	63	8.27	6.5	8.5	10.1	0	--	--	--	--	
BOD, 5-day, mg/L	49	11.66	3.5	7.7	18	0	--	--	--	--	
Fecal coli., c/100 mL	40	1,221.32	140	660	1,300	0	--	--	--	--	
Hardness tot., mg/L	46	104.43	48	75	160	8	--	--	--	--	
Sulfate dis., mg/L	61	e 20.87	15	21	26	61	-0.75	-3.59	0.520	U	
Chloride dis., mg/L	62	606.77	52	250	1,000	0	--	--	--	--	
ROE, mg/L	64	1,579.31	301	760	2,510	0	--	--	--	--	
TSS, mg/L	68	53.38	22	36	65	0	--	--	--	--	
NO2 + NO3 tot., mg/L	59	e 0.18	0.05	0.11	0.24	59	--	--	--	--	
NH3 tot., mg/L	61	e 1.13	0.070	0.220	1.50	61	--	--	--	--	
OrgN tot., mg/L	25	4.97	0.92	1.7	4.3	17	--	--	--	--	
OrgN + NH3 tot., mg/L	29	e 5.78	0.90	1.5	8.4	29	--	--	--	--	
Nitrogen tot., mg/L	23	3.35	0.95	1.7	3.0	17	--	--	--	--	
Phosphorus tot., mg/L	57	e 1.71	0.260	0.860	2.35	57	--	--	--	--	
OrthoP tot., mg/L	64	e 0.87	0.120	0.400	0.960	64	--	--	--	--	

Station number: 07261260		Station name: Arkansas River at Toad Suck Ferry Dam near Conway, Ark.				Longitude: 923206		Drainage area: 156,386 square miles			
Latitude: 350430											
		Descriptive statistics				Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
Conductance, µS/cm	59	543.49	348	504	711	0	--	--	--	--	
pH, standard units	159	7.87	7.6	7.9	8.1	79	0.01	0.18	0.165	F	
Turbidity, NTU	101	31.21	10	25	43	50	-0.98	-3.13	0.118	F	
Oxygen dis., mg/L	156	9.73	8.4	9.4	11.0	80	-0.02	-0.26	0.303	F	
BOD, 5-day, mg/L	156	2.01	1.4	1.8	2.4	79	-0.05	-2.30	0.084	F	
Fecal coli., c/100 mL	133	95.97	5	33	120	72	-0.17	-0.18	0.955	F	
Hardness tot., mg/L	95	120.69	96	120	150	45	4.32	3.58	0.001	U	
Alkalinity tot., mg/L	17	78.94	62	82	97	9	--	--	--	--	
Sulfate dis., mg/L	76	e 49.67	35	46	58	76	3.00	6.04	0.009	U	
Chloride dis., mg/L	160	98.10	54	86	130	78	2.49	2.54	0.091	F	
ROE, mg/L	126	335.14	245	338	415	62	5.34	1.59	0.224	F	
TSS, mg/L	165	29.66	14	23	38	80	-0.83	-2.81	0.003	F	
NO2 + NO3 tot., mg/L	107	e 0.37	0.13	0.36	0.53	107	0.00	0.00	0.649	U	
NH3 tot., mg/L	132	e 0.09	0.040	0.070	0.090	132	0.00	0.00	1.000	U	
OrgN + NH3 tot., mg/L	10	e 1.06	0.60	0.90	1.3	10	--	--	--	--	
Phosphorus tot., mg/L	82	e 0.11	0.080	0.110	0.140	82	0.00	0.00	1.000	U	
OrthoP tot., mg/L	102	e 0.08	0.020	0.040	0.080	102	0.01	11.97	0.000	U	

**Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued**

Station number: 07261500		Station name: Fourche LaFave River near Gravelly, Ark.		Drainage area: 410 square miles	
Latitude: 345221		Longitude: 933924			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, μ S/cm	67	49.67	40	46	
pH, standard units	160	7.07	6.8	7.0	
Turbidity, NTU	97	12.13	5.1	8.5	
Oxygen dis., mg/L	162	9.49	8.1	9.2	
BOD, 5-day, mg/L	152	1.47	1.0	1.4	
Fecal coli., c/100 mL	139	60.37	3	20	
Hardness tot., mg/L	94	17.73	13	16	
Alkalinity tot., mg/L	20	15.00	9	14	
Sulfate dis., mg/L	71	e 5.74	4.0	6.0	
Chloride dis., mg/L	153	4.63	3.5	4.5	
ROE, mg/L	120	41.87	36	42	
TSS, mg/L	164	7.65	4	6	
NO ₂ + NO ₃ tot., mg/L	99	e 0.11	0.03	0.07	
NH ₃ tot., mg/L	124	e 0.04	0.010	0.040	
Phosphorus tot., mg/L	75	e 0.04	0.020	0.040	
OrthoP tot., mg/L	94	e 0.02	e 0.010	0.010	
		Best trend results			
		Units per year	Percent per year	N	Trend code
		0	0.03	86	F
		0.48	0.60	52	F
		0.07	-0.64	86	F
		-0.06	-4.17	83	F
		-0.06	1.44	71	F
		0.87	-0.77	43	F
		-0.14	--	0	--
		0.00	0.00	71	U
		-0.17	-3.72	83	F
		-0.13	-0.31	64	F
		-0.07	-0.90	86	F
		0.00	0.00	99	U
		0.00	0.00	124	U
		0.00	3.86	75	U
		0.00	0.00	94	U

Station number: 07262500		Station name: Fourche LaFave River near Nimrod, Ark.		Drainage area: 684 square miles	
Latitude: 345702		Longitude: 930916			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, μ S/cm	119	38.84	32	38	
pH, standard units	122	6.68	6.4	6.6	
Turbidity, NTU	30	14.38	7.5	12	
Oxygen dis., mg/L	122	9.14	7.5	8.9	
BOD, 5-day, mg/L	37	1.92	1.3	1.9	
Fecal coli., c/100 mL*	36	81.25	10	27	
Hardness tot., mg/L	42	13.10	9	11	
Calcium dis., mg/L	27	2.49	1.6	2.0	
Magnesium dis., mg/L	27	1.37	1.1	1.4	
Alkalinity tot., mg/L	36	12.33	8	12	
Chloride dis., mg/L	26	2.52	2.1	2.5	
NO ₂ + NO ₃ tot., mg/L	36	e 0.09	0.02	0.08	
OrgN tot., mg/L	19	0.53	0.32	0.37	
OrgN + NH ₃ tot., mg/L	8	e 0.45	0.30	0.40	
Phosphorus tot., mg/L	24	e 0.05	0.030	0.040	
OrthoP tot., mg/L	27	e 0.02	e 0.010	0.020	
		Best trend results			
		Units per year	Percent per year	N	Trend code
		--	--	0	--
		0.54	3.74	18	U
		--	--	0	--
		--	--	0	--
		--	--	0	--
		-0.39	-2.96	28	U
		--	--	0	--
		--	--	0	--
		0.26	2.12	24	U
		--	--	0	--
		0.00	0.00	36	U
		--	--	0	--
		--	--	8	--
		0.00	6.87	24	U
		0.00	0.00	27	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07262985		Station name: South Fourche LaFave River at Hollis, Ark.				Drainage area: 127 square miles				
Latitude: 345216		Longitude: 930638								
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
pH, standard units	62	7.01	6.6	7.0	7.3	0	--	--	--	--
Turbidity, NTU	64	20.04	8.1	15	25	0	--	--	--	--
Oxygen dis., mg/L	60	8.98	7.3	8.5	10.4	0	--	--	--	--
BOD, 5-day, mg/L	61	1.97	1.2	1.8	2.5	0	--	--	--	--
Fecal coli., c/100 mL	44	148.11	8	24	230	0	--	--	--	--
Hardness tot., mg/L	46	15.96	14	16	18	9	--	--	--	--
Sulfate dis., mg/L	59	e 6.70	4.0	6.0	7.0	59	0.00	0.00	0.406	U
Chloride dis., mg/L	61	4.56	3.5	4.5	5.3	0	--	--	--	--
ROE, mg/L	61	47.98	40	46	52	0	--	--	--	--
TSS, mg/L	66	10.92	4	7	12	0	--	--	--	--
NO2 + NO3 tot., mg/L	57	e 0.10	0.05	0.08	0.14	57	--	--	--	--
NH3 tot., mg/L	60	e 0.07	0.030	0.060	0.090	60	--	--	--	--
Phosphorus tot., mg/L	55	e 0.06	0.040	0.060	0.070	55	--	--	--	--
OrthoP tot., mg/L	61	e 0.04	0.020	0.040	0.050	61	--	--	--	--

Station number: 07263240		Station name: Stone Dam Creek near Conway, Ark.				Drainage area: Unknown				
Latitude: 350332		Longitude: 922628								
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend
pH, standard units	65	7.18	7.0	7.1	7.4	0	--	--	--	--
Turbidity, NTU	68	20.44	9.1	15	29	0	--	--	--	--
Oxygen dis., mg/L	62	6.00	4.2	5.8	7.7	0	--	--	--	--
BOD, 5-day, mg/L	55	4.30	1.6	2.7	5.6	0	--	--	--	--
Fecal coli., c/100 mL	41	287.15	4	24	230	0	--	--	--	--
Hardness tot., mg/L	48	46.21	42	46	50	8	--	--	--	--
Sulfate dis., mg/L	63	e 32.56	23	32	40	63	0.00	0.00	1.000	U
Chloride dis., mg/L	65	22.10	15	21	29	0	--	--	--	--
ROE, mg/L	66	171.58	131	177	210	0	--	--	--	--
TSS, mg/L	69	17.54	9	14	20	0	--	--	--	--
NO2 + NO3 tot., mg/L	60	e 2.11	0.54	1.0	2.9	60	--	--	--	--
NH3 tot., mg/L	58	e 6.26	2.30	5.80	10.1	58	--	--	--	--
OrgN tot., mg/L	22	1.65	0.65	1.3	2.1	14	--	--	--	--
OrgN + NH3 tot., mg/L	25	e 6.64	3.2	6.3	9.6	25	--	--	--	--
Nitrogen tot., mg/L	18	8.11	5.3	7.5	11	14	--	--	--	--
Phosphorus tot., mg/L	58	e 3.86	1.60	3.50	6.10	58	--	--	--	--
OrthoP tot., mg/L	63	e 3.23	1.20	2.95	4.85	63	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07263450			Station name: Arkansas River at Murray Dam at Little Rock, Ark.							
Latitude: 344727		Longitude: 922132		Drainage area: 158,030 square miles						
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results			
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	96	501.59	347	491	617	0	--	--	--	--
pH, standard units	160	7.87	7.6	7.9	8.2	81	0.01	0.11	0.397	F
Turbidity, NTU	98	28.22	8.1	20	40	54	-1.09	-3.86	0.002	F
Oxygen dis., mg/L	164	9.73	8.2	9.2	11.2	80	0.04	0.44	0.157	F
BOD, 5-day, mg/L	162	1.78	1.2	1.6	2.2	80	-0.03	-1.91	0.232	F
Fecal coli., c/100 mL	135	65.55	4	16	80	69	-1.52	-2.32	0.002	F
Hardness tot., mg/L	96	120.01	89	120	150	45	2.50	2.08	0.013	U
Alkalinity tot., mg/L	18	84.83	70	82	101	0	--	--	--	--
Sulfate dis., mg/L	72	e 50.94	34	48	63	72	3.10	6.09	0.022	U
Chloride dis., mg/L	150	92.33	53	82	120	79	1.98	2.14	0.061	F
ROE, mg/L	115	322.88	223	307	415	22	-9.31	-2.88	0.205	F
TSS, mg/L	162	25.08	12	19	30	79	-0.86	-3.42	0.000	F
NO2 + NO3 tot., mg/L	108	e 0.30	0.05	0.32	0.50	108	0.00	0.00	0.646	U
NH3 tot., mg/L	132	e 0.06	0.040	0.060	0.080	132	0.00	0.045	0.045	U
OrgN tot., mg/L	101	0.58	0.34	0.51	0.76	59	0.00	-0.61	0.717	F
OrgN + NH3 tot., mg/L	77	e 0.70	0.40	0.55	0.80	77	0.00	0.00	0.928	U
Nitrogen tot., mg/L	49	0.91	0.69	0.88	1.1	12	-0.01	-0.99	1.000	F
Phosphorus tot., mg/L	81	e 0.10	0.070	0.090	0.130	81	0.00	-2.01	0.233	U
Orthoph tot., mg/L	97	e 0.04	0.010	0.030	0.060	97	0.00	0.00	0.302	U

Station number: 07263620		Station name: Arkansas River at David D. Terry Lock and Dam below Little Rock, Ark.				Longitude: 920918		Drainage area: 158,288 square miles		
Latitude: 344007										
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$		130	550.01	389	534	699	87	7.31	1.33	0.048 F
pH, standard units		129	7.92	7.7	7.9	8.1	87	0.03	0.40	0.000 F
Turbidity, NTU		58	22.02	4.5	17	34	51	-1.39	-6.30	0.046 F
Oxygen dis., mg/L		123	9.27	7.5	9.0	10.7	86	0.00	-0.01	0.898 F
Fecal coli., c/100 mL*		101	919.85	59	200	980	71	-41.97	-4.56	0.000 F
Fecal strp., c/100 mL		90	266.43	28	80	250	67	-1.31	-0.49	0.715 F
Hardness tot., mg/L		128	118.25	93	120	140	86	1.74	1.47	0.016 F
Calcium dis., mg/L		128	33.80	26	35	41	86	0.37	1.11	0.036 F
Magnesium dis., mg/L		129	8.10	6.3	7.9	9.4	86	0.18	2.17	0.002 F
Sodium dis., mg/L		129	61.98	37	59	78	86	0.99	1.59	0.079 F
Potassium dis., mg/L		129	3.36	2.8	3.3	3.9	87	0.00	0.11	0.833 F
Alkalinity tot., mg/L		88	80.74	65	82	97	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07263620		Station name: Arkansas River at David D. Terry Lock and Dam below Little Rock, Ark.--Continued				Drainage area: 158,288 square miles			
Latitude: 344007		Longitude: 920918							
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Sulfate dis., mg/L	42	e 49.33	31	47	61	42	3.20	6.49	0.044 U
Chloride dis., mg/L	130	93.89	55	87	120	87	1.25	1.33	0.206 F
ROE, mg/L	94	318.22	228	313	385	69	8.17	2.57	0.006 F
NO ₂ + NO ₃ tot., mg/L	46	e 0.31	0.13	0.39	0.44	46	--	--	--
NO ₂ + NO ₃ dis., mg/L	70	e 0.30	0.02	0.29	0.47	70	0.00	0.00	1.000 U
OrgN tot., mg/L	63	0.73	0.58	0.71	0.91	43	-0.01	-1.97	0.447 F
Phosphorus tot., mg/L	47	e 0.75	0.50	0.70	0.80	47	0.05	6.54	0.332 U
Phosphorus dis., mg/L	47	e 0.10	0.070	0.090	0.110	47	-0.01	-6.05	0.328 U
Orthoph dis., mg/L	47	e 0.05	0.030	0.050	0.060	47	0.00	0.00	0.518 U
Aluminum dis., µg/L	47	e 0.04	0.020	0.040	0.050	47	0.00	1.83	0.409 U
Barium dis., µg/L	27	e 32.27	10	30	40	27	3.67	11.36	0.263 U
Iron dis., µg/L	40	88.47	61	85	97	32	0.35	0.39	0.624 F
Manganese dis., µg/L	60	e 45.49	17	30	60	60	0.15	0.34	0.699 U
Nickel dis., µg/L	60	e 8.98	e 10	3	11	60	0.00	0.00	0.144 U
Strontium dis., µg/L	41	e 2.40	e 1	2	4	41	-0.12	-4.92	0.267 U
Sediment susp., mg/L	26	302.69	210	310	350	14	6.69	2.21	0.457 F
Sed. susp., %ft. 62µm	123	44.85	18	26	46	85	-0.97	-2.16	0.023 F
	124	70.99	56	77	89	86	-1.67	-2.35	0.000 F

Station number: 07263640		Station name: Arkansas River at Lock and Dam 5 near Wright, Ark.				Drainage area: 158,542 square miles			
Latitude: 342448		Longitude: 920607							
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, µS/cm	31	489.65	337	490	629	17	--	--	--
pH, standard units	64	7.94	7.7	7.9	8.2	0	--	--	--
Turbidity, NTU	64	28.19	7.0	20	45	0	--	--	--
Oxygen dis., mg/L	62	10.00	8.5	9.5	11.2	0	--	--	--
BOD, 5-day, mg/L	65	2.18	1.5	1.8	2.4	0	--	--	--
Sulfate dis., mg/L	61	e 52.46	38	50	62	61	4.67	8.90	0.017 U
Chloride dis., mg/L	59	82.20	52	72	110	0	--	--	--
ROE, mg/L	62	317.89	238	311	390	0	--	--	--
TSS, mg/L	59	27.88	12	18	38	0	--	--	--
NO ₂ + NO ₃ tot., mg/L	68	e 0.31	0.05	0.34	0.52	68	--	--	--
NH ₃ tot., mg/L	64	e 0.06	0.010	0.050	0.090	64	--	--	--
OrgN tot., mg/L	41	0.57	0.39	0.54	0.76	0	--	--	--
OrgN + NH ₃ tot., mg/L	58	e 0.65	0.40	0.60	0.80	58	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07263920				Station name: Bayou Meto near North Little Rock, Ark.				Longitude: 920913				Drainage area:				Unknown			
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results												
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code									
pH, standard units	63	6.81	6.6	6.8	7.0	0	--	--	--	--	--	--	--	--	--	--			
Turbidity, NTU	64	19.51	9.1	15	20	0	--	--	--	--	--	--	--	--	--	--			
Oxygen dis., mg/L	66	5.20	1.5	4.8	8.8	0	--	--	--	--	--	--	--	--	--	--			
BOD, 5-day, mg/L	61	2.03	1.3	1.9	2.8	0	--	--	--	--	--	--	--	--	--	--			
Fecal coli., c/100 mL	42	243.90	28	68	240	0	--	--	--	--	--	--	--	--	--	--			
Hardness tot., mg/L	48	25.58	18	21	34	8	--	--	--	--	--	--	--	--	--	--			
Sulfate dis., mg/L	61	e 5.95	5.0	6.0	7.0	61	0.00	0.00	0.744	U	--	--	--	--	--	--			
Chloride dis., mg/L	64	4.66	3.5	4.5	5.9	0	--	--	--	--	--	--	--	--	--	--			
ROE, mg/L	60	53.98	45	54	63	0	--	--	--	--	--	--	--	--	--	--			
TSS, mg/L	65	11.97	6	9	13	0	--	--	--	--	--	--	--	--	--	--			
NO2 + NO3 tot., mg/L	65	e 0.10	0.04	0.08	0.14	65	--	--	--	--	--	--	--	--	--	--			
NH3 tot., mg/L	64	e 0.08	0.040	0.060	0.110	64	--	--	--	--	--	--	--	--	--	--			
OrgN tot., mg/L	26	0.70	0.38	0.57	0.96	0	--	--	--	--	--	--	--	--	--	--			
OrgN + NH3 tot., mg/L	32	e 0.77	0.50	0.60	1.0	32	--	--	--	--	--	--	--	--	--	--			
Nitrogen tot., mg/L	26	0.85	0.54	0.74	1.0	16	--	--	--	--	--	--	--	--	--	--			
Phosphorus tot., mg/L	60	e 0.09	0.060	0.080	0.110	60	--	--	--	--	--	--	--	--	--	--			
OrthoP tot., mg/L	63	e 0.04	0.020	0.030	0.050	63	--	--	--	--	--	--	--	--	--	--			

Station number: 07263935				Station name: Bayou Meto near Jacksonville, Ark.				Longitude: 920720				Drainage area:				Unknown			
Water-quality property or constituent		Sample size	Descriptive statistics				Best trend results												
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code									
pH, standard units	64	6.98	6.8	7.0	7.2	0	--	--	--	--	--	--	--	--	--	--			
Turbidity, NTU	63	21.10	15	20	25	0	--	--	--	--	--	--	--	--	--	--			
Oxygen dis., mg/L	66	4.35	2.1	4.3	6.6	0	--	--	--	--	--	--	--	--	--	--			
BOD, 5-day, mg/L	63	4.29	2.1	3.0	6.0	0	--	--	--	--	--	--	--	--	--	--			
Fecal coli., c/100 mL	40	433.10	85	200	500	0	--	--	--	--	--	--	--	--	--	--			
Hardness tot., mg/L	47	57.72	26	44	62	8	--	--	--	--	--	--	--	--	--	--			
Sulfate dis., mg/L	61	e 11.49	7.0	9.0	13	61	0.75	6.53	0.061	U	--	--	--	--	--	--			
Chloride dis., mg/L	65	81.87	7.9	26	52	0	--	--	--	--	--	--	--	--	--	--			
ROE, mg/L	59	241.32	72	107	241	0	--	--	--	--	--	--	--	--	--	--			
TSS, mg/L	65	19.96	11	17	26	0	--	--	--	--	--	--	--	--	--	--			
NO2 + NO3 tot., mg/L	64	e 0.99	0.14	0.23	0.35	64	--	--	--	--	--	--	--	--	--	--			
NH3 tot., mg/L	64	e 1.36	0.180	0.630	2.60	64	--	--	--	--	--	--	--	--	--	--			
OrgN tot., mg/L	27	1.24	0.71	1.0	1.5	17	--	--	--	--	--	--	--	--	--	--			
OrgN + NH3 tot., mg/L	31	e 2.07	1.0	1.4	2.4	31	--	--	--	--	--	--	--	--	--	--			

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07263935			Station name: Bayou Meto near Jacksonville, Ark.							
Latitude: 345039	Longitude: 920720		Drainage area:				Unknown			
			Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Nitrogen tot., mg/L	28	3.73	1.2	2.0	6.2	16	--	--	--	--
Phosphorus tot., mg/L	60	e 1.78	0.400	0.880	2.65	60	--	--	--	--
OrthoP tot., mg/L	63	e 1.24	0.240	0.490	1.60	63	--	--	--	--
Station number: 07265099			Station name: Bayou Meto near Bayou Meto, Ark.							
Latitude: 341205	Longitude: 913145		Drainage area:				794 square miles			
			Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	64	195.14	104	160	253	0	--	--	--	--
pH, standard units	160	7.24	6.9	7.2	7.5	71	0.01	0.09	0.516	F
Turbidity, NTU	94	55.57	35	50	70	49	-1.13	-2.02	0.056	U
Oxygen dis., mg/L	161	6.25	4.6	6.0	7.4	82	0.03	0.44	0.366	U
BOD, 5-day, mg/L	153	2.25	1.5	2.1	2.7	67	-0.02	-0.82	0.562	F
Fecal coli., c/100 mL	135	109.43	20	60	120	65	-2.14	-1.95	0.369	F
Hardness tot., mg/L	98	71.08	38	50	98	25	-0.71	-1.00	0.464	U
Magnesium dis., mg/L	10	7.04	3.0	7.0	11	9	--	--	--	--
Alkalinity tot., mg/L	20	50.45	27	41	77	0	--	--	--	--
Sulfate dis., mg/L	67	e 13.16	9.0	12	16	67	1.00	7.60	0.011	U
Chloride dis., mg/L	147	18.49	10	16	26	79	-0.33	-1.80	0.240	U
ROE, mg/L	115	164.33	130	149	187	62	-2.50	-1.52	0.136	U
TSS, mg/L	151	43.40	22	33	57	69	-0.42	-0.97	0.479	F
NO2 + NO3 tot., mg/L	108	e 0.23	0.14	0.22	0.32	108	-0.01	-2.43	0.088	U
NH3 tot., mg/L	130	e 0.11	0.070	0.090	0.130	130	0.00	-3.79	0.007	U
Phosphorus tot., mg/L	77	e 0.23	0.170	0.220	0.280	77	0.00	0.00	0.845	U
OrthoP tot., mg/L	97	e 0.13	0.070	0.110	0.190	97	0.00	3.18	0.227	U

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07265283			Station name: Arkansas River at Dam No. 2 near Gillett, Ark.			Drainage area: 160,475 square miles		
Latitude: 335920			Longitude: 911847					
Water-quality property or constituent			Descriptive statistics			Best trend results		
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	522.92	388	505	625	0	--	--	--
pH, standard units	7.86	7.7	7.9	8.1	82	0.01	0.14	0.102 F
Turbidity, NTU	26.72	6.6	23	43	50	-0.61	-2.28	0.420 F
Oxygen dis., mg/L	9.30	7.8	8.9	10.8	79	0.01	0.16	0.644 F
BOD, 5-day, mg/L	1.76	1.2	1.6	2.1	40	0.01	0.68	0.364 F
Fecal coli., c/100 mL*	160.28	24	69	170	0	--	--	--
Fecal coli., c/100 mL	140.73	9	33	160	0	--	--	--
Fecal strp., c/100 mL	1,242.59	25	220	690	0	--	--	--
Hardness tot., mg/L	119.29	88	120	140	27	2.79	2.34	0.050 F
Calcium dis., mg/L	32.11	24	34	39	0	--	--	--
Magnesium dis., mg/L	7.86	5.6	7.7	9.4	0	--	--	--
Sodium dis., mg/L	62.76	41	56	82	0	--	--	--
Potassium dis., mg/L	3.49	2.8	3.2	4.0	0	--	--	--
Alkalinity tot., mg/L	75.57	58	74	97	0	--	--	--
Sulfate dis., mg/L	e 50.19	36	44	64	54	2.55	5.08	0.163 U
Chloride dis., mg/L	90.65	57	78	120	78	1.28	1.41	0.219 F
ROE, mg/L	315.75	226	306	391	64	1.93	0.61	0.515 F
TSS, mg/L	29.89	14	26	43	39	-1.05	-3.53	0.001 F
NO ₂ + NO ₃ tot., mg/L	e 0.33	0.10	0.34	0.48	73	-0.01	-3.52	0.014 U
NO ₂ + NO ₃ dis., mg/L	e 0.40	0.13	0.38	0.52	47	--	--	--
OrgN tot., mg/L	0.88	0.64	0.87	1.1	0	--	--	--
OrgN + NH ₃ tot., mg/L	e 0.71	0.50	0.70	0.90	30	--	--	--
Phosphorus tot., mg/L	e 0.12	0.090	0.110	0.140	63	0.00	0.00	0.701 U
Phosphorus dis., mg/L	e 0.06	0.040	0.060	0.070	30	--	--	--
OrthoP tot., mg/L	e 0.06	0.030	0.060	0.080	34	--	--	--
OrthoP dis., mg/L	e 0.04	0.030	0.040	0.050	30	--	--	--
Aluminum dis., $\mu\text{g}/\text{L}$	e 43.88	10	30	90	15	--	--	--
Barium dis., $\mu\text{g}/\text{L}$	106.17	71	88	120	0	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	e 87.93	20	60	140	28	--	--	--
Manganese dis., $\mu\text{g}/\text{L}$	e 17.05	4	8	24	28	--	--	--
Nickel dis., $\mu\text{g}/\text{L}$	e 6.39	2	3	6	26	--	--	--
Strontium dis., $\mu\text{g}/\text{L}$	256.67	160	290	320	8	--	--	--
Sediment susp., mg/L	52.85	15	41	77	0	--	--	--
Sed. susp., $\% \text{t.t. } 62\mu\text{m}$	68.15	57	74	85	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07265450		Station name: Mississippi River near Arkansas City, Ark.		Drainage area: 1,130,600 square miles						
Latitude: 333327		Longitude: 911415								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	
Conductance, $\mu\text{S}/\text{cm}$	118	396.86	351	400	443	73	0.99	0.25	0.706	F
pH, standard units	118	7.83	7.7	7.9	8.0	73	0.01	0.11	0.257	F
Turbidity, NTU	48	54.87	28	45	79	37	-2.81	-5.11	0.128	F
Oxygen dis., mg/L	84	8.77	7.3	8.2	10.0	0	--	--	--	--
Fecal coli., c/100 mL*	88	607.63	170	410	790	61	-12.14	-2.00	0.444	F
Fecal strp., c/100 mL	76	277.05	57	120	300	53	2.96	1.07	0.397	F
Hardness tot., mg/L	118	147.43	130	150	160	73	0.64	0.43	0.131	F
Calcium dis., mg/L	118	39.07	36	39	43	73	0.06	0.16	0.517	F
Magnesium dis., mg/L	118	12.03	10	12	14	73	0.12	0.98	0.027	F
Sodium dis., mg/L	118	20.76	15	20	26	73	0.14	0.68	0.332	F
Potassium dis., mg/L	118	3.05	2.7	3.1	3.4	73	0.00	0.07	0.787	F
Alkalinity tot., mg/L	82	102.10	92	103	111	0	--	--	--	--
Sulfate dis., mg/L	30	e 55.77	44	52	73	30	-2.37	-4.24	0.457	U
Chloride dis., mg/L	117	21.09	16	20	24	72	0.13	0.62	0.477	F
ROE, mg/L	80	240.41	210	238	273	54	1.24	0.52	0.339	F
NO2 dis., mg/L	18	e 0.02	e 0.010	0.020	0.020	18	--	--	--	--
NO2 + NO3 tot., mg/L	45	e 1.33	1.1	1.3	1.6	45	--	--	--	--
NO2 + NO3 dis., mg/L	58	e 1.32	0.84	1.3	1.8	58	-0.05	-3.75	0.045	U
Orgn tot., mg/L	55	0.99	0.67	0.84	1.3	33	0.02	1.58	0.181	F
Orgn + NH3 tot., mg/L	36	e 0.89	0.60	0.80	1.1	36	0.03	3.11	0.723	U
Phosphorus tot., mg/L	36	e 0.18	0.130	0.150	0.210	36	0.00	0.00	0.929	U
Phosphorus dis., mg/L	36	e 0.07	0.050	0.070	0.080	36	0.00	-5.60	0.032	U
Orthop dis., mg/L	36	e 0.06	0.050	0.060	0.070	36	0.00	-5.50	0.071	U
Aluminum dis., $\mu\text{g}/\text{L}$	28	e 25.97	10	20	40	28	5.00	19.25	0.038	U
Barium dis., $\mu\text{g}/\text{L}$	39	116.36	60	73	92	33	-4.24	-3.64	0.020	F
Iron dis., $\mu\text{g}/\text{L}$	59	e 36.37	14	21	40	59	0.09	0.25	0.526	U
Manganese dis., $\mu\text{g}/\text{L}$	59	e 9.85	2	4	9	59	0.00	0.00	0.452	U
Nickel dis., $\mu\text{g}/\text{L}$	40	e 2.87	1	2	4	40	-0.20	-6.96	0.025	U
Strontium dis., $\mu\text{g}/\text{L}$	29	190.28	160	190	220	12	-2.78	-1.46	0.894	F
Sediment susp., mg/L	113	167.38	97	141	192	71	-1.05	-0.62	0.596	F
Sed. susp., $\text{\&f.t. } 62\mu\text{m}$	113	84.55	78	90	95	71	-0.24	-0.28	0.388	F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
-- alternate period--Continued

Station number: 07336860		Station name: Red River near Foreman, Ark.		Drainage area: 47,648 square miles					
Latitude: 333412		Longitude: 942439							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	66	1,078.58	526	1,120	1,540	0	--	--	--
pH, standard units	163	8.01	7.9	8.0	8.2	88	0.00	0.06	0.317 F
Turbidity, NTU	99	94.18	25	50	110	54	-2.15	-2.29	0.097 F
Oxygen dis., mg/L	166	9.01	7.7	8.7	10.3	89	-0.05	-0.58	0.010 F
BOD, 5-day, mg/L	165	2.81	1.8	2.6	3.5	89	-0.03	-1.22	0.105 F
Fecal coli., c/100 mL	135	188.09	16	50	160	74	-2.81	-1.50	0.261 F
Hardness tot., mg/L	95	228.48	170	240	300	25	-0.29	-0.13	0.964 F
Alkalinity tot., mg/L	20	120.05	110	127	135	0	--	--	--
Sulfate dis., mg/L	69	111.36	76	100	150	69	5.00	4.49	0.339 U
Chloride dis., mg/L	160	161.20	79	150	230	86	-0.28	-0.17	0.880 F
ROE, mg/L	118	592.03	392	607	769	22	7.15	1.21	0.700 F
TSS, mg/L	172	131.06	39	79	157	89	-1.32	-1.01	0.378 F
NO ₂ + NO ₃ tot., mg/L	114	e 0.17	0.02	0.16	0.28	114	0.00	0.00	0.967 U
NH ₃ tot., mg/L	137	e 0.07	0.020	0.060	0.090	137	0.00	-3.09	0.004 U
Phosphorus tot., mg/L	81	e 0.16	0.090	0.120	0.190	81	0.01	3.08	0.073 U
OrthoP tot., mg/L	98	e 0.03	0.010	0.030	0.050	98	0.00	0.00	0.042 U

Station number: 07337000		Station name: Red River at Index, Ark.		Drainage area: 48,030 square miles					
Latitude: 333307		Longitude: 940228							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	58	978.66	720	961	1,180	0	--	--	--
pH, standard units	57	7.96	7.8	8.0	8.2	0	--	--	--
Turbidity, NTU	52	60.41	16	40	85	51	-2.54	-4.21	0.048 F
Oxygen dis., mg/L	57	8.56	7.2	8.4	9.8	0	--	--	--
Fecal coli., c/100 mL*	58	435.17	22	81	400	0	--	--	--
Fecal strp., c/100 mL	56	548.45	61	140	400	0	--	--	--
Hardness tot., mg/L	58	235.60	180	230	300	0	--	--	--
Calcium dis., mg/L	58	63.55	49	64	80	0	--	--	--
Magnesium dis., mg/L	58	18.60	14	18	24	0	--	--	--
Sodium dis., mg/L	58	109.02	77	100	130	0	--	--	--
Potassium dis., mg/L	58	4.33	3.8	4.4	4.9	0	--	--	--
Alkalinity tot., mg/L	23	131.35	105	130	153	7	--	--	--
Sulfate dis., mg/L	41	e 135.68	96	140	180	41	8.00	5.90	0.076 U
Chloride dis., mg/L	58	164.36	130	160	200	0	--	--	--
ROE, mg/L	57	595.35	460	579	738	0	--	--	--

Station number: 07337000 Station name: Red River at Index, Ark.
Latitude: 333307 Longitude: 940228 Drainage area: 48,030 square miles

Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	58	978.66	720	961	1,180	0	--	--	--
pH, standard units	57	7.96	7.8	8.0	8.2	0	--	--	--
Turbidity, NTU	52	60.41	16	40	85	51	-2.54	-4.21	0.048 F
Oxygen dis., mg/L	57	8.56	7.2	8.4	9.8	0	--	--	--
Fecal coli., c/100 mL*	58	435.17	22	81	400	0	--	--	--
Fecal strp., c/100 mL	56	548.45	61	140	400	0	--	--	--
Hardness tot., mg/L	58	235.60	180	230	300	0	--	--	--
Calcium dis., mg/L	58	63.55	49	64	80	0	--	--	--
Magnesium dis., mg/L	58	18.60	14	18	24	0	--	--	--
Sodium dis., mg/L	58	109.02	77	100	130	0	--	--	--
Potassium dis., mg/L	58	4.33	3.8	4.4	4.9	0	--	--	--
Alkalinity tot., mg/L	23	131.35	105	130	153	7	--	--	--
Sulfate dis., mg/L	41	e 135.68	96	140	180	41	8.00	5.90	0.076 U
Chloride dis., mg/L	58	164.36	130	160	200	0	--	--	--
ROE, mg/L	57	595.35	460	579	738	0	--	--	--

**Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued**

Station number: 07337000		Station name: Red River at Index, Ark.--Continued		Drainage area: 48,030 square miles	
Latitude: 333307		Longitude: 940228			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
NO2 + NO3 tot., mg/L	11	e 0.17	e 0.10	0.02	11
NO2 + NO3 dis., mg/L	55	e 0.17	e 0.10	0.16	55
OrgN tot., mg/L	31	0.97	0.65	0.86	0
OrgN + NH3 tot., mg/L	46	e 0.82	0.50	0.80	46
Phosphorus tot., mg/L	47	e 0.11	0.060	0.100	47
Phosphorus dis., mg/L	46	e 0.03	0.020	0.030	46
OrthoP dis., mg/L	45	e 0.02	0.010	0.020	45
Aluminum dis., µg/L	27	e 38.78	20	30	27
Barium dis., µg/L	37	178.30	130	170	34
Iron dis., µg/L	37	e 59.89	24	36	37
Manganese dis., µg/L	37	e 18.57	7	17	37
Nickel dis., µg/L	37	e 2.65	1	2	37
Strontium dis., µg/L	27	718.52	540	750	14
Sediment susp., mg/L	58	254.28	43	143	0
Sed. susp., %f.t. 62µm	58	74.23	64	76	0
		Best trend results			Trend code
		Units per year	Percent per year	p	
		--	--	0.00	--
		--	--	0.00	--
		--	--	0.00	--
		--	--	-6.74	U
		--	--	0.00	U
		--	--	0.00	U
		--	--	-11.50	U
		--	--	0.00	U
		--	--	0.00	U
		--	--	-1.25	F
		--	--	--	--
		--	--	--	--
		--	--	0.00	U
		--	--	3.06	F
		--	--	--	--
		--	--	--	--

Station name: Mountain Fork near Hatfield, Ark.

Drainage area: 168 square miles

Longitude: 942550

Station number: 07338720

Latitude: 343018

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07339795			Station name: Bear Creek near Horatio, Ark.			Longitude: 942301			Drainage area: Unknown		
Latitude: 335910											
			Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
pH, standard units	61	7.05	6.9	7.1	7.2	0	--	--	--	--	
Turbidity, NTU	67	24.30	15	20	30	0	--	--	--	--	
Oxygen dis., mg/L	68	6.84	4.3	7.6	9.7	0	--	--	--	--	
BOD, 5-day, mg/L	59	4.05	1.9	2.6	3.9	0	--	--	--	--	
Fecal coli., c/100 mL	38	278.42	76	190	470	0	--	--	--	--	
Hardness tot., mg/L	47	37.21	26	30	46	8	--	--	--	--	
Sulfate dis., mg/L	59	e 16.41	9.0	11	15	59	0.00	0.00	0.500	U	
Chloride dis., mg/L	67	16.82	5.5	8.0	22	0	--	--	--	--	
ROE, mg/L	63	112.87	65	81	131	0	--	--	--	--	
TSS, mg/L	69	24.48	12	19	27	0	--	--	--	--	
NO2 + NO3 tot., mg/L	70	e 0.87	0.25	0.53	1.0	70	--	--	--	--	
NH3 tot., mg/L	68	e 0.76	0.060	0.190	0.750	68	--	--	--	--	
OrgN tot., mg/L	23	1.08	0.48	0.85	1.7	15	--	--	--	--	
OrgN + NH3 tot., mg/L	32	e 1.37	0.70	1.0	2.0	32	--	--	--	--	
Nitrogen tot., mg/L	32	2.49	1.1	1.8	2.8	0	--	--	--	--	
Phosphorus tot., mg/L	63	e 1.59	0.220	0.460	1.95	63	--	--	--	--	
OrthoP tot., mg/L	64	e 1.01	0.120	0.280	1.10	64	--	--	--	--	

Station number: 07340000

Station name: Little River near Horatio, Ark.

Longitude: 942315

Drainage area: 2,662 square miles

Latitude: 335510											
			Descriptive statistics				Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code	
Conductance, µS/cm	74	67.43	51	60	82	0	--	--	--	--	
pH, standard units	174	6.96	6.8	7.0	7.1	89	0.02	0.24	0.004	F	
Turbidity, NTU	102	18.65	6.4	15	20	54	-0.09	-0.50	0.898	F	
Oxygen dis., mg/L	178	8.85	7.4	8.4	10.3	90	0.00	-0.02	0.952	F	
BOD, 5-day, mg/L	167	1.37	1.0	1.3	1.6	90	-0.06	-4.06	0.000	F	
Fecal coli., c/100 mL	141	145.22	12	30	110	73	-3.05	-2.10	0.041	F	
Hardness tot., mg/L	106	20.97	16	20	25	25	0.45	2.13	0.020	F	
Alkalinity tot., mg/L	19	16.42	14	15	19	0	--	--	--	--	
Sulfate dis., mg/L	71	e 6.58	5.0	6.0	8.0	71	-0.17	-2.53	0.125	U	
Chloride dis., mg/L	170	8.88	5.0	7.0	13	86	0.04	0.48	0.620	F	
ROE, mg/L	119	59.38	50	60	69	22	0.90	1.52	0.409	F	
TSS, mg/L	182	16.73	6	10	20	89	-0.13	-0.76	0.356	F	
NO2 + NO3 tot., mg/L	127	e 0.20	0.13	0.19	0.24	127	0.00	-1.71	0.193	U	
NH3 tot., mg/L	137	e 0.08	0.040	0.070	0.100	137	0.00	-3.98	0.033	U	
Phosphorus tot., mg/L	83	e 0.07	0.040	0.060	0.090	83	0.01	8.02	0.001	U	
OrthoP tot., mg/L	100	e 0.04	0.010	0.030	0.060	100	0.01	18.24	0.002	U	

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07340400		Station name: Cossatot River near Umpire, Ark.						
Latitude: 341745	Longitude: 941039	Drainage area: 142 square miles						
Water-quality property or constituent		Best trend results						
		Descriptive statistics						
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units	7.23	7.1	7.3	7.4	0	--	--	--
Turbidity, NTU	4.75	2.0	3.5	6.0	0	--	--	--
Oxygen dis., mg/L	9.37	7.5	9.7	11.1	0	--	--	--
BOD, 5-day, mg/L	0.74	0.5	0.7	0.9	0	--	--	--
Fecal coli., c/100 mL	23.38	5	9	19	0	--	--	--
Hardness tot., mg/L	18.40	14	16	22	8	--	--	--
Sulfate dis., mg/L	5.63	4.0	6.0	7.0	58	-0.50	-8.88	0.037 U
Chloride dis., mg/L	2.64	2.0	2.5	3.0	0	--	--	--
ROE, mg/L	35.35	30	34	42	0	--	--	--
TSS, mg/L	4.92	2	4	5	0	--	--	--
NO2 + NO3 tot., mg/L	e 0.04	0.03	0.04	0.05	69	--	--	--
NH3 tot., mg/L	e 0.03	e 0.010	0.020	0.040	67	--	--	--
Phosphorus tot., mg/L	e 0.02	0.010	0.020	0.030	62	--	--	--
Orthoph tot., mg/L	e 0.02	e 0.030	0.010	0.020	65	--	--	--

Station number: 07340945			Station name: Saline River near Burg, Ark.			Drainage area: 57.4 square miles			
Latitude: 341239		Longitude: 940302		Best trend results					
Descriptive statistics				Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
pH, standard units	62	7.17	6.9	7.1	7.4	0	--	--	--
Turbidity, NTU	68	11.84	5.0	7.5	19	0	--	--	--
Oxygen dis., mg/L	67	8.87	6.9	9.2	10.9	0	--	--	--
BOD, 5-day, mg/L	68	1.07	0.8	1.1	1.3	0	--	--	--
Fecal coli., c/100 mL	41	65.95	24	44	99	0	--	--	--
Hardness tot., mg/L	46	15.28	14	15	16	8	--	--	--
Sulfate dis., mg/L	58	e 4.31	3.0	4.0	6.0	58	0.00	0.00	0.510 U
Chloride dis., mg/L	68	3.16	2.5	3.0	3.5	0	--	--	--
ROE, mg/L	63	43.49	36	44	50	0	--	--	--
TSS, mg/L	70	8.88	5	7	10	0	--	--	--
NO2 + NO3 tot., mg/L	70	e 0.32	0.08	0.30	0.54	70	--	--	--
NH3 tot., mg/L	68	e 0.05	0.020	0.040	0.060	68	--	--	--
Phosphorus tot., mg/L	63	e 0.04	0.030	0.040	0.050	63	--	--	--
Orthoph tot., mg/L	66	e 0.02	0.010	0.020	0.030	66	--	--	--

Table 5 --Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued

Station number: 07341301		Station name: Little River at Millwood Dam near Ashdown, Ark.		Drainage area: 4,119 square miles					
Latitude: 34128		Longitude: 935753							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	127	64.93	56	64	74	0	--	--	--
pH, standard units	125	7.14	6.9	7.1	7.4	0	--	--	--
Turbidity, NTU	45	10.16	4.1	8.5	16	18	-0.43	-4.24	0.415 U
Oxygen dis., mg/L	135	10.01	8.4	9.8	11.8	0	--	--	--
BOD, 5-day, mg/L	18	1.83	1.4	1.8	2.3	0	--	--	--
Fecal coli., c/100 mL*	61	35.32	6	10	33	0	--	--	--
Fecal strp., c/100 mL	43	57.81	5	15	52	0	--	--	--
Hardness tot., mg/L	63	19.86	17	19	23	0	--	--	--
Calcium dis., mg/L	55	5.90	4.9	5.7	6.9	0	--	--	--
Magnesium dis., mg/L	55	1.33	1.2	1.3	1.5	0	--	--	--
Sodium dis., mg/L	45	4.25	3.1	4.1	5.0	0	--	--	--
Potassium dis., mg/L	46	1.37	1.2	1.4	1.5	0	--	--	--
Alkalinity tot., mg/L	41	18.95	15	18	24	0	--	--	--
Sulfate dis., mg/L	33	6.61	5.0	5.6	8.8	33	-0.40	-6.05	0.457 U
Chloride dis., mg/L	60	5.07	3.7	4.8	6.3	0	--	--	--
ROE, mg/L	46	51.74	44	50	57	0	--	--	--
NO ₂ + NO ₃ tot., mg/L	42	0.12	e 0.10	0.06	0.20	42	0.00	0.00	0.342 U
NO ₂ + NO ₃ dis., mg/L	39	0.12	e 0.10	0.10	0.18	39	--	--	--
OrgN tot., mg/L	29	0.74	0.42	0.54	0.97	0	--	--	--
OrgN + NH ₃ tot., mg/L	25	0.74	0.40	0.50	0.70	25	--	--	--
Phosphorus tot., mg/L	40	0.06	0.040	0.050	0.060	40	0.00	1.21	0.306 U
Phosphorus dis., mg/L	22	0.02	0.010	0.020	0.030	22	--	--	--
OrthoP tot., mg/L	19	0.02	e 0.010	0.020	0.040	19	--	--	--
OrthoP dis., mg/L	22	0.01	e 0.010	0.010	0.020	22	--	--	--
Aluminum dis., $\mu\text{g}/\text{L}$	15	e 41.26	10	20	80	15	--	--	--
Barium dis., $\mu\text{g}/\text{L}$	27	28.85	14	17	26	0	--	--	--
Iron dis., $\mu\text{g}/\text{L}$	29	e 160.45	50	160	210	29	--	--	--
Manganese dis., $\mu\text{g}/\text{L}$	29	e 36.56	4	12	36	29	--	--	--
Nickel dis., $\mu\text{g}/\text{L}$	26	e 2.05	1	2	3	26	--	--	--
Strontium dis., $\mu\text{g}/\text{L}$	15	43.87	28	41	52	8	--	--	--
Sediment susp., mg/L	44	21.59	11	16	23	0	--	--	--
Sed. susp., %f.t. 62 μm	45	67.04	56	68	83	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued

Station number: 07344275			Station name: Sulphur River south of Texarkana, Ark.			Drainage area: 3,540 square miles			
Latitude: 331432			Longitude: 935958						
Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, µS/cm	126	253.88	190	216	299	0	--	--	--
pH, standard units	154	7.46	7.2	7.5	7.7	66	0.01	0.12	0.229 F
Turbidity, NTU	62	24.39	14	25	32	45	1.00	4.10	0.269 U
Oxygen dis., mg/L	157	6.99	5.2	7.1	8.7	66	0.09	1.35	0.164 F
BOD, 5-day, mg/L	79	2.31	1.5	2.0	3.1	42	-0.02	-0.66	0.358 F
Fecal coli., c/100 mL*	41	54.33	14	31	63	0	--	--	--
Fecal coli., c/100 mL	51	124.02	12	27	93	0	--	--	--
Fecal strp., c/100 mL	43	180.64	37	91	280	0	--	--	--
Hardness tot., mg/L	81	78.32	65	78	91	22	1.22	1.56	0.110 F
Calcium dis., mg/L	51	24.62	21	25	28	0	--	--	--
Magnesium dis., mg/L	52	3.04	2.5	2.9	3.5	0	--	--	--
Sodium dis., mg/L	41	20.96	11	14	22	0	--	--	--
Potassium dis., mg/L	43	3.70	3.2	3.6	4.2	0	--	--	--
Alkalinity tot., mg/L	37	63.54	54	64	72	0	--	--	--
Sulfate dis., mg/L	41	e 22.61	15	18	26	41	-2.00	-8.85	0.026 U
Chloride dis., mg/L	113	25.26	12	18	27	62	-0.30	-1.17	0.167 F
ROE, mg/L	82	173.93	130	153	193	47	0.22	0.13	0.643 F
TSS, mg/L	80	46.64	18	36	60	41	-1.29	-2.76	0.067 F
NO2 + NO3 tot., mg/L	72	e 0.26	0.06	0.12	0.18	72	0.00	0.00	0.944 U
NO2 + NO3 dis., mg/L	39	e 0.16	0.05	0.16	0.22	39	--	--	--
OrgN tot., mg/L	27	1.10	0.78	1.0	1.3	0	--	--	--
OrgN + NH3 tot., mg/L	22	e 1.12	0.70	1.1	1.4	22	--	--	--
Phosphorus tot., mg/L	54	e 0.21	0.120	0.140	0.180	54	0.01	2.50	0.093 U
Phosphorus dis., mg/L	22	e 0.05	0.020	0.050	0.080	22	--	--	--
OrthoP tot., mg/L	34	e 0.13	0.050	0.080	0.100	34	--	--	--
OrthoP dis., mg/L	22	e 0.04	0.020	0.030	0.070	22	--	--	--
Aluminum dis., µg/L	14	e 139.54	10	50	200	14	--	--	--
Barium dis., µg/L	24	69.50	47	58	84	0	--	--	--
Iron dis., µg/L	30	e 199.13	56	130	240	30	--	--	--
Manganese dis., µg/L	29	e 72.72	10	30	120	29	--	--	--
Nickel dis., µg/L	25	e 3.11	1	2	6	25	--	--	--
Strontium dis., µg/L	13	240.00	230	240	270	7	--	--	--
Sediment susp., mg/L	44	62.80	30	53	79	0	--	--	--
Sed. susp., ‡ft. 62µm	45	69.53	54	78	88	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07344300		Station name: Days Creek southeast of Texarkana, Ark.				Longitude: 940016		Drainage area: 78.5 square miles		
Latitude: 331906										
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$		110	869.76	390	588	1,030	0	--	--	--
pH, standard units		165	7.24	7.0	7.3	7.5	88	0.00	0.03	0.646 F
Turbidity, NTU		100	19.53	8.0	15	20	54	-1.07	-5.49	0.009 F
Oxygen dis., mg/L		168	5.28	3.6	5.3	7.1	89	-0.02	-0.39	0.608 F
BOD, 5-day, mg/L		144	9.67	6.0	9.2	12	86	-0.27	-2.78	0.058 F
Fecal coli., c/100 mL		120	792.34	49	220	600	72	2.93	0.37	0.760 F
Hardness tot., mg/L		97	91.68	56	68	83	25	-0.23	-0.25	0.750 F
Alkalinity tot., mg/L		20	84.95	38	93	118	0	--	--	--
Sulfate dis., mg/L		70	e 30.33	23	30	38	70	0.00	0.00	1.000 U
Chloride dis., mg/L		161	160.16	43	88	150	86	-4.86	-3.03	0.000 F
ROE, mg/L		118	400.58	186	258	404	22	0.32	0.08	1.000 F
TSS, mg/L		170	23.50	13	18	28	89	-0.62	-2.63	0.007 F
NO2 + NO3 tot., mg/L		116	e 1.17	0.12	0.36	0.66	116	0.04	3.60	0.009 U
NH3 tot., mg/L		124	e 5.70	1.20	4.60	8.80	124	-0.41	-7.19	0.004 U
OrgN tot., mg/L		83	2.54	0.90	1.5	3.0	59	-0.01	-0.39	0.882 F
OrgN + NH3 tot., mg/L		81	e 6.50	1.8	5.1	9.6	81	-0.80	-12.32	0.114 U
Nitrogen tot., mg/L		60	8.00	4.1	6.5	11	35	-0.50	-6.22	0.039 F
Phosphorus tot., mg/L		82	e 1.40	0.700	1.05	2.20	82	-0.04	-2.86	0.389 U
OrthoP tot., mg/L		96	e 1.03	0.320	0.740	1.60	96	-0.01	-0.97	0.630 U

Station number: 07344350		Station name: Red River near Spring Bank, Ark.				Longitude: 935138		Drainage area: 56,909 square miles		
Latitude: 330529										
Water-quality property or constituent		Sample size	Descriptive statistics			Best trend results				
			Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$		105	694.43	361	600	1,060	0	--	--	--
pH, standard units		159	7.83	7.7	7.9	8.0	88	0.00	-0.06	0.359 F
Turbidity, NTU		100	76.80	30	50	84	54	-2.62	-3.41	0.019 F
Oxygen dis., mg/L		168	8.48	7.6	8.4	9.3	90	-0.04	-0.46	0.163 F
BOD, 5-day, mg/L		166	2.55	1.5	2.3	3.3	90	0.00	-0.18	0.856 F
Fecal coli., c/100 mL		133	92.47	12	36	100	74	-0.96	-1.04	0.324 F
Hardness tot., mg/L		96	152.06	90	130	210	46	0.39	0.26	0.828 F
Alkalinity tot., mg/L		19	98.26	49	98	120	0	--	--	--
Sulfate dis., mg/L		71	e 54.83	27	45	83	71	-2.00	-3.65	0.411 U
Chloride dis., mg/L		162	97.88	32	67	130	86	-1.50	-1.53	0.149 F
ROE, mg/L		120	378.29	209	288	497	66	2.52	0.67	0.465 F
TSS, mg/L		165	109.36	42	63	121	89	-2.25	-2.06	0.020 F
NO2 + NO3 tot., mg/L		114	e 0.20	0.11	0.18	0.27	114	0.00	0.00	1.000 U

Station number: 07344350 Station name: Red River near Spring Bank, Ark.
 Latitude: 330529 Longitude: 935138 Drainage area: 56,909 square miles

Water-quality property or constituent	Sample size	Descriptive statistics				Best trend results			
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	105	694.43	361	600	1,060	0	--	--	--
pH, standard units	159	7.83	7.7	7.9	8.0	88	0.00	-0.06	0.359 F
Turbidity, NTU	100	76.80	30	50	84	54	-2.62	-3.41	0.019 F
Oxygen dis., mg/L	168	8.48	7.6	8.4	9.3	90	-0.04	-0.46	0.163 F
BOD, 5-day, mg/L	166	2.55	1.5	2.3	3.3	90	0.00	-0.18	0.856 F
Fecal coli., c/100 mL	133	92.47	12	36	100	74	-0.96	-1.04	0.324 F
Hardness tot., mg/L	96	152.06	90	130	210	46	0.39	0.26	0.828 F
Alkalinity tot., mg/L	19	98.26	49	98	120	0	--	--	--
Sulfate dis., mg/L	71	e 54.83	27	45	83	71	-2.00	-3.65	0.411 U
Chloride dis., mg/L	162	97.88	32	67	130	86	-1.50	-1.53	0.149 F
ROE, mg/L	120	378.29	209	288	497	66	2.52	0.67	0.465 F
TSS, mg/L	165	109.36	42	63	121	89	-2.25	-2.06	0.020 F
NO2 + NO3 tot., mg/L	114	e 0.20	0.11	0.18	0.27	114	0.00	0.00	1.000 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07344350		Station name: Red River near Spring Bank, Ark.--Continued		Drainage area: 56,909 square miles	
Latitude: 330529		Longitude: 935138			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
NH3 tot., mg/L	135	e 0.18	0.050	0.090	0.140
OrgN tot., mg/L	75	0.93	0.51	0.79	1.0
OrgN + NH3 tot., mg/L	54	e 0.76	0.40	0.80	1.1
Nitrogen tot., mg/L	29	1.02	0.69	1.1	1.3
Phosphorus tot., mg/L	83	e 0.17	0.120	0.160	0.200
OrthoP tot., mg/L	100	e 0.06	0.030	0.060	0.090
		Best trend results			
		Units per year	Percent per year	N	p
		0.00	-1.10	135	0.071
		--	--	0	--
		--	--	54	--
		--	--	17	--
		0.00	1.22	83	0.438
		0.01	8.37	100	0.006
					U
Station number: 07348650		Station name: Bayou Dorcheat near Taylor, Ark.		Drainage area: 389 square miles	
Latitude: 330553		Longitude: 932253			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, µS/cm	49	238.06	160	237	300
pH, standard units	132	6.27	5.9	6.3	6.7
Turbidity, NTU	85	10.12	5.5	8.3	15
Oxygen dis., mg/L	133	6.47	4.8	6.3	8.3
BOD, 5-day, mg/L	132	1.62	1.0	1.4	2.0
Fecal coli., c/100 mL	110	144.59	36	67	160
Hardness tot., mg/L	86	40.86	28	36	51
Calcium dis., mg/L	10	8.77	5.0	8.0	12
Magnesium dis., mg/L	10	3.34	2.0	3.0	4.0
Alkalinity tot., mg/L	14	13.86	7	13	21
Sulfate dis., mg/L	63	e 7.44	6.0	7.0	9.0
Chloride dis., mg/L	131	54.76	35	48	72
ROE, mg/L	90	165.56	123	145	195
TSS, mg/L	135	11.30	6	9	14
NO2 + NO3 tot., mg/L	96	e 0.07	0.02	0.06	0.10
NH3 tot., mg/L	104	e 0.10	0.040	0.060	0.130
Phosphorus tot., mg/L	75	e 0.06	0.040	0.060	0.080
OrthoP tot., mg/L	91	e 0.02	0.010	0.020	0.030
		Best trend results			
		Units per year	Percent per year	N	p
		--	--	0	--
		-0.02	-0.39	78	0.022
		0.19	1.84	51	0.214
		-0.04	-0.60	76	0.389
		0.04	2.27	76	0.054
		-1.82	-1.26	67	0.187
		0.98	2.39	32	0.006
		--	--	10	--
		--	--	10	--
		-0.29	-3.92	63	0.447
		-0.78	-1.42	74	0.035
		--	--	0	--
		-0.18	-1.59	79	0.358
		0.00	0.00	96	0.512
		0.00	-0.72	104	0.387
		0.00	5.48	75	0.127
		0.00	0.00	91	0.239
					U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued

Station number: 07349440		Station name: Bodcau Creek near Lewisville, Ark.					Drainage area: Unknown		
Latitude: 331536		Longitude: 933300			Drainage area: Unknown				
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, $\mu\text{S}/\text{cm}$	52	188.92	107	155	220	0	--	--	--
pH, standard units	149	6.34	6.1	6.4	6.6	81	0.00	0.04	0.637 U
Turbidity, NTU	91	11.80	7.2	9.2	15	52	0.00	0.00	1.000 U
Oxygen dis., mg/L	150	6.30	4.7	5.9	7.7	81	-0.02	-0.35	0.450 U
BOD, 5-day, mg/L	144	1.61	1.0	1.5	2.1	80	0.02	1.04	0.348 U
Fecal coli., c/100 mL	128	121.18	21	57	130	70	-2.54	-2.09	0.108 U
Hardness tot., mg/L	88	32.34	22	28	40	15	0.04	0.13	0.702 F
Alkalinity tot., mg/L	15	9.33	6	9	11	9	--	--	--
Sulfate dis., mg/L	68	e 7.72	6.0	8.0	9.0	68	-0.33	-4.32	0.216 U
Chloride dis., mg/L	145	46.08	24	36	57	16	-0.88	-1.90	0.066 F
ROE, mg/L	101	140.92	99	125	170	0	--	--	--
TSS, mg/L	146	13.76	6	10	16	80	-0.41	-3.01	0.016 U
NO2 + NO3 tot., mg/L	95	e 0.09	0.04	0.08	0.12	95	--	--	--
NH3 tot., mg/L	118	e 0.08	0.030	0.050	0.090	118	0.00	-2.08	0.021 U
Phosphorus tot., mg/L	77	e 0.12	0.080	0.110	0.150	77	0.00	4.33	0.004 U
OrthoP tot., mg/L	97	e 0.05	0.030	0.050	0.070	97	0.00	4.81	0.013 U

Station number: 07355825		Station name: Prairie Creek near Mena, Ark.					Drainage area: Unknown		
Latitude: 343414		Longitude: 941116			Drainage area: Unknown				
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	66	7.21	7.1	7.3	7.4	0	--	--	--
Turbidity, NTU	62	22.51	9.0	20	30	0	--	--	--
Oxygen dis., mg/L	59	8.96	7.1	9.0	10.8	0	--	--	--
BOD, 5-day, mg/L	58	4.56	1.7	3.2	5.1	0	--	--	--
Fecal coli., c/100 mL	40	489.17	74	300	790	0	--	--	--
Hardness tot., mg/L	45	26.27	22	24	33	8	--	--	--
Sulfate dis., mg/L	56	e 10.64	7.0	9.0	12	56	0.00	0.00	0.890 U
Chloride dis., mg/L	62	9.85	5.0	7.5	11	0	--	--	--
ROE, mg/L	62	80.08	50	67	96	0	--	--	--
TSS, mg/L	64	25.29	8	18	36	0	--	--	--
NO2 + NO3 tot., mg/L	64	e 0.46	0.28	0.40	0.56	64	--	--	--
NH3 tot., mg/L	64	e 0.32	0.070	0.140	0.410	64	--	--	--
OrgN tot., mg/L	31	1.11	0.42	0.72	1.7	0	--	--	--

Station number: 07355825 Station name: Prairie Creek near Mena, Ark.

Latitude: 343414

Longitude: 941116

Drainage area: Unknown

		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	66	7.21	7.1	7.3	7.4	0	--	--	--
Turbidity, NTU	62	22.51	9.0	20	30	0	--	--	--
Oxygen dis., mg/L	59	8.96	7.1	9.0	10.8	0	--	--	--
BOD, 5-day, mg/L	58	4.56	1.7	3.2	5.1	0	--	--	--
Fecal coli., c/100 mL	40	489.17	74	300	790	0	--	--	--
Hardness tot., mg/L	45	26.27	22	24	33	8	--	--	--
Sulfate dis., mg/L	56	e 10.64	7.0	9.0	12	56	0.00	0.00	0.890 U
Chloride dis., mg/L	62	9.85	5.0	7.5	11	0	--	--	--
ROE, mg/L	62	80.08	50	67	96	0	--	--	--
TSS, mg/L	64	25.29	8	18	36	0	--	--	--
NO2 + NO3 tot., mg/L	64	e 0.46	0.28	0.40	0.56	64	--	--	--
NH3 tot., mg/L	64	e 0.32	0.070	0.140	0.410	64	--	--	--
OrgN tot., mg/L	31	1.11	0.42	0.72	1.7	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07355825		Station name: Prairie Creek near Mena, Ark.--Continued							
Latitude: 343414		Longitude: 94116		Drainage area:		Unknown			
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
OrgN + NH3 tot., mg/L	36	e 1.34	0.60	0.90	1.9	36	--	--	--
Nitrogen tot., mg/L	36	1.83	0.97	1.5	2.7	0	--	--	--
Phosphorus tot., mg/L	61	e 1.09	0.190	0.520	2.40	61	--	--	--
Orthophosphorus tot., mg/L	64	e 0.81	0.090	0.490	1.18	64	--	--	--

Station number: 07356000		Station name: Ouachita River near Mount Ida, Ark.								
Latitude: 343636		Longitude: 934150		Drainage area: 414 square miles						
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	98	60.70	46	58	71	0	--	--	--	--
pH, standard units	154	7.16	6.9	7.2	7.4	82	0.01	0.15	0.159	F
Turbidity, NTU	99	10.01	3.0	4.8	15	52	0.13	1.27	0.194	F
Oxygen dis., mg/L	160	9.20	8.0	9.0	10.5	83	0.01	0.06	0.874	F
BOD, 5-day, mg/L	155	1.63	1.0	1.5	2.1	82	-0.05	-3.16	0.008	F
Fecal coli., c/100 mL	122	172.40	17	40	130	69	-1.73	-1.00	0.131	F
Hardness tot., mg/L	94	24.31	18	23	30	25	0.34	1.38	0.186	F
Calcium dis., mg/L	10	7.45	5.0	6.3	11	10	--	--	--	--
Magnesium dis., mg/L	10	2.12	1.0	1.0	3.0	9	--	--	--	--
Alkalinity tot., mg/L	17	23.06	15	23	30	9	--	--	--	--
Sulfate dis., mg/L	73	e 4.50	3.0	5.0	6.0	73	0.00	0.00	0.837	U
Chloride dis., mg/L	151	3.85	3.0	4.0	4.5	80	-0.16	-4.21	0.000	F
ROE, mg/L	110	45.77	40	46	51	0	--	--	--	--
TSS, mg/L	154	8.06	3	4	8	82	-0.21	-2.65	0.010	F
NO2 + NO3 tot., mg/L	106	e 0.23	0.04	0.14	0.28	106	0.00	-1.89	0.015	U
NH3 tot., mg/L	124	e 0.05	0.020	0.040	0.060	124	0.00	0.00	0.048	U
OrgN tot., mg/L	52	0.51	0.18	0.32	0.68	0	--	--	--	--
OrgN + NH3 tot., mg/L	52	e 0.36	e 0.10	0.20	0.40	52	--	--	--	--
Nitrogen tot., mg/L	17	0.73	0.29	0.65	0.97	15	--	--	--	--
Phosphorus tot., mg/L	87	e 0.05	0.030	0.040	0.060	87	0.00	8.87	0.041	U
Orthop tot., mg/L	101	e 0.02	0.010	0.010	0.030	101	0.00	0.00	0.793	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07358501		Station name: Ouachita River at Carpenter Dam near Hot Springs				Longitude: 930124		Drainage area: 1,459 square miles	
Latitude: 342636		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	67	58.63	53	57	64	0	--	--	--
pH, standard units	127	6.99	6.8	7.0	7.1	0	--	--	--
Turbidity, NTU	62	4.61	2.4	3.0	4.0	0	--	--	--
Oxygen dis., mg/L	130	8.39	5.9	8.5	10.8	0	--	--	--
BOD, 5-day, mg/L	123	1.89	1.2	1.6	2.3	0	--	--	--
Fecal coli., c/100 mL	117	45.24	4	20	48	57	-0.21	-0.47	0.520 F
Hardness tot., mg/L	67	23.84	20	24	27	0	--	--	--
Alkalinity tot., mg/L	20	21.90	19	22	24	0	--	--	--
Sulfate dis., mg/L	39	e 5.12	4.0	5.0	6.0	39	--	--	--
Chloride dis., mg/L	121	3.95	3.5	4.0	4.5	0	--	--	--
ROE, mg/L	83	40.01	35	40	45	0	--	--	--
TSS, mg/L	127	5.24	3	4	7	0	--	--	--
NO2 + NO3 tot., mg/L	66	e 0.14	0.11	0.14	0.16	66	--	--	--
NH3 tot., mg/L	96	e 0.07	0.040	0.060	0.080	96	--	--	--
Phosphorus tot., mg/L	49	e 0.03	0.010	0.020	0.040	49	--	--	--
OrthoP tot., mg/L	61	e 0.02	e 0.010	e 0.010	0.020	61	--	--	--

Station number: 07359500		Station name: Ouachita River near Malvern, Ark.				Longitude: 925020		Drainage area: 1,585 square miles	
Latitude: 342310		Descriptive statistics				Best trend results			
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	98	122.38	75	103	162	0	--	--	--
pH, standard units	133	7.02	6.9	7.0	7.2	0	--	--	--
Turbidity, NTU	75	5.53	2.6	3.5	6.0	0	--	--	--
Oxygen dis., mg/L	136	9.08	7.6	9.2	10.6	0	--	--	--
BOD, 5-day, mg/L	130	2.26	1.2	1.9	2.8	0	--	--	--
Fecal coli., c/100 mL	132	57.80	4	20	50	68	-1.27	-2.19	0.064 F
Hardness tot., mg/L	72	31.11	24	30	38	0	--	--	--
Alkalinity tot., mg/L	19	24.47	16	19	21	0	--	--	--
Sulfate dis., mg/L	51	e 8.68	6.0	8.0	10	51	0.17	1.92	0.880 U
Chloride dis., mg/L	134	12.38	4.9	11	18	0	--	--	--
ROE, mg/L	97	66.44	47	59	80	0	--	--	--
TSS, mg/L	130	8.16	4	6	9	0	--	--	--
NO2 + NO3 tot., mg/L	84	e 0.28	0.15	0.20	0.34	84	-0.02	-5.95	0.153 U
NH3 tot., mg/L	108	e 0.18	0.040	0.080	0.290	108	-0.01	-6.13	0.236 U
OrgN tot., mg/L	61	0.64	0.23	0.42	0.78	0	--	--	--

Table 5.---Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07359500		Station name: Ouachita River near Malvern, Ark.--Continued								
Latitude: 342310		Longitude: 925020		Drainage area: 1,585 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
OrgN + NH3 tot., mg/L	48	e 0.53	e 0.10	0.30	0.80	48	--	--	--	--
Nitrogen tot., mg/L	16	0.93	0.48	0.76	1.2	12	--	--	--	--
Phosphorus tot., mg/L	60	e 0.05	0.040	0.040	0.060	60	0.01	11.35	0.685	U
Orthop tot., mg/L	74	e 0.02	0.010	0.010	0.030	74	0.00	0.00	0.592	U
Station number: 07359580		Station name: Ouachita River near Donaldson, Ark.								
Latitude: 341416		Longitude: 925732		Drainage area: 1,732 square miles						
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, μ S/cm	62	110.79	86	102	125	0	--	--	--	--
pH, standard units	158	7.00	6.8	7.0	7.2	84	0.01	0.21	0.021	F
Turbidity, NTU	98	8.01	3.4	4.3	7.4	52	-0.22	-2.69	0.054	F
Oxygen dis., mg/L	163	8.92	7.6	8.6	10.0	85	0.03	0.39	0.293	F
BOD, 5-day, mg/L	156	1.87	1.1	1.6	2.4	84	0.04	2.05	0.090	F
Fecal coli., c/100 mL	127	114.94	15	33	140	70	-0.60	-0.52	0.486	F
Hardness tot., mg/L	91	28.24	22	26	32	25	0.14	0.49	0.616	F
Alkalinity tot., mg/L	20	17.50	16	18	20	0	--	--	--	--
Sulfate dis., mg/L	74	e 10.48	6.0	7.0	13	74	0.50	4.77	0.039	U
Chloride dis., mg/L	154	9.84	4.5	7.5	14	83	-0.74	-7.55	0.000	F
ROE, mg/L	117	61.20	47	57	74	0	--	--	--	--
TSS, mg/L	158	11.92	5	8	13	87	-0.53	-4.41	0.000	F
NO2 + NO3 tot., mg/L	103	e 0.30	0.17	0.21	0.36	103	-0.01	-2.54	0.249	U
NH3 tot., mg/L	131	e 0.13	0.030	0.060	0.170	131	0.00	0.00	0.101	U
Phosphorus tot., mg/L	85	e 0.05	0.030	0.050	0.060	85	0.00	0.00	0.314	U
Orthop tot., mg/L	97	e 0.02	0.010	0.010	0.030	97	0.00	0.00	0.595	U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07360200		Station name: Little Missouri River near Langley, Ark.			Drainage area: 68.4 square miles					
Latitude: 341841		Longitude: 935358								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	58	43.88	32	42	56	0	--	--	--	--
pH, standard units	144	7.12	6.9	7.1	7.4	76	0.02	0.23	0.065	U
Turbidity, NTU	91	4.55	1.8	2.5	5.0	43	0.20	4.44	0.057	F
Oxygen dis., mg/L	148	9.99	8.9	9.8	11.2	76	-0.03	-0.33	0.133	U
BOD, 5-day, mg/L	143	1.33	0.7	1.1	1.8	75	-0.11	-8.07	0.000	U
Fecal coli., c/100 mL	116	78.30	10	31	73	64	0.00	0.00	0.973	U
Hardness tot., mg/L	81	19.14	12	18	24	22	0.47	2.47	0.164	U
Alkalinity tot., mg/L	16	16.50	11	16	23	9	--	--	--	--
Sulfate dis., mg/L	73	e 3.55	2.0	3.0	5.0	73	0.00	0.00	0.777	U
Chloride dis., mg/L	139	2.97	2.0	3.0	4.0	74	-0.19	-6.46	0.000	U
ROE, mg/L	101	36.22	29	35	43	0	--	--	--	--
TSS, mg/L	144	2.82	1	2	3	77	-0.08	-2.95	0.035	U
NO ₂ + NO ₃ tot., mg/L	96	e 0.07	0.03	0.06	0.09	96	0.00	0.00	0.248	U
NH ₃ tot., mg/L	114	e 0.04	0.010	0.030	0.050	114	0.00	0.00	0.005	U
Phosphorus tot., mg/L	74	e 0.02	0.010	0.020	0.030	74	0.00	0.00	0.335	U
OrthoP tot., mg/L	91	e 0.02	e 0.010	0.010	0.020	91	0.00	0.00	0.264	U

Station number: 07361022		Station name: Prairie Creek at Murfreesboro, Ark.			Drainage area: Unknown					
Latitude: 340402		Longitude: 934058								
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	29	48.45	37	45	53	0	--	--	--	--
pH, standard units	66	6.88	6.6	6.9	7.2	0	--	--	--	--
Turbidity, NTU	66	9.35	4.0	6.0	15	0	--	--	--	--
Oxygen dis., mg/L	67	8.83	6.9	8.8	10.4	0	--	--	--	--
BOD, 5-day, mg/L	66	1.71	1.1	1.6	2.1	0	--	--	--	--
Fecal coli., c/100 mL	41	154.90	28	68	150	0	--	--	--	--
Hardness tot., mg/L	46	18.00	12	16	22	8	--	--	--	--
Sulfate dis., mg/L	61	e 5.13	4.0	5.0	7.0	61	0.00	0.00	0.873	U
Chloride dis., mg/L	66	4.67	3.0	4.5	6.0	0	--	--	--	--
ROE, mg/L	65	44.15	33	43	51	0	--	--	--	--
TSS, mg/L	65	4.78	2	4	6	0	--	--	--	--
NO ₂ + NO ₃ tot., mg/L	62	e 0.20	0.09	0.19	0.28	62	--	--	--	--
NH ₃ tot., mg/L	66	e 0.05	0.010	0.030	0.040	66	--	--	--	--

Station number: 07361022 Station name: Prairie Creek at Murfreesboro, Ark.

Latitude: 340402 Longitude: 934058 Drainage area: Unknown

Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, $\mu\text{S}/\text{cm}$	29	48.45	37	45	53	0	--	--	--	--
pH, standard units	66	6.88	6.6	6.9	7.2	0	--	--	--	--
Turbidity, NTU	66	9.35	4.0	6.0	15	0	--	--	--	--
Oxygen dis., mg/L	67	8.83	6.9	8.8	10.4	0	--	--	--	--
BOD, 5-day, mg/L	66	1.71	1.1	1.6	2.1	0	--	--	--	--
Fecal coli., c/100 mL	41	154.90	28	68	150	0	--	--	--	--
Hardness tot., mg/L	46	18.00	12	16	22	8	--	--	--	--
Sulfate dis., mg/L	61	e 5.13	4.0	5.0	7.0	61	0.00	0.873	U	--
Chloride dis., mg/L	66	4.67	3.0	4.5	6.0	0	--	--	--	--
ROE, mg/L	65	44.15	33	43	51	0	--	--	--	--
TSS, mg/L	65	4.78	2	4	6	0	--	--	--	--
NO2 + NO3 tot., mg/L	62	e 0.20	0.09	0.19	0.28	62	--	--	--	--
NH3 tot., mg/L	66	e 0.05	0.010	0.030	0.040	66	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07361022		Station name: Prairie Creek at Murfreesboro, Ark.--Continued								
Latitude: 340402		Longitude: 934058		Drainage area: Unknown						
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
OrgN tot., mg/L	31	0.40	0.18	0.36	0.56	0	--	--	--	--
OrgN + NH3 tot., mg/L	62	e 0.45	e 0.10	0.30	0.50	62	--	--	--	--
Nitrogen tot., mg/L	40	0.63	0.42	0.54	0.71	12	-0.02	-3.97	0.507	U
Phosphorus tot., mg/L	63	e 0.13	0.030	0.050	0.080	63	--	--	--	--
OrthoP tot., mg/L	66	e 0.08	0.010	0.020	0.040	66	--	--	--	--
Station number: 07361025		Station name: Prairie Creek near Murfreesboro, Ark.				Drainage area: 33.7 square miles				
Latitude: 340234		Longitude: 934102								
		Descriptive statistics			Best trend results					
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	31	88.13	50	73	123	0	--	--	--	--
pH, standard units	66	7.09	6.9	7.1	7.3	0	--	--	--	--
Turbidity, NTU	65	12.60	5.4	8.0	20	0	--	--	--	--
Oxygen dis., mg/L	67	8.80	7.3	8.8	10.5	0	--	--	--	--
BOD, 5-day, mg/L	62	2.48	1.6	2.3	3.3	0	--	--	--	--
Fecal coli., c/100 mL	42	132.10	16	50	180	0	--	--	--	--
Hardness tot., mg/L	46	29.54	20	26	40	8	--	--	--	--
Sulfate dis., mg/L	61	e 5.79	5.0	6.0	7.0	61	0.00	0.00	1.000	U
Chloride dis., mg/L	66	5.65	3.5	5.0	7.1	0	--	--	--	--
ROE, mg/L	66	67.70	45	62	80	0	--	--	--	--
TSS, mg/L	65	8.32	4	7	11	0	--	--	--	--
NO2 + NO3 tot., mg/L	62	e 0.24	0.12	0.26	0.34	62	--	--	--	--
NH3 tot., mg/L	66	e 0.09	0.010	0.040	0.120	66	--	--	--	--
OrgN tot., mg/L	41	0.56	0.19	0.46	0.79	0	--	--	--	--
OrgN + NH3 tot., mg/L	64	e 0.60	0.20	0.40	0.80	64	--	--	--	--
Nitrogen tot., mg/L	50	0.78	0.47	0.70	1.1	12	-0.04	-5.12	0.172	U
Phosphorus tot., mg/L	64	e 0.35	0.080	0.120	0.310	64	--	--	--	--
OrthoP tot., mg/L	66	e 0.18	0.050	0.080	0.180	66	--	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07361600		Station name: Little Missouri River near Boughton, Ark.		Drainage area: 1,079 square miles	
Latitude: 335241		Longitude: 931816			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	65	77.49	60	78	
pH, standard units	162	7.10	6.9	7.1	
Turbidity, NTU	101	23.88	10	15	
Oxygen dis., mg/L	168	9.04	7.8	8.8	
BOD, 5-day, mg/L	168	1.37	0.8	1.1	
Fecal coli., c/100 mL	136	151.03	20	48	
Hardness tot., mg/L	96	29.96	21	28	
Alkalinity tot., mg/L	19	18.26	15	18	
Sulfate dis., mg/L	71	10.13	7.0	9.0	
Chloride dis., mg/L	164	5.01	4.0	5.0	
ROE, mg/L	120	63.97	49	62	
TSS, mg/L	169	24.48	9	14	
NO ₂ + NO ₃ tot., mg/L	115	e 0.18	0.13	0.18	
NH ₃ tot., mg/L	136	e 0.08	0.040	0.060	
Phosphorus tot., mg/L	83	e 0.07	0.040	0.050	
OrthoP tot., mg/L	100	e 0.04	0.010	0.030	
		Best trend results			
		Units per year	N	75th percentile	Trend
		0.01	0	89	
		0.16	82	7.3	F
		0.02	48	25	F
		-0.26	82	10.2	F
		-3.95	81	1.8	F
		-1.46	68	160	F
		2.37	23	36	F
		0.71	0	23	F
		0.00	71	11	U
		-4.75	79	6.0	F
		-1.60	60	75	F
		-2.28	81	28	F
		-2.01	115	0.23	U
		-2.61	136	0.090	U
		3.55	83	0.080	U
		15.06	100	0.050	U

Station number: 07362000		Station name: Ouachita River at Camden, Ark.		Drainage area: 5,357 square miles	
Latitude: 333547		Longitude: 924905			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend
		Mean	25th percentile	50th percentile (median)	
Conductance, $\mu\text{S}/\text{cm}$	114	88.42	73	86	
pH, standard units	113	7.11	6.9	7.1	
Turbidity, NTU	45	14.18	6.9	14	
Oxygen dis., mg/L	96	8.80	7.3	8.5	
Fecal coli., c/100 mL*	90	70.72	10	22	
Fecal strp., c/100 mL	74	123.01	18	38	
Hardness tot., mg/L	111	25.20	21	24	
Calcium dis., mg/L	111	7.59	6.2	7.2	
Magnesium dis., mg/L	111	1.52	1.4	1.5	
Sodium dis., mg/L	109	5.70	4.1	5.5	
Potassium dis., mg/L	111	1.52	1.2	1.5	
Alkalinity tot., mg/L	90	16.16	14	16	
Sulfate dis., mg/L	27	e 8.89	6.6	9.0	
Chloride dis., mg/L	113	8.84	5.5	7.8	
ROE, mg/L	80	57.70	47	55	
		Best trend results			
		Units per year	N	75th percentile	Trend
		-0.97	60	99	F
		0.01	60	7.4	F
		-0.65	35	17	F
		0.20	44	10.3	F
		-1.66	50	59	F
		2.05	47	94	F
		-0.33	59	29	F
		-1.31	59	8.7	F
		-1.75	59	1.7	F
		-0.70	59	6.7	F
		-1.00	59	1.7	F
		-1.32	59	18	F
		0.28	0	10	U
		-3.28	59	12	F
		-0.61	56	67	F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07362000		Station name: Ouachita River at Camden, Ark.--Continued		Longitude: 924905		Drainage area: 5,357 square miles		Latitude: 333547	
Descriptive statistics					Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
NO2 dis., mg/L	15	e 0.01	e 0.010	e 0.010	0.010	15	--	--	--
NO2 + NO3 tot., mg/L	48	e 0.21	0.16	0.24	0.37	48	--	--	--
NO2 + NO3 dis., mg/L	56	e 0.22	0.13	0.20	0.27	56	0.00	-1.11	0.576 U
OrgN tot., mg/L	58	e 0.56	0.33	0.47	0.67	29	0.00	0.46	0.670 F
OrgN + NH3 tot., mg/L	32	e 0.53	0.30	0.40	0.60	32	0.00	0.00	0.621 U
Phosphorus tot., mg/L	34	e 0.04	0.030	0.040	0.060	34	0.00	0.00	0.782 U
Phosphorus dis., mg/L	34	e 0.02	0.010	0.020	0.030	34	0.00	0.00	1.000 U
OrthoP dis., mg/L	33	e 0.01	e 0.010	0.010	0.020	33	0.00	0.00	0.846 U
Aluminum dis., µg/L	26	e 45.30	20	40	70	26	3.33	7.36	0.237 U
Barium dis., µg/L	38	33.18	27	30	33	37	-0.21	-0.63	0.457 F
Iron dis., µg/L	59	e 220.71	120	160	260	59	5.00	2.27	0.164 U
Manganese dis., µg/L	58	e 66.87	40	60	92	58	-1.50	-2.24	0.231 U
Nickel dis., µg/L	37	e 2.23	e 1	2	3	37	0.00	0.00	0.670 U
Strontium dis., µ	26	48.92	44	47	54	13	-0.19	-0.39	0.907 F
Sediment susp., mg/L	102	40.60	20	29	38	58	-1.19	-2.93	0.005 F
Sed. susp., %f.t. 62µm	103	79.74	75	85	92	58	-0.45	-0.56	0.040 F

Station number: 07362065		Station name: Ouachita River below Camden, Ark.		Longitude: 924511		Drainage area: 5,676 square miles		Latitude: 332903	
Descriptive statistics					Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	50	7.00	6.9	7.0	7.2	0	--	--	--
Turbidity, NTU	47	25.82	10	20	30	0	--	--	--
Oxygen dis., mg/L	48	8.39	7.5	8.3	8.8	0	--	--	--
BOD, 5-day, mg/L	52	1.56	1.0	1.4	2.1	0	--	--	--
Fecal coli., c/100 mL	38	182.82	19	77	170	0	--	--	--
Hardness tot., mg/L	37	25.51	22	24	28	8	--	--	--
Sulfate dis., mg/L	46	e 10.50	7.0	9.0	14	46	0.77	7.30	0.585 U
Chloride dis., mg/L	50	8.97	5.4	7.7	11	0	--	--	--
ROE, mg/L	42	73.83	63	71	81	0	--	--	--
TSS, mg/L	47	31.32	15	23	34	0	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07362065		Station name: Ouachita River below Camden, Ark.--Continued							
Latitude: 332903		Longitude: 924511		Drainage area: 5,676 square miles					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
NO2 + NO3 tot., mg/L	49	e 0.21	0.12	0.16	0.24	49	--	--	--
NH3 tot., mg/L	48	e 0.08	0.030	0.050	0.080	48	--	--	--
OrgN tot., mg/L	11	0.54	0.16	0.53	0.93	8	--	--	--
OrgN + NH3 tot., mg/L	22	e 0.56	0.10	0.40	1.0	22	--	--	--
Nitrogen tot., mg/L	17	0.96	0.65	0.89	1.2	12	--	--	--
Phosphorus tot., mg/L	48	e 0.08	0.060	0.080	0.100	48	--	--	--
OrthoP tot., mg/L	52	e 0.03	0.010	0.030	0.040	52	--	--	--
Station number: 07362110		Station name: Smackover Creek north of Smackover, Ark.							
Latitude: 332246		Longitude: 924309		Drainage area: 411 square miles					
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	107	892.45	464	696	1,260	0	--	--	--
pH, standard units	165	6.10	5.8	6.1	6.4	88	0.01	0.20	0.307 F
Turbidity, NTU	96	16.66	9.0	15	25	54	-0.05	-0.30	0.733 F
Oxygen dis., mg/L	160	7.10	5.4	6.8	8.8	87	0.01	0.08	0.849 F
BOD, 5-day, mg/L	158	1.62	0.9	1.2	2.0	87	0.00	0.03	1.000 F
Fecal coli., c/100 mL	135	121.09	13	40	110	74	-0.42	-0.34	0.893 F
Hardness tot., mg/L	95	107.04	54	94	140	25	0.09	0.09	0.964 F
Alkalinity tot., mg/L	21	e 8.29	5	7	12	0	--	--	--
Sulfate dis., mg/L	72	e 6.99	5.0	7.0	9.0	72	-0.17	-2.38	0.562 U
Chloride dis., mg/L	161	292.32	130	220	400	86	-7.94	-2.72	0.009 F
ROE, mg/L	112	579.71	279	474	788	65	-18.75	-3.23	0.004 F
TSS, mg/L	162	19.17	10	16	23	89	-0.51	-2.67	0.020 F
NO2 + NO3 tot., mg/L	111	e 0.09	0.04	0.06	0.10	111	0.00	0.00	0.875 U
NH3 tot., mg/L	130	e 0.09	0.040	0.070	0.110	130	0.00	0.00	0.615 U
OrgN tot., mg/L	68	0.78	0.37	0.65	1.1	0	--	--	--
OrgN + NH3 tot., mg/L	47	e 0.74	0.20	0.60	0.90	47	--	--	--
Nitrogen tot., mg/L	23	0.93	0.53	0.81	1.1	17	--	--	--
Phosphorus tot., mg/L	84	e 0.07	0.040	0.060	0.080	84	0.00	6.82	0.006 U
OrthoP tot., mg/L	103	e 0.02	0.010	0.010	0.030	103	0.00	0.00	0.233 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07362550		Station name: Moro Creek near Banks, Ark.		Longitude: 921900		Drainage area: 385 square miles			
Latitude: 333238									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	67	68.30	48	62	86	0	--	--	--
pH, standard units	154	6.48	6.2	6.5	6.7	65	0.00	-0.06	0.410 F
Turbidity, NTU	90	18.79	10	15	25	38	0.51	2.74	0.300 F
Oxygen dis., mg/L	154	6.94	5.3	6.8	8.6	67	-0.09	-1.24	0.034 F
BOD, 5-day, mg/L	143	1.81	1.1	1.5	2.3	41	-0.05	-2.59	0.227 F
Fecal coli., c/100 mL	127	168.57	44	88	170	72	4.00	2.37	0.168 U
Hardness tot., mg/L	92	22.28	16	20	26	23	0.13	0.60	0.837 F
Calcium dis., mg/L	15	4.25	3.0	4.0	5.0	0	--	--	--
Magnesium dis., mg/L	15	1.93	1.0	1.1	2.0	15	--	--	--
Alkalinity tot., mg/L	23	14.04	7	11	19	0	--	--	--
Sulfate dis., mg/L	63	e 7.87	6.0	7.0	10	63	0.00	0.00	0.734 U
Chloride dis., mg/L	151	8.12	6.0	7.5	10	48	-0.27	-3.27	0.006 F
ROE, mg/L	105	83.67	72	80	93	61	-1.07	-1.28	0.109 U
TSS, mg/L	149	15.51	8	11	19	66	-0.08	-0.53	0.708 F
NO ₂ + NO ₃ tot., mg/L	108	e 0.10	0.02	0.06	0.15	108	0.00	0.00	0.357 U
NH ₃ tot., mg/L	125	e 0.07	0.030	0.060	0.090	125	0.00	0.00	0.054 U
Phosphorus tot., mg/L	75	e 0.09	0.060	0.090	0.120	75	0.00	0.00	0.544 U
OrthoP tot., mg/L	89	e 0.04	0.020	0.040	0.050	89	0.00	0.00	0.531 U
Sediment susp., mg/L	12	49.25	12	17	22	11	--	--	--

Station number: 07363002		Station name: Saline River west of Benton, Ark.		Longitude: 923655		Drainage area: 550 square miles			
Latitude: 343346									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend p code
Conductance, $\mu\text{S}/\text{cm}$	90	115.31	96	119	133	0	--	--	--
pH, standard units	166	7.38	7.2	7.4	7.6	88	-0.02	-0.20	0.023 F
Turbidity, NTU	100	8.81	4.1	5.9	9.8	54	0.01	0.14	0.898 F
Oxygen dis., mg/L	166	8.95	7.4	8.5	10.6	88	0.04	0.42	0.091 F
BOD, 5-day, mg/L	165	1.12	0.7	1.0	1.4	87	-0.03	-2.76	0.052 F
Fecal coli., c/100 mL	140	172.35	28	65	180	76	-3.14	-1.82	0.104 F
Hardness tot., mg/L	91	55.99	50	54	64	23	-0.16	-0.29	0.758 F
Alkalinity tot., mg/L	19	51.32	43	51	58	0	--	--	--
Sulfate dis., mg/L	74	e 6.95	5.0	7.0	8.0	74	0.00	0.00	0.536 U
Chloride dis., mg/L	159	4.10	3.0	4.0	4.5	85	-0.18	-4.48	0.000 F
ROE, mg/L	117	77.11	66	79	85	22	-1.55	-2.01	0.054 F

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07363002		Station name: Saline River west of Benton, Ark.--Continued		Drainage area: 550 square miles	
Latitude: 343346		Longitude: 923655			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
TSS, mg/L	161	9.90	5	8	
NO2 + NO3 tot., mg/L	109	e 0.10	0.04	0.08	-3.31 0.000 F
NH3 tot., mg/L	131	e 0.05	0.020	0.040	0.00 0.146 U
OrgN tot., mg/L	34	0.40	0.14	0.25	0.00 0.021 U
OrgN + NH3 tot., mg/L	63	e 0.37	e 0.10	0.20	-- --
Nitrogen tot., mg/L	37	0.57	0.31	0.45	-0.01 11 -1.57 1.000 F
Phosphorus tot., mg/L	80	e 0.04	0.020	0.030	10.34 0.283 U
OrthoP tot., mg/L	103	e 0.02	e 0.010	0.010	0.00 0.393 U
		Best trend results			Trend code
		Units per year	Percent per year	Percent per year	
		N			
		89	-0.33	-3.31	0.000 F
		109	0.00	0.00	0.146 U
		131	0.00	0.00	0.021 U
		0	--	--	--
		63	--	--	--
		11	-0.01	-1.57	1.000 F
		80	0.00	10.34	0.283 U
		103	0.00	0.00	0.393 U

Station number: 07363054		Station name: Saline River near Shaw, Ark.		Drainage area: Unknown	
Latitude: 342956		Longitude: 923346			
Water-quality property or constituent	Sample size	Descriptive statistics			Trend code
		Mean	25th percentile	50th percentile (median)	
Conductance, µS/cm	28	175.00	114	145	
pH, standard units	62	7.33	7.2	7.4	
Turbidity, NTU	63	12.31	6.0	9.0	
Oxygen dis., mg/L	64	8.71	6.9	8.7	
BOD, 5-day, mg/L	66	1.17	0.8	1.0	
Fecal coli., c/100 mL	44	131.73	33	62	
Hardness tot., mg/L	45	52.62	46	52	
Sulfate dis., mg/L	62	e 25.61	8.0	14	
Chloride dis., mg/L	65	3.94	3.0	3.5	
ROE, mg/L	58	91.09	73	85	
TSS, mg/L	65	12.31	6	9	
NO2 + NO3 tot., mg/L	59	e 0.20	0.11	0.17	
NH3 tot., mg/L	62	e 0.07	0.040	0.070	
OrgN tot., mg/L	38	0.37	0.18	0.29	
OrgN + NH3 tot., mg/L	59	e 0.36	e 0.10	0.30	
Nitrogen tot., mg/L	39	0.66	0.44	0.63	
Phosphorus tot., mg/L	58	e 0.11	0.060	0.090	
OrthoP tot., mg/L	65	e 0.07	0.020	0.040	
		Best trend results			Trend code
		Units per year	Percent per year	Percent per year	
		N			
		0	--	--	--
		0	--	--	--
		0	--	--	--
		0	--	--	--
		0	--	--	--
		8	--	--	--
		62	3.00	11.71	0.056 U
		0	--	--	--
		0	--	--	--
		0	--	--	--
		59	--	--	--
		62	--	--	--
		0	--	--	--
		59	--	--	--
		29	-0.04	-6.44	0.365 F
		58	--	--	--
		65	--	--	--

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07363200		Station name: Saline River near Sheridan, Ark.		Drainage area: 1,123 square miles					
Latitude: 340656		Longitude: 922421							
		Descriptive statistics			Best trend results				
Water-quality property or constituent	Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	67	7.22	6.9	7.2	7.5	0	--	--	--
Turbidity, NTU	67	15.76	8.8	15	20	0	--	--	--
Oxygen dis., mg/L	68	8.07	6.8	7.8	9.2	0	--	--	--
BOD, 5-day, mg/L	66	1.27	0.9	1.1	1.5	0	--	--	--
Fecal coli., c/100 mL	43	78.58	28	64	100	0	--	--	--
Hardness tot., mg/L	46	39.52	34	38	47	8	--	--	--
Sulfate dis., mg/L	63	e 17.24	9.0	13	22	63	1.50	8.70	0.073 U
Chloride dis., mg/L	67	4.29	3.5	4.0	5.0	0	--	--	--
ROE, mg/L	61	85.49	73	82	90	0	--	--	--
TSS, mg/L	66	15.71	8	13	21	0	--	--	--
NO2 + NO3 tot., mg/L	64	e 0.12	0.06	0.11	0.15	64	--	--	--
NH3 tot., mg/L	64	e 0.05	0.030	0.050	0.070	64	--	--	--
Phosphorus tot., mg/L	61	e 0.07	0.060	0.070	0.080	61	--	--	--
Orthop tot., mg/L	66	e 0.05	0.020	0.030	0.050	66	--	--	--

Station number: 07363270		Station name: Hurricane Creek near Sardis, Ark.			Drainage area: 66 square miles				
Latitude: 343040		Longitude: 922454							
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, μ S/cm	98	609.86	321	527	828	0	--	--	--
pH, standard units	163	7.14	6.7	7.4	7.8	87	0.13	1.85	0.000 U
Turbidity, NTU	100	15.97	3.5	8.5	19	52	-0.14	-0.91	0.823 F
Oxygen dis., mg/L	163	8.72	7.5	8.3	10.1	87	-0.08	-0.92	0.000 U
BOD, 5-day, mg/L	158	1.27	0.7	1.2	1.8	87	0.01	1.05	0.338 U
Fecal coli., c/100 mL	134	192.44	12	54	120	69	1.72	0.89	0.496 F
Hardness tot., mg/L	88	160.64	65	110	230	24	2.00	1.25	0.630 U
Alkalinity tot., mg/L	19	25.39	13	21	34	0	--	--	--
Sulfate dis., mg/L	68	e 276.46	110	230	400	68	5.00	1.81	0.832 U
Chloride dis., mg/L	154	7.58	5.5	6.5	8.1	83	0.06	0.82	0.168 U
ROE, mg/L	113	519.28	253	469	726	62	16.86	3.25	0.011 F
TSS, mg/L	157	24.85	7	13	23	87	-1.00	-4.02	0.000 U
NO2 + NO3 tot., mg/L	108	e 0.24	0.15	0.20	0.30	108	-0.01	-2.60	0.083 U
NH3 tot., mg/L	129	e 0.11	0.050	0.100	0.150	129	0.00	0.00	0.520 U
OrgN tot., mg/L	73	0.64	0.19	0.42	0.96	0	--	--	--
OrgN + NH3 tot., mg/L	52	e 0.57	0.20	0.30	0.70	52	--	--	--
Nitrogen tot., mg/L	25	0.91	0.45	0.64	1.0	8	--	--	--
Phosphorus tot., mg/L	78	e 0.05	0.020	0.050	0.070	78	0.00	0.00	0.711 U
Orthop tot., mg/L	101	e 0.02	e 0.010	0.010	0.030	101	0.00	0.00	0.169 U

Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07363465		Station name: Big Creek near Pansy, Ark.		Longitude: 920458		Drainage area: 153 square miles			
Latitude: 334947									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
pH, standard units	67	6.38	6.0	6.4	6.7	0	--	--	--
Turbidity, NTU	68	24.63	15	20	30	0	--	--	--
Oxygen dis., mg/L	68	6.65	4.1	7.1	8.7	0	--	--	--
BOD, 5-day, mg/L	61	1.81	0.9	1.3	2.0	0	--	--	--
Fecal coli., c/100 mL	42	133.29	18	38	160	0	--	--	--
Hardness tot., mg/L	57	27.86	22	28	32	0	--	--	--
Sulfate dis., mg/L	63	e 19.71	12	18	29	63	-0.37	-1.86	0.400 U
Chloride dis., mg/L	67	5.08	3.5	5.0	6.0	0	--	--	--
ROE, mg/L	61	87.57	76	87	101	0	--	--	--
TSS, mg/L	66	20.59	11	17	26	0	--	--	--
NO2 + NO3 tot., mg/L	64	e 0.06	0.03	0.06	0.09	64	--	--	--
NH3 tot., mg/L	63	e 0.06	0.030	0.050	0.080	63	--	--	--
Phosphorus tot., mg/L	61	e 0.09	0.050	0.080	0.110	61	--	--	--
OrthoP tot., mg/L	66	e 0.03	0.010	0.030	0.040	66	--	--	--

Station number: 07364012		Station name: Saline River near Fountain Hill, Ark.		Longitude: 915735		Drainage area: 2,642 square miles			
Latitude: 332242									
Water-quality property or constituent	Sample size	Descriptive statistics			Best trend results				
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	Trend code
Conductance, µS/cm	64	157.13	83	113	160	0	--	--	--
pH, standard units	157	7.00	6.7	7.0	7.3	85	0.01	0.17	0.049 F
Turbidity, NTU	96	15.25	7.0	15	20	50	-0.85	-5.58	0.014 F
Oxygen dis., mg/L	152	8.22	6.8	8.2	9.5	57	-0.05	-0.66	0.339 F
BOD, 5-day, mg/L	160	1.69	1.1	1.5	2.1	86	-0.01	-0.34	0.651 F
Fecal coli., c/100 mL	140	87.85	12	30	85	72	-2.24	-2.56	0.062 F
Hardness tot., mg/L	89	37.57	29	34	42	23	-0.75	-2.00	0.024 F
Alkalinity tot., mg/L	17	30.47	17	24	29	0	--	--	--
Sulfate dis., mg/L	69	e 20.09	13	19	25	69	-1.88	-9.33	0.130 U
Chloride dis., mg/L	144	10.94	5.0	6.0	7.5	55	-0.20	-1.80	0.000 F
ROE, mg/L	112	92.72	78	93	105	22	-3.68	-3.97	0.032 F
TSS, mg/L	160	16.34	8	13	18	86	-0.46	-2.83	0.007 F
NO2 + NO3 tot., mg/L	109	e 0.13	0.05	0.09	0.17	109	0.00	-3.09	0.004 U
NH3 tot., mg/L	132	e 0.06	0.030	0.050	0.080	132	0.00	0.00	0.054 U
Phosphorus tot., mg/L	77	e 0.07	0.050	0.070	0.090	77	0.00	4.04	0.371 U
OrthoP tot., mg/L	95	e 0.03	0.010	0.020	0.040	95	0.00	0.00	0.263 U

Table 5. --Statistical summary and trend results of selected water-quality data for the 1975-89 water years or alternate period--Continued

Station number: 07364115		Station name: Bayou Bartholomew near Ladd, Ark.				Longitude: 915406		Drainage area: Unknown	
Latitude: 340624									
Water-quality property or constituent		Descriptive statistics				Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend code
Conductance, $\mu\text{S}/\text{cm}$	100.65	74	105	133	0	--	--	--	--
pH, standard units	6.95	6.7	6.9	7.2	68	0.00	0.07	0.468	F
Turbidity, NTU	36.51	20	30	45	54	-1.25	-3.42	0.141	U
Oxygen dis., mg/L	6.43	4.6	6.1	7.9	68	-0.07	-1.11	0.130	F
BOD, 5-day, mg/L	2.43	1.8	2.4	3.0	67	-0.03	-1.40	0.091	F
Fecal coli., c/100 mL	250.88	38	88	270	55	-5.72	-2.28	0.027	F
Hardness tot., mg/L	37.86	25	34	44	19	-0.31	-0.83	0.342	F
Alkalinity tot., mg/L	34.11	24	35	41	0	--	--	--	--
Sulfate dis., mg/L	e 10.93	8.0	11	13	73	-0.23	-2.06	0.423	U
Chloride dis., mg/L	8.36	5.5	7.5	10	64	-0.22	-2.64	0.002	F
ROE, mg/L	104.76	85	96	115	62	-1.39	-1.32	0.037	U
TSS, mg/L	37.80	21	30	44	68	-1.08	-2.86	0.011	F
NO ₂ + NO ₃ tot., mg/L	e 0.17	0.05	0.11	0.20	113	0.00	0.00	0.938	U
NH ₃ tot., mg/L	e 0.11	0.050	0.090	0.140	132	0.00	0.00	0.469	U
Phosphorus tot., mg/L	e 0.23	0.160	0.220	0.280	81	-0.01	-6.51	0.219	U
OrthoP tot., mg/L	e 0.12	0.070	0.120	0.180	102	0.00	1.33	0.628	U

Station number: 07364600		Station name: Bayou de Loutre near El Dorado, Ark.				Longitude: 923532		Drainage area: 78.2 square miles	
Latitude: 330555									
Water-quality property or constituent		Descriptive statistics				Best trend results			
Sample size	Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p code	Trend code
Conductance, $\mu\text{S}/\text{cm}$	3,299.36	1,650	2,980	4,340	0	--	--	--	--
pH, standard units	7.07	6.8	7.1	7.4	64	-0.03	-0.49	0.001	F
Turbidity, NTU	13.48	6.0	10	20	30	0.17	1.27	0.556	F
Oxygen dis., mg/L	5.94	3.6	5.4	8.0	43	-0.03	-0.56	0.523	F
BOD, 5-day, mg/L	2.70	1.5	2.2	3.4	61	-0.19	-7.16	0.000	F
Fecal coli., c/100 mL	355.35	100	180	330	76	10.00	2.81	0.017	U
Hardness tot., mg/L	345.98	160	290	470	35	0.63	0.18	0.958	F
Alkalinity tot., mg/L	70.90	30	61	107	0	--	--	--	--
Sulfate dis., mg/L	e 72.44	29	62	97	66	-4.71	-6.50	0.393	U
Chloride dis., mg/L	997.20	360	830	1,500	82	-51.43	-5.16	0.002	U
ROE, mg/L	1,809.61	789	1,340	2,550	16	-83.91	-4.64	0.392	F
TSS, mg/L	22.64	12	18	30	66	-0.73	-3.23	0.011	F
NO₂ + NO₃ tot., mg/L	e 0.77	0.31	0.66	0.95	102	-0.03	-4.48	0.282	U
NH₃ tot., mg/L	e 0.56	0.120	0.230	0.430	131	-0.03	-5.69	0.000	U
Phosphorus tot., mg/L	e 0.15	0.090	0.130	0.210	75	0.00	2.74	0.152	U
OrthoP tot., mg/L	e 0.07	0.040	0.060	0.090	95	0.00	1.16	0.281	U

**Table 5.--Statistical summary and trend results of selected water-quality data for the 1975-89 water years
or alternate period--Continued**

Station number: 07365800		Station name: Cornie Bayou near Three Creeks, Ark.		Drainage area: 180 square miles						
Latitude: 330221		Longitude: 925615								
Water-quality property or constituent		Descriptive statistics			Best trend results					
		Mean	25th percentile	50th percentile (median)	75th percentile	N	Units per year	Percent per year	p	Trend code
Conductance, µS/cm	14	333.71	227	288	442	8	--	--	--	--
pH, standard units	110	6.17	5.7	6.2	6.5	0	--	--	--	--
Turbidity, NTU	96	15.00	7.0	15	20	53	0.00	0.00	0.562	U
Oxygen dis., mg/L	102	5.87	3.9	5.8	8.0	0	--	--	--	--
BOD, 5-day, mg/L	103	1.61	0.9	1.4	2.1	0	--	--	--	--
Fecal coli., c/100 mL	90	158.89	20	62	170	0	--	--	--	--
Hardness tot., mg/L	81	80.20	50	76	96	0	--	--	--	--
Sulfate dis., mg/L	71	e 8.17	5.0	9.0	10	71	0.20	2.45	0.270	U
Chloride dis., mg/L	112	115.74	65	100	160	0	--	--	--	--
ROE, mg/L	101	289.38	181	257	344	0	--	--	--	--
TSS, mg/L	108	12.70	7	11	16	0	--	--	--	--
NO2 + NO3 tot., mg/L	97	e 0.08	0.04	0.06	0.11	97	--	--	--	--
NH3 tot., mg/L	107	e 0.09	0.040	0.060	0.110	107	0.00	0.00	0.804	U
Phosphorus tot., mg/L	81	e 0.07	0.040	0.060	0.080	81	0.00	3.77	0.210	U
Orthoph tot., mg/L	99	e 0.03	0.010	0.020	0.040	99	0.00	0.00	0.096	U