



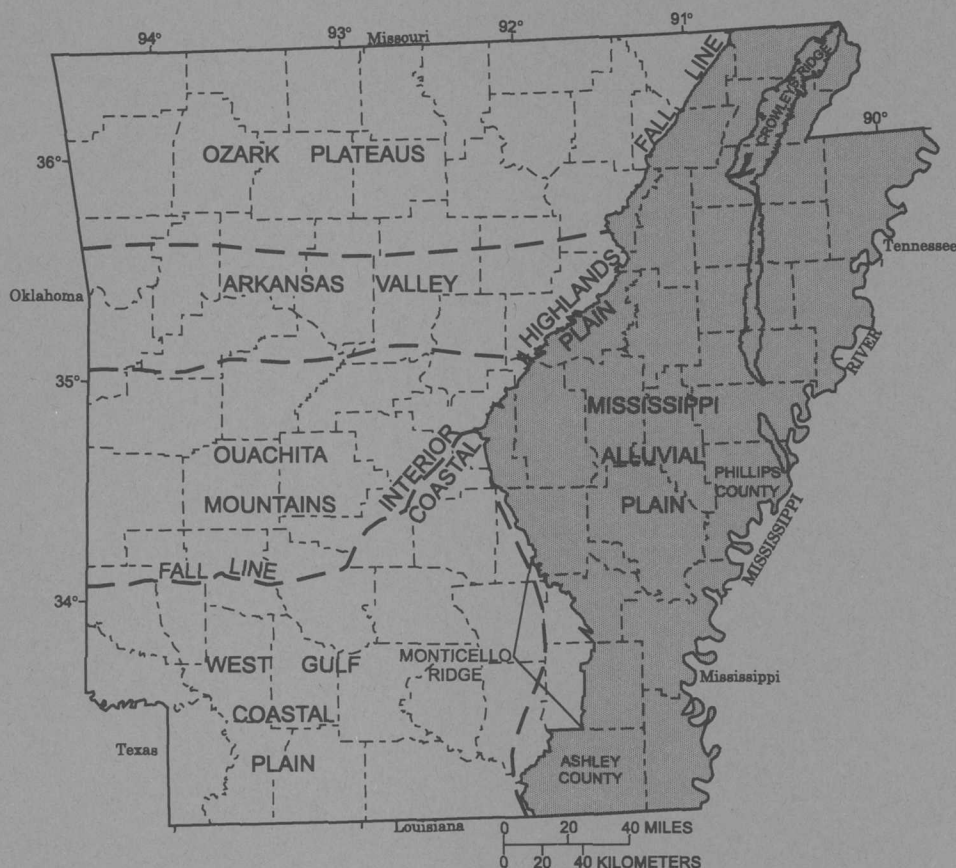
Rec'd  
6/3/99

Prepared in cooperation with the

**Arkansas Soil and Water Conservation Commission** and the  
**Arkansas Geological Commission**

## **STATUS OF WATER LEVELS AND SELECTED WATER- QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 1998**

**Water-Resources Investigations Report 99-4035**



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



# **STATUS OF WATER LEVELS AND SELECTED WATER-QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 1998**

*by Robert L. Joseph*

---

**U.S. GEOLOGICAL SURVEY**

**Water-Resources Investigations Report 99-4035**

Prepared in cooperation with the  
**Arkansas Soil and Water Conservation Commission**  
and the **Arkansas Geological Commission**

Little Rock, Arkansas  
1999

**U.S. DEPARTMENT OF THE INTERIOR**  
**BRUCE BABBITT, Secretary**

**U.S. GEOLOGICAL SURVEY**  
**Charles G. Groat, Director**

---

For additional information  
write to:

District Chief  
U.S. Geological Survey, WRD  
401 Hardin Road  
Little Rock, Arkansas 72211

Copies of this report can be  
purchased from:

U.S. Geological Survey  
Branch of Information Services  
Box 25286  
Denver Federal Center  
Denver, Colorado 80225

# CONTENTS

Abstract.....	1
Introduction .....	1
Aquifer Description .....	3
Water Levels .....	5
Potentiometric Surface .....	5
Long-Term Water-Level Changes .....	5
Comparison of Water-Level Changes in Cones of Depression from 1994 to 1998 .....	5
Long-Term Water-Level Changes in Cones of Depression .....	20
Specific Conductance and Dissolved Chloride .....	20
Summary.....	20
References .....	21
Appendix 1. Information pertaining to measured wells completed in the alluvial aquifer, 1998 .....	25
Appendix 2. Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998 ....	49

## PLATES

Plate 1. Map showing potentiometric surface of the alluvial aquifer, spring 1998.....	In pocket
2. Map showing specific conductance of the alluvial aquifer, summer 1998 .....	In pocket

## ILLUSTRATIONS

Figure 1. Map showing location of study area .....	2
2. Diagram showing well-numbering system .....	4
3. Water-level hydrographs for selected wells in the alluvial aquifer.....	6
4. Map showing comparison of Arkansas County cone of depression, 1994 to 1998.....	17
5. Map showing comparison of Poinsett County cone of depression, 1994 to 1998.....	18
6. Map showing comparison of St. Francis County cone of depression, 1994 to 1998.....	19



# STATUS OF WATER LEVELS AND SELECTED WATER-QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 1998

By Robert L. Joseph

## ABSTRACT

During the spring of 1998, water levels were measured in 656 wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas. Water samples were collected during the summer of 1998 from about 140 wells completed in the alluvial aquifer and measured for specific conductance, and samples from 119 wells were analyzed for dissolved chloride concentrations.

The regional direction of ground-water flow in the alluvial aquifer is generally to the south and east except where water levels are affected by ground-water withdrawals. A large depression in the potentiometric surface is located in Arkansas, Lonoke, and Prairie Counties. Shallower depressions are located in Poinsett, Lee, St. Francis, and Woodruff Counties. Potentiometric depressions in the alluvial aquifer generally are a result of long-term pumping and probably are affected by variations in aquifer characteristics. Water-level data from 22 wells with 26 or more years of record indicate long-term water levels in the alluvial aquifer declined an average of about 0.38 foot per year.

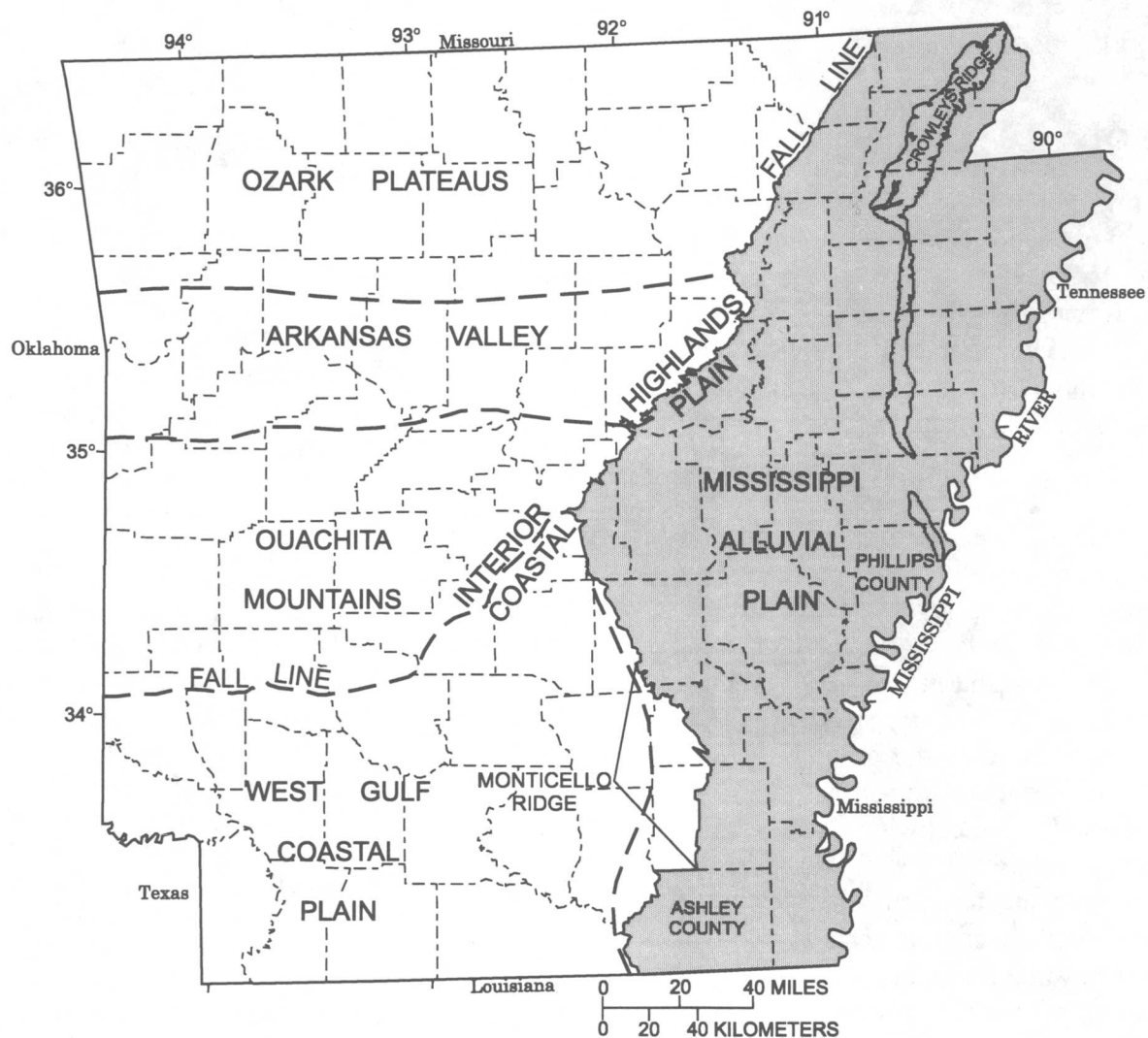
Specific conductance measurements made on water samples collected during the study ranged from 199 microsiemens per centimeter at 25 degrees Celsius at a well in Drew County to 3,800 microsiemens per centimeter at 25 degrees Celsius at a well in Chicot County. Dissolved chloride concentrations ranged from 2.1 milligrams per liter at a well in Mississippi and St. Francis Counties to 820 milligrams per liter at a well in Chicot County. The high chloride concentrations

occurred in the same area of Chicot County as the high specific conductance.

## INTRODUCTION

The U.S. Geological Survey (USGS) conducted studies of water levels and selected water-quality conditions in the alluvial aquifer in eastern Arkansas during 1998. The Mississippi Alluvial Plain (fig. 1) encompasses an area of approximately 32,000 square miles and includes parts of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. Approximately 54 percent of the Mississippi Alluvial Plain covers the eastern one-third of Arkansas. The Mississippi River Valley alluvial aquifer (herein referred to as the alluvial aquifer) underlies the Mississippi Alluvial Plain in eastern Arkansas. Within Arkansas, the alluvial aquifer extends from the Missouri State line south to the Louisiana State line, and from the Mississippi River west to the Fall Line (the physiographic boundary between the Coastal Plain and the Interior Highlands), the Monticello Ridge (a topographic feature in southeastern Arkansas), and near the Ashley County line (fig. 1).

Since 1900, the land use in eastern Arkansas has become more agricultural, with production consisting predominately of rice, soybeans, cotton, and in recent years aquaculture, all of which are highly dependent on the availability of water. Eastern Arkansas receives sufficient precipitation to support these crops, receiving an average 46 to 54 inches of precipitation annually (Freiwald, 1984). However, during a critical portion of the growing season from late spring through early summer most precipitation in eastern Arkansas falls as rain from widely scattered thunderstorms. Farmers are increasingly relying on water from the alluvial aquifer for agriculture and aquaculture irrigation. In 1985,



## LOCATION OF STUDY AREA

**Figure 1.** Location of study area.



withdrawals from the alluvial aquifer in Arkansas totaled about 3,500 million gallons of water per day (Mgal/d) (Baker, 1991), withdrawals increased to 4,300 Mgal/d in 1990 (Holland, 1993). In 1995, withdrawals from the alluvial aquifer in Arkansas totaled about 5,062 Mgal/d (T.W. Holland, U.S. Geological Survey, written commun., 1999); the 1995 withdrawal rate previously reported in Stanton and others (1998) is in error.

The U.S. Geological Survey, in cooperation with the Arkansas Soil and Water Conservation Commission (ASWCC) and the Arkansas Geological Commission, conducted a study of water levels and selected water-quality conditions in the alluvial aquifer in eastern Arkansas. The U.S. Department of Agriculture-Natural Resources Conservation Service (NRCS) also measured water levels in wells completed in the alluvial aquifer and provided these data to the ASWCC. These data were made available to the USGS and were incorporated into the database used to develop a potentiometric-surface map of the alluvial aquifer for the spring of 1998. In the spring of 1998, a total of 656 water-level measurements were collected, 285 by the USGS and 371 by the NRCS.

The USGS collected and analyzed water samples for specific conductance from about 140 wells and dissolved chloride concentrations from 119 wells completed in the alluvial aquifer during the summer of 1998. These measurements provided information for the creation of a supplemental database of selected water-quality data for the alluvial aquifer. This report presents the results of these studies with maps, long-term hydrographs, and data tables.

The well-numbering system used in this report is based upon the location of the wells according to the Federal land survey used in Arkansas. The component parts of a well number are the township number; the range number; the section number; three letters which indicate, respectively, the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section in which the well is located; and a sequence number of the well in the quarter-quarter-quarter section. The letters are assigned counterclockwise, beginning with "A" in the northeast quarter or quarter-quarter or quarter-quarter-quarter section in which the well is located. For example, well 01S03W04BBD16 (fig. 2) is located in Township 1 South, Range 3 West, and in the southeast quarter of the northwest quarter of the northwest quarter of section 4. This well is the 16th well in this

quarter-quarter-quarter section of section 4 from which data were collected.

## AQUIFER DESCRIPTION

The alluvial aquifer comprises alluvial and terrace deposits of Quaternary age (Ackerman, 1996). Lithologically, the Quaternary alluvial and terrace deposits are similar, consisting of unconsolidated sediments that grade from gravel and coarse sand in the lower sections to silt and clay in the upper sections (Boswell and others, 1968). The coarse sediments in the lower sections of the alluvial and terrace deposits are the materials that compose the alluvial aquifer and lend the aquifer its productive hydraulic properties (Ackerman, 1996). The finer sediments in the upper sections of the alluvial and terrace deposits form a confining layer over much of the aquifer. These finer sediments are thin or have been completely removed by erosion in some areas, especially in areas near the Arkansas, White, St. Francis, and other large rivers within the study area (Gonthier and Mahon, 1993). Channel fill, point bar, and backswamp deposits associated with present or former channels of these rivers have produced abrupt changes in lithology and result in large spatial variations in the aquifer's hydraulic properties.

Sedimentary rocks and unconsolidated sediments of Tertiary age or older underlie the alluvial aquifer and have been deformed by geological processes into an undulating surface (Mahon and Poynter, 1993). In most areas, these rocks and sediments are less permeable than the overlying Quaternary alluvial and terrace deposits and form the confining unit below the alluvial aquifer (Boswell and others, 1968).

In the northern half of the study area, the Quaternary alluvial and terrace deposits are separated by Crowleys Ridge, an erosional remnant of Tertiary age deposits trending north-south from the Missouri-Arkansas border to northeastern Phillips County (fig. 1). Crowleys Ridge is a prominent topographic feature on the otherwise low-relief surface of the Mississippi Alluvial Plain and forms a physical barrier to groundwater flow in the alluvial aquifer.

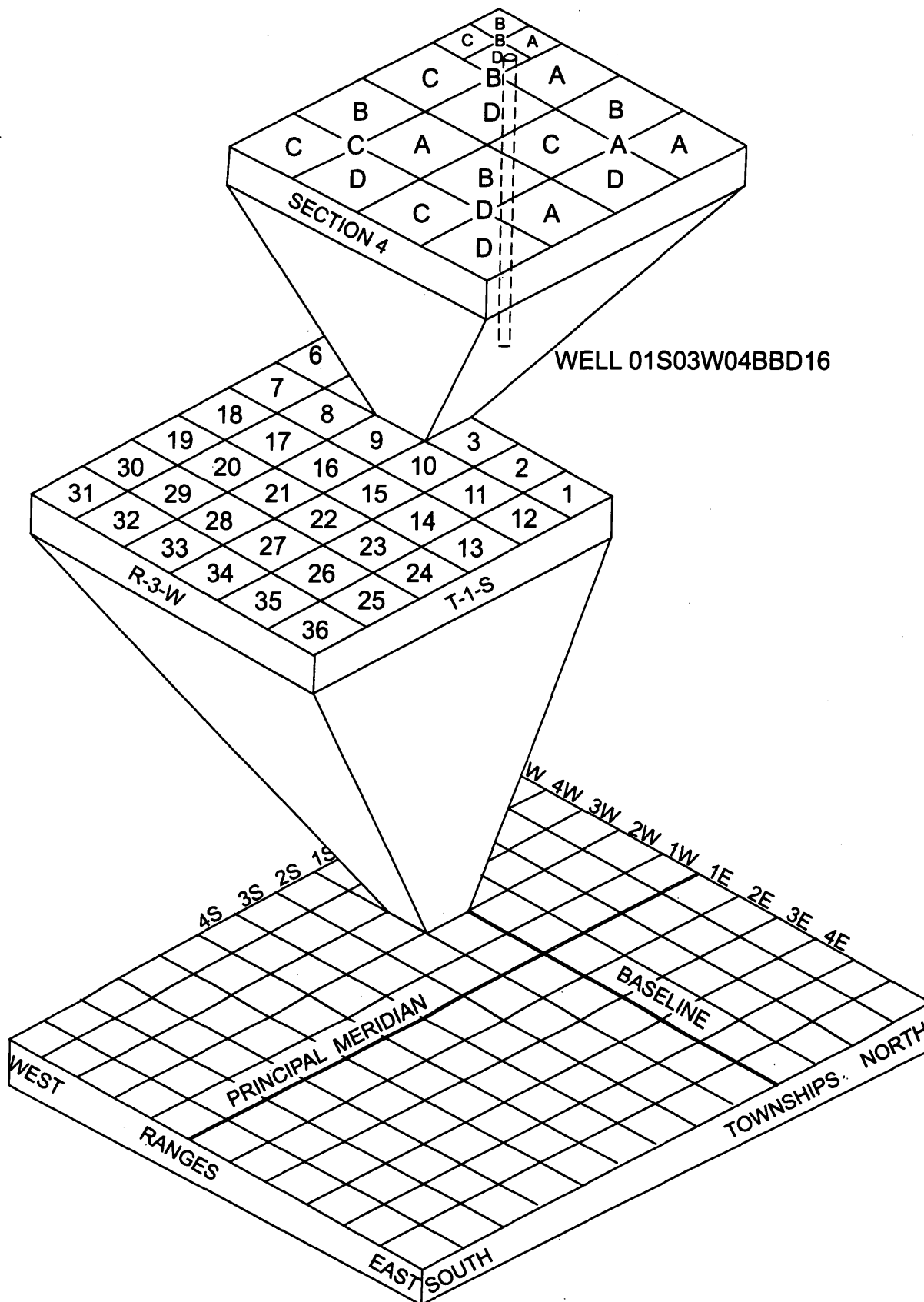


Figure 2. Well-numbering system.

## **WATER LEVELS**

### **Potentiometric Surface**

The potentiometric-surface map shows the altitude to which water would rise in tightly cased wells screened in the aquifer (plate 1). The map on plate 1 is based on 656 water-level measurements made during the spring of 1998 (appendix 1). The surface was mapped using the altitude of the water levels measured in the wells and are represented on the map by contours that connect points of equal value. The general direction of ground-water flow is perpendicular to the contours in the direction of decreasing potentiometric altitude.

The regional direction of ground-water flow is generally to the south and east except where affected by intense ground-water withdrawals. In 1998, the highest water-level altitude measured (about 298 feet above sea level<sup>1</sup>) was in northeastern Clay County near the northern boundary of the study area. The lowest water-level altitude measured (78 feet above sea level) was in central Arkansas County at the low point of a large, elongate cone of depression that extends across Arkansas, Lonoke, and Prairie Counties. Two shallower depressions in the potentiometric surface occur in the study area; the first in Lee, Monroe, St. Francis, and Woodruff Counties and the second in Craighead, Cross, and Poinsett Counties. The comparison of water-level altitudes from 1994 to 1998 indicates that water levels have declined and the three cones of depression have become larger since 1994. Potentiometric depressions in the alluvial aquifer generally are a result of long-term pumping and probably are affected by variations in aquifer characteristics.

### **Long-Term Water-Level Changes**

Water-level measurements for 22 selected alluvial wells in eastern Arkansas were plotted to illustrate the history of water levels in the study area (fig. 3). Historic data from 22 wells with 26 or more years of record indicate long-term water levels declined an average of about 0.38 foot per year. Analysis of the last 25 years

of record (1974 to 1998) for all 22 wells indicates water levels declined an average of about 0.49 foot per year.

Average rates of water-level decline varied across the study area. Water level measurements indicated an average rate of decline greater than 0.60 foot per year in Craighead, Cross, Desha, Jackson, Lonoke, and Poinsett Counties since 1973. Well hydrographs from Mississippi and Phillips Counties showed very little or no change since 1973.

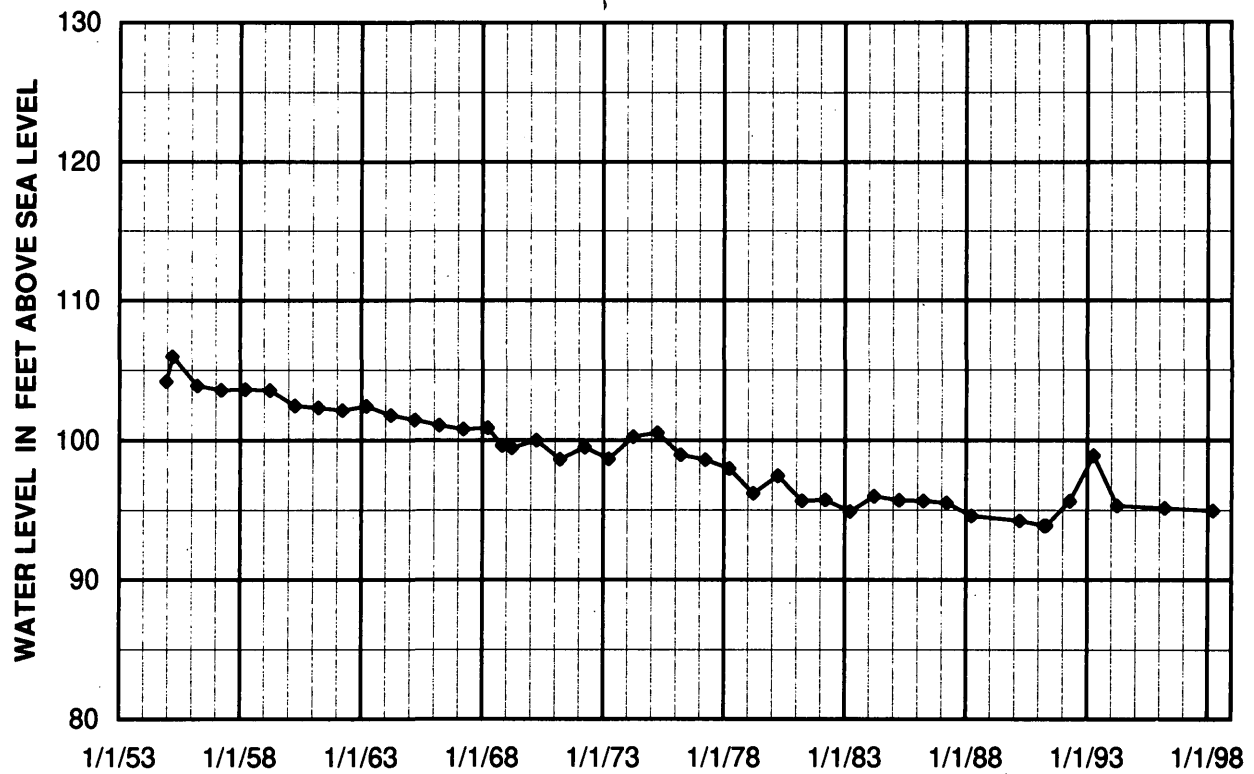
### **Comparison of Water-Level Changes in Cones of Depression from 1994 to 1998**

The comparison of water-level altitudes from 1994 to 1998 reveals that water levels declined and the cone of depression became larger in central Arkansas County. In 1994, the lowest water-level altitude measured in Arkansas County was about 86 feet above sea level; in 1998, the lowest water-level altitude measured was about 78 feet above sea level. The area enclosed by the 90-foot contour in 1994 expanded northwest and southeast in 1998 (fig. 4). The comparison of water levels in two other smaller cones of depression reveal similar changes. In 1994, a rather small cone of depression resulted in a 140-foot contour in northern Poinsett County. In 1998, the area enclosed by that 140-foot contour moved eastward to Crowleys Ridge and southward approaching the Cross County line (fig. 5). Contours representing water-level altitudes of 130 feet and 140 feet were not present in southwestern St. Francis County in 1994. However, water levels in southwestern St. Francis County in 1998 were as low as 129 feet above sea level in 1998, and the area enclosed by the 150-foot contour had encroached farther into Lee, Monroe, St. Francis, and Woodruff Counties (fig. 6). The water-level altitudes did not decline in every well monitored from 1994 to 1998; however, water-level altitudes generally declined during this period and the areal extent of the cones of depression increased.

---

<sup>1</sup>In this report, sea level refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

### A. ARKANSAS COUNTY, WELL 04S04W02ABB1



### B. ASHLEY COUNTY, WELL 17S06W01ADD1

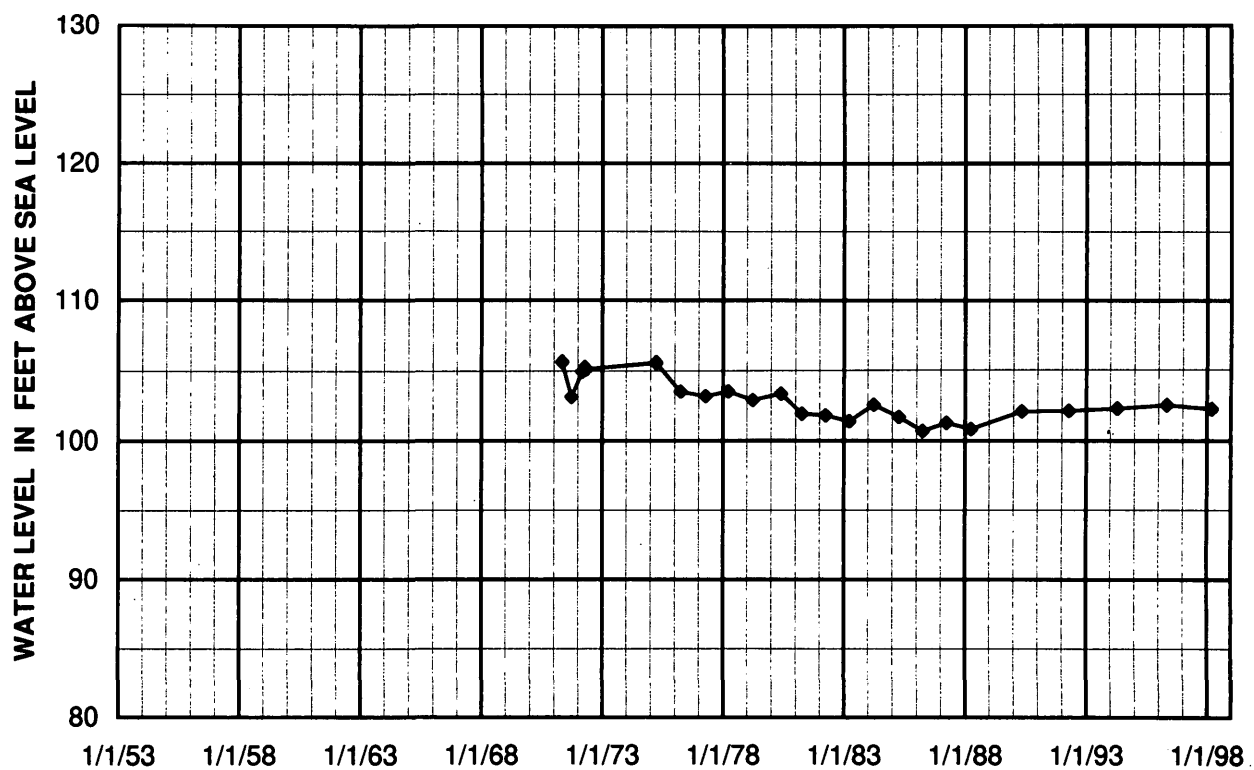
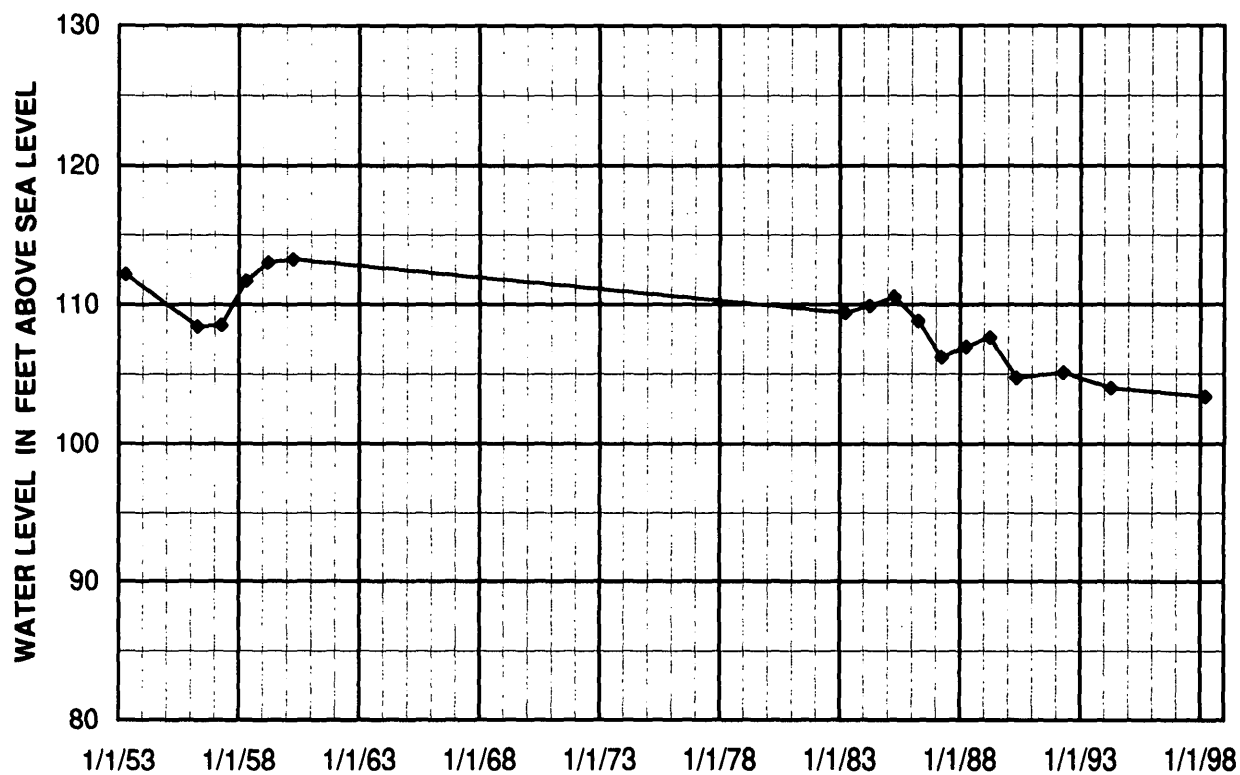


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer.

### C. CHICOT COUNTY, WELL 14S03W32DCB1



### D. CLAY COUNTY, WELL 20N05E34DBA1

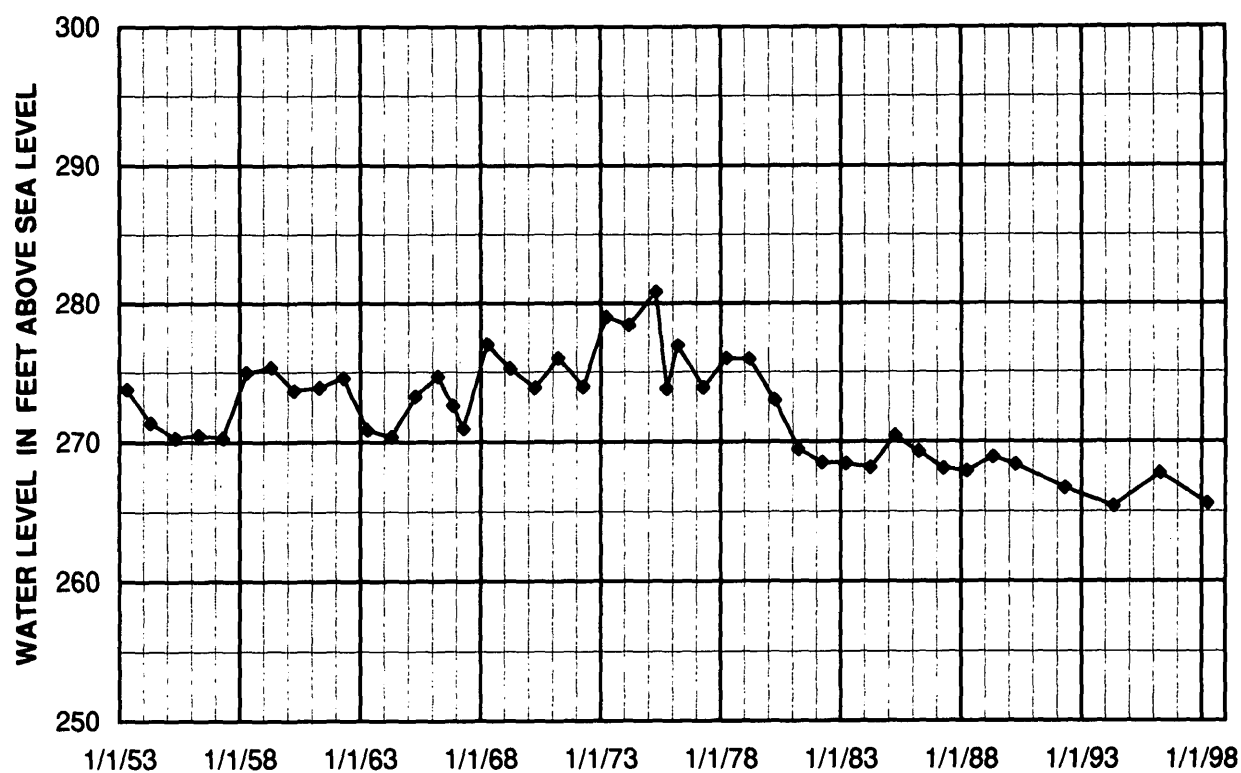


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued.

### E. CRAIGHEAD COUNTY, WELL 14N02E18BDD1



### F. CRITTENDEN COUNTY, WELL 08N07E14DAA2

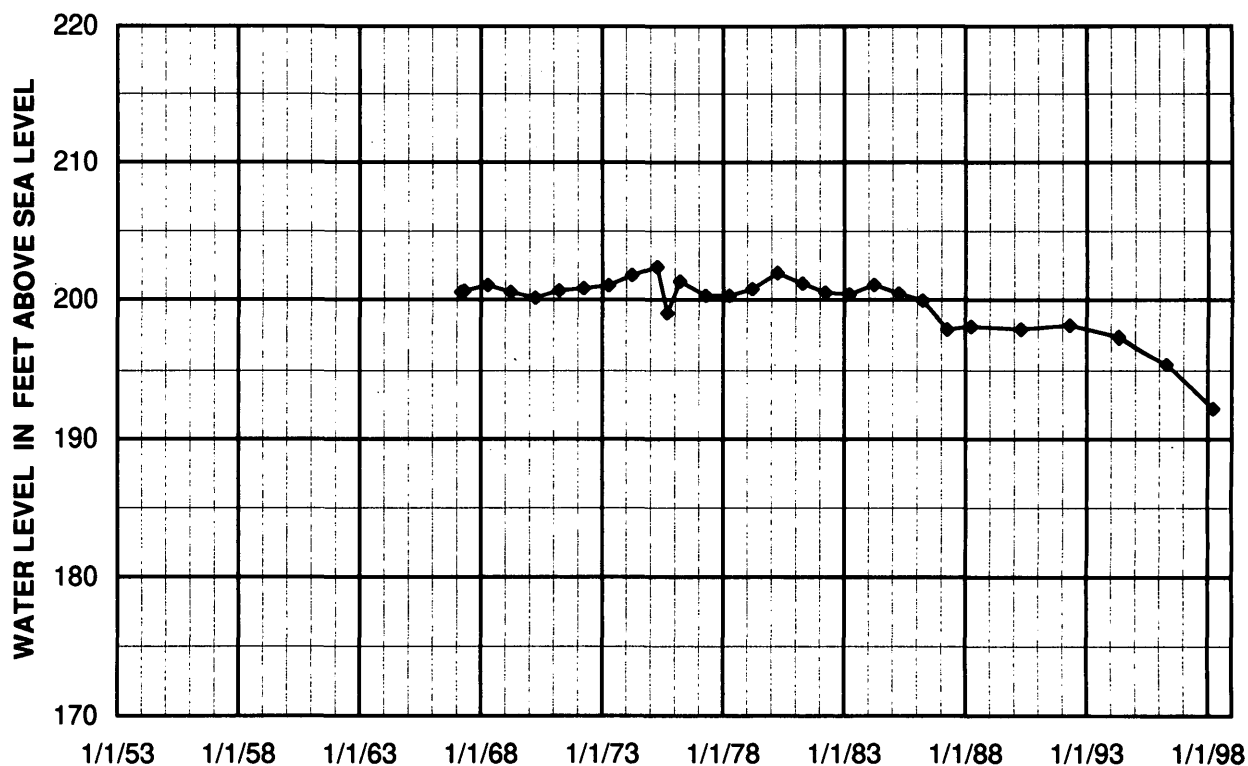
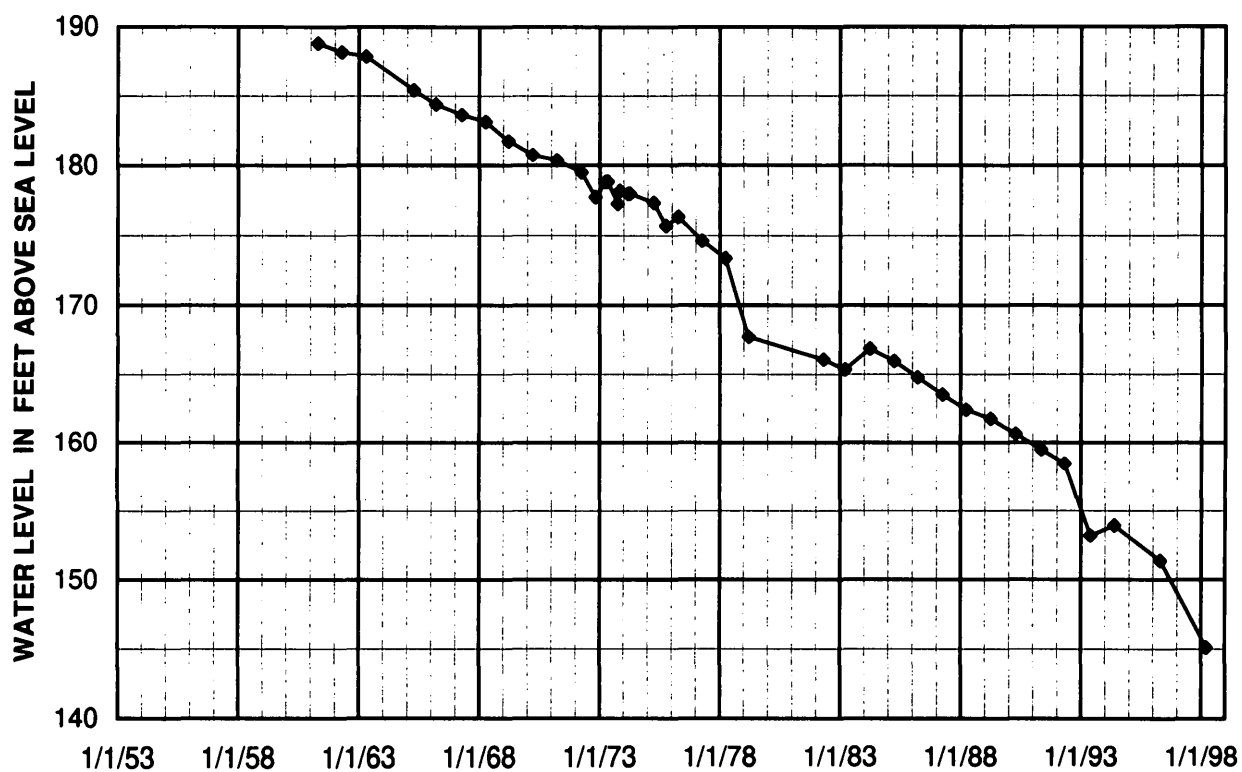


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

### G. CROSS COUNTY, WELL 09N03E17DDC1



### H. DESHA COUNTY, WELL 09S03W17DCB1

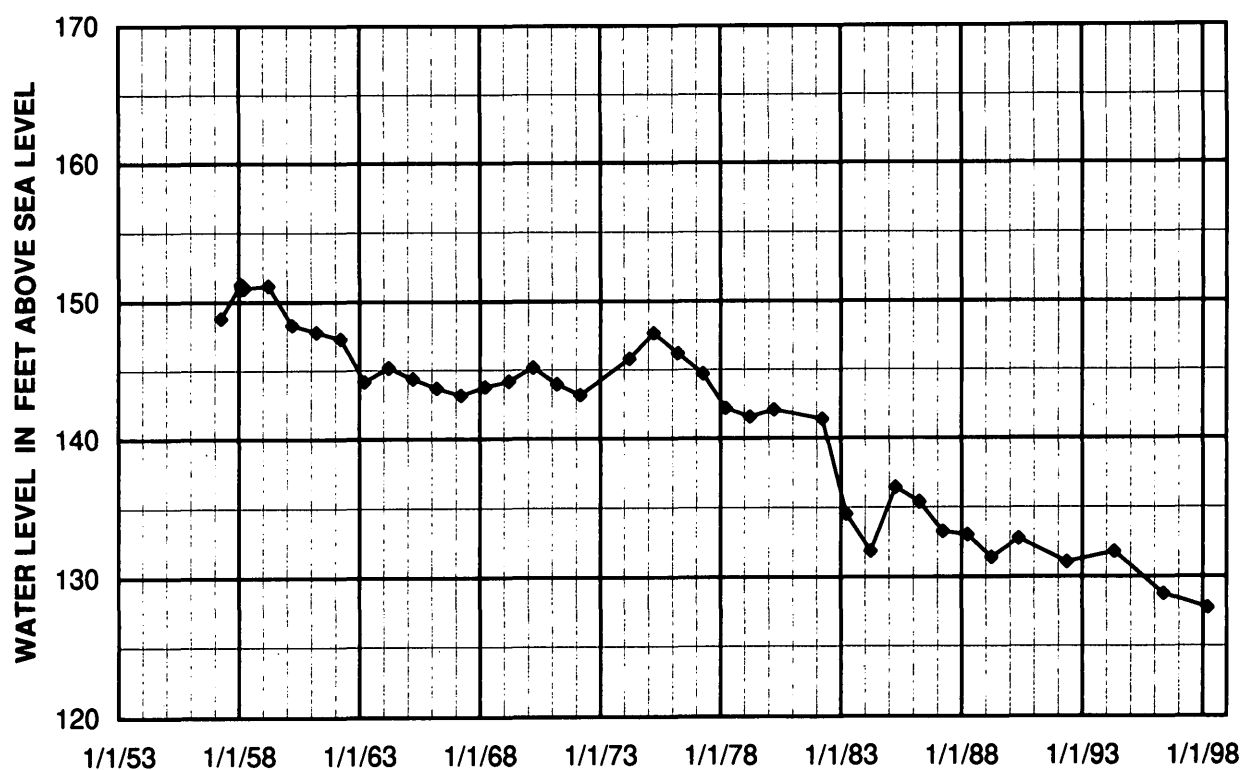
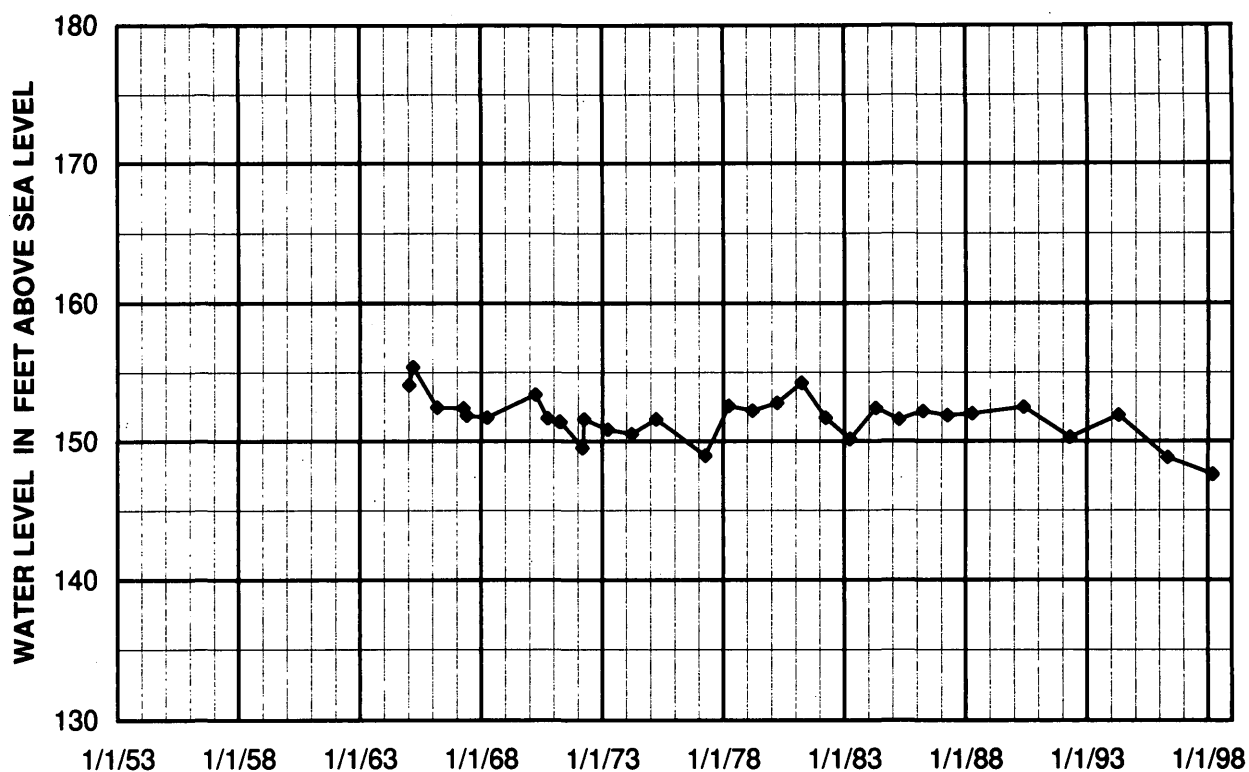


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

# **I. DREW COUNTY, WELL 11S05W08CCC1**



# **J. GREENE COUNTY, WELL 16N06E28ABB1**

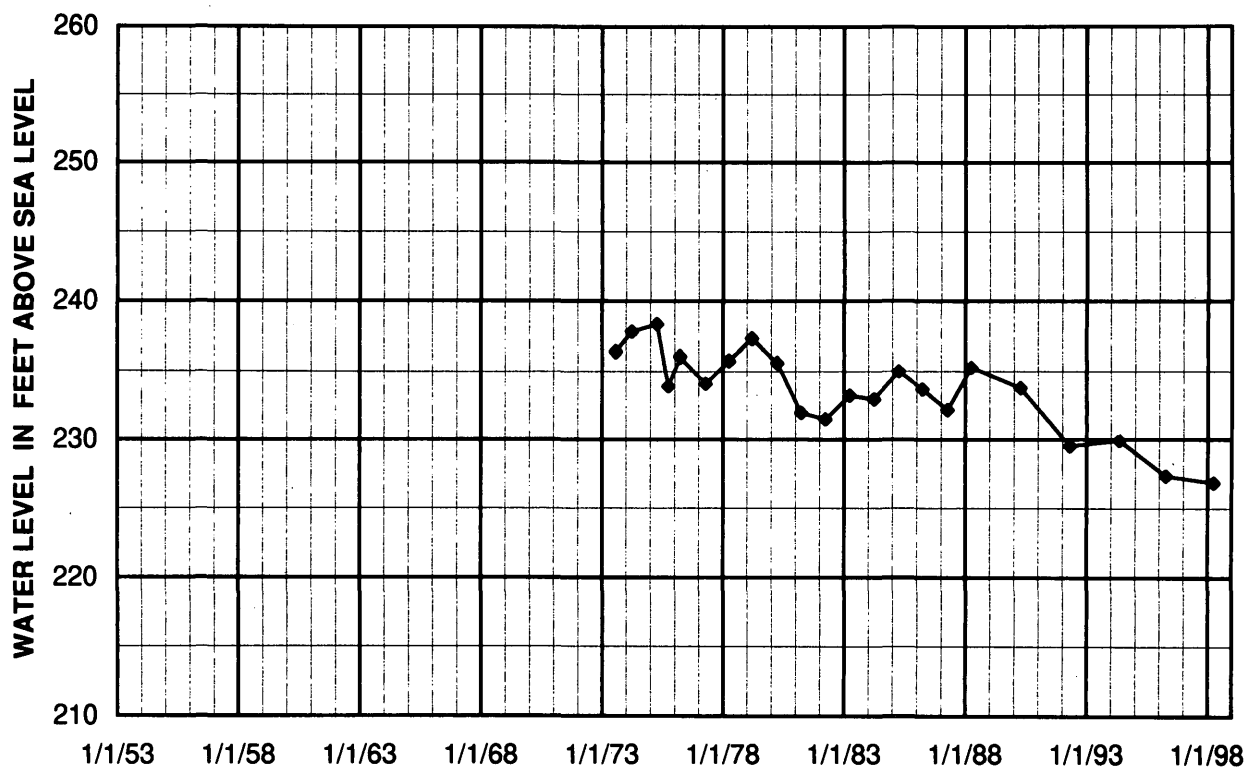
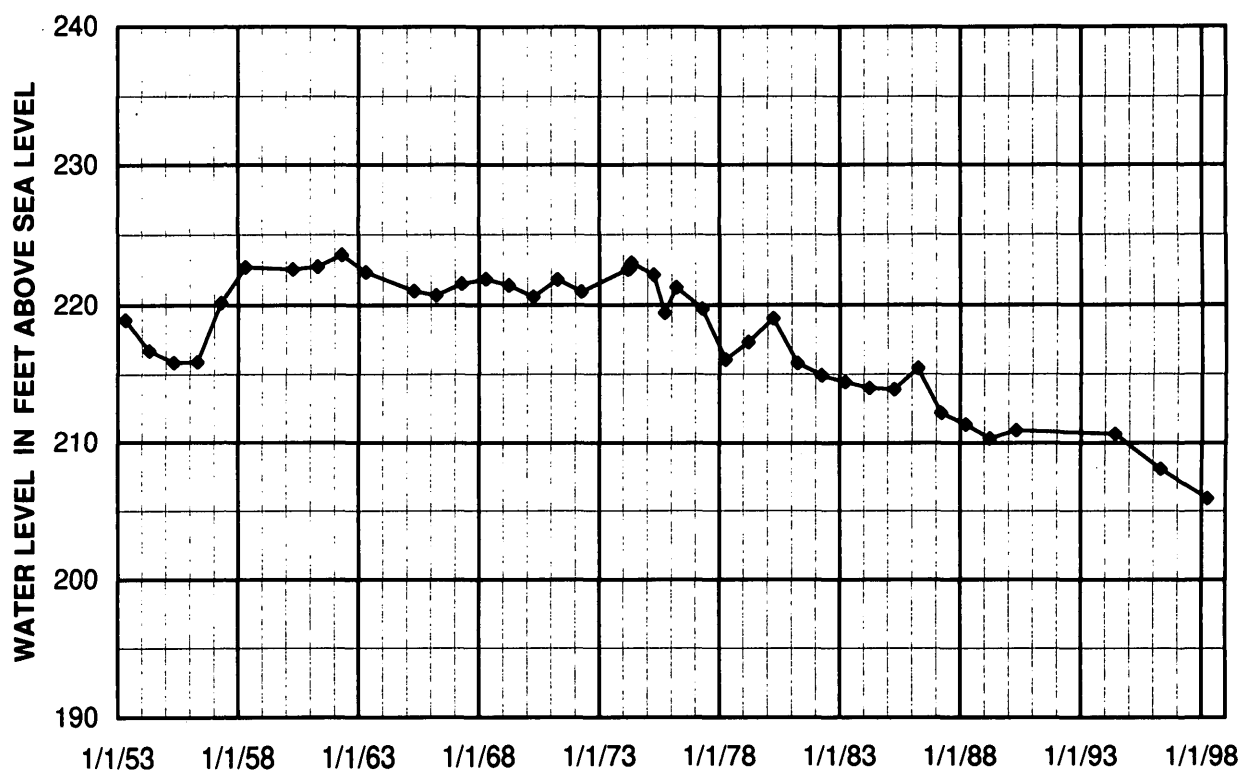


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued



## K. JACKSON COUNTY, WELL 12N02W25ABB2



## L. JEFFERSON COUNTY, WELL 03S08W24BBC1

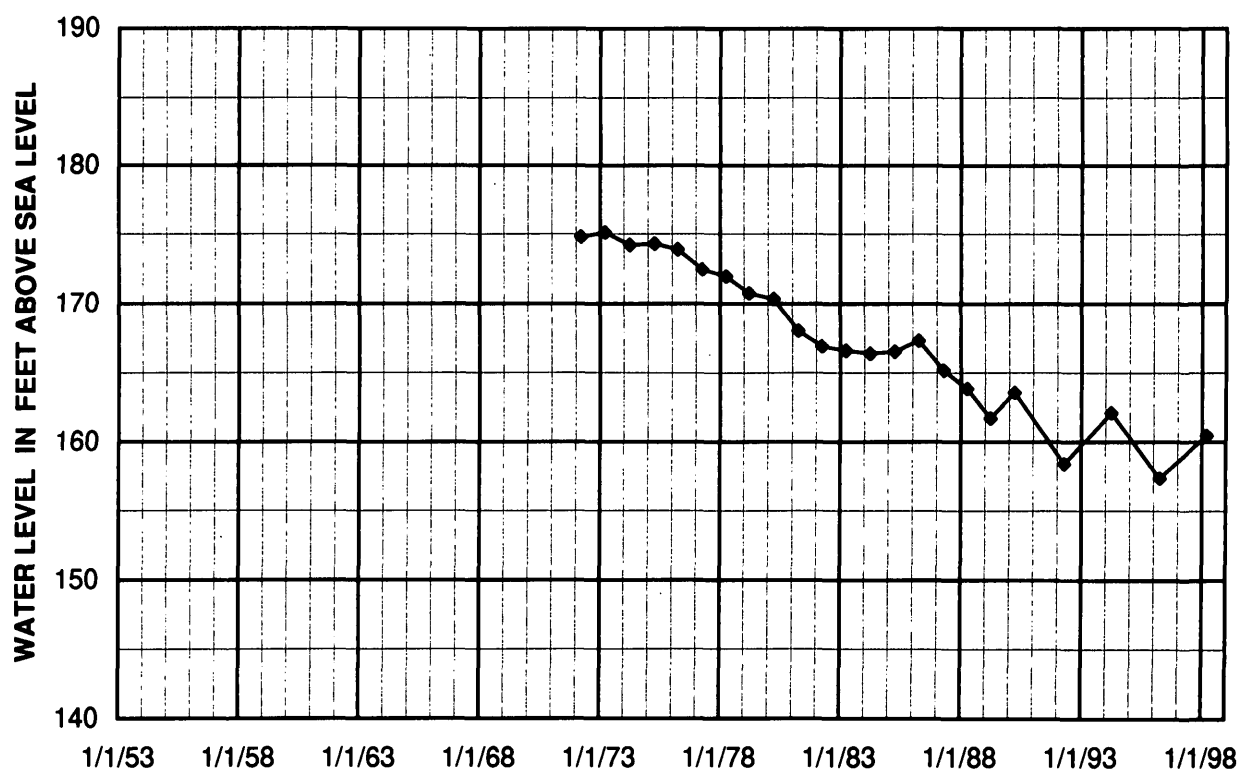
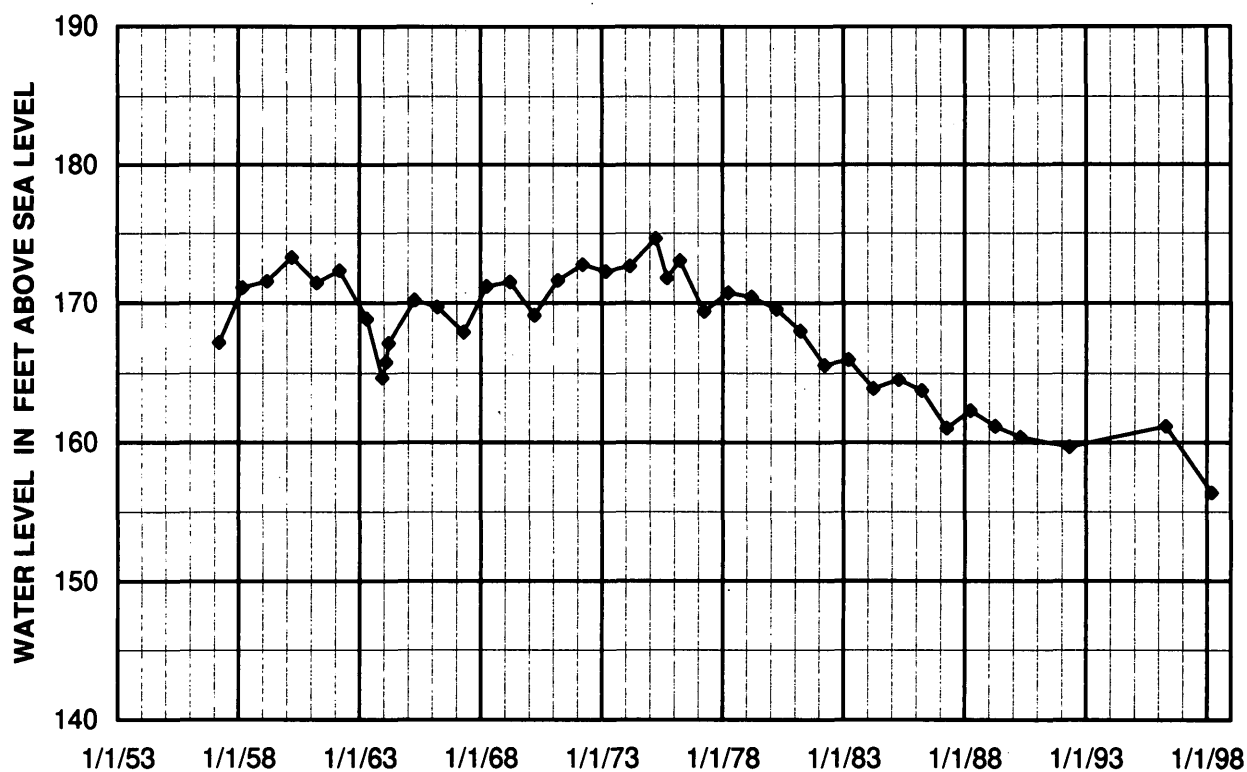


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

### M. LEE COUNTY, WELL 02N01E23BAA2



### N. LONOKE COUNTY, WELL 02N09W17CCB1

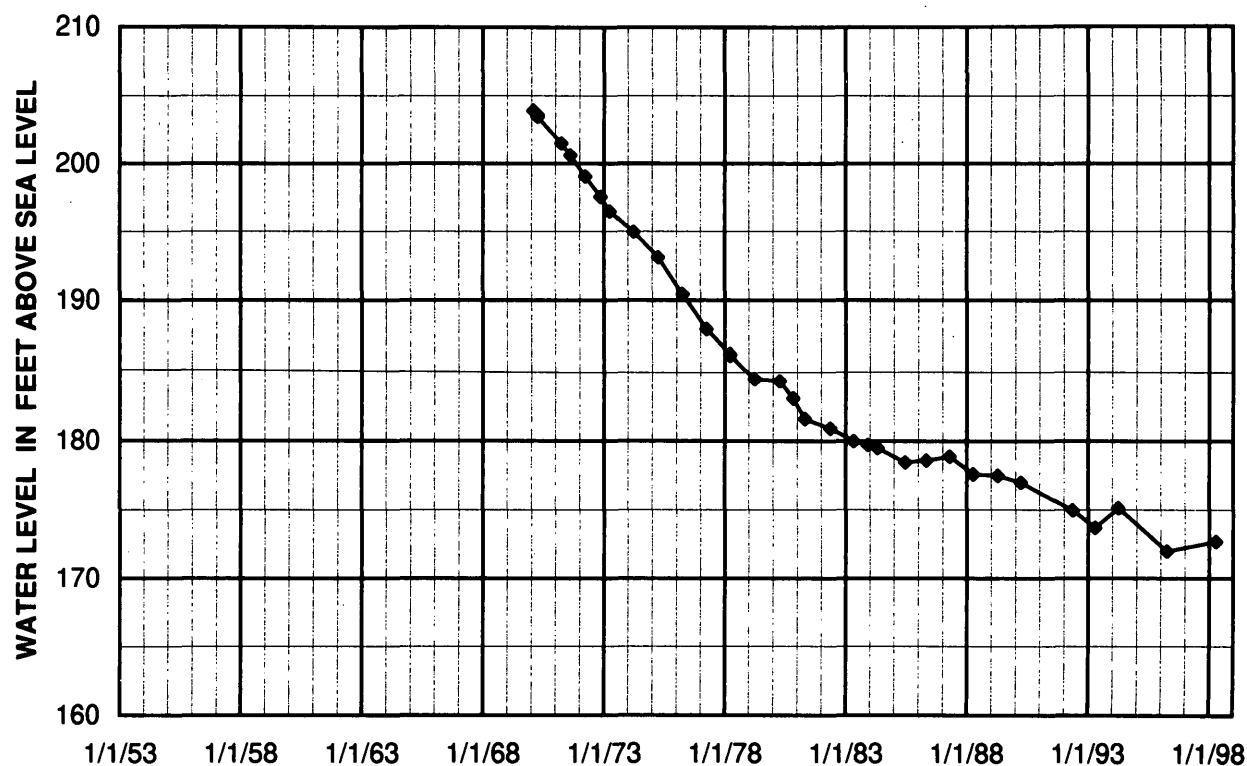
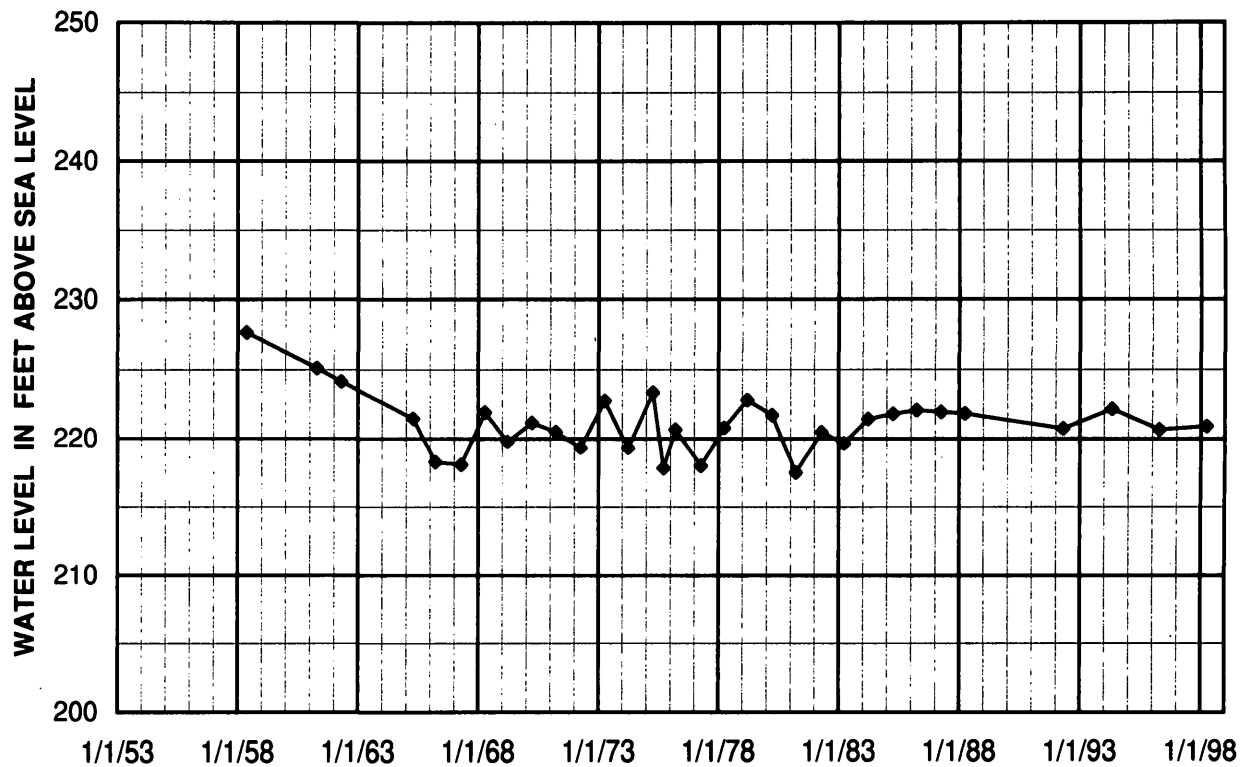
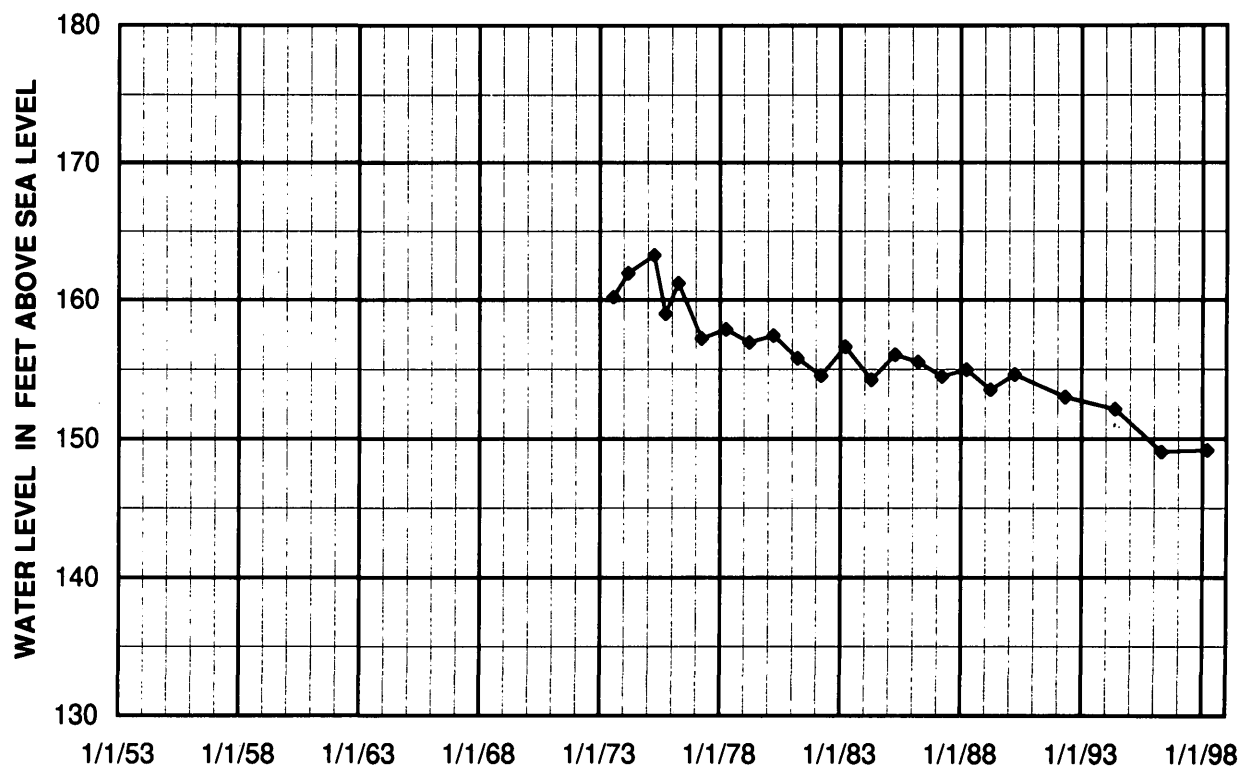


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

# **O. MISSISSIPPI COUNTY, WELL 13N09E30CCD1**

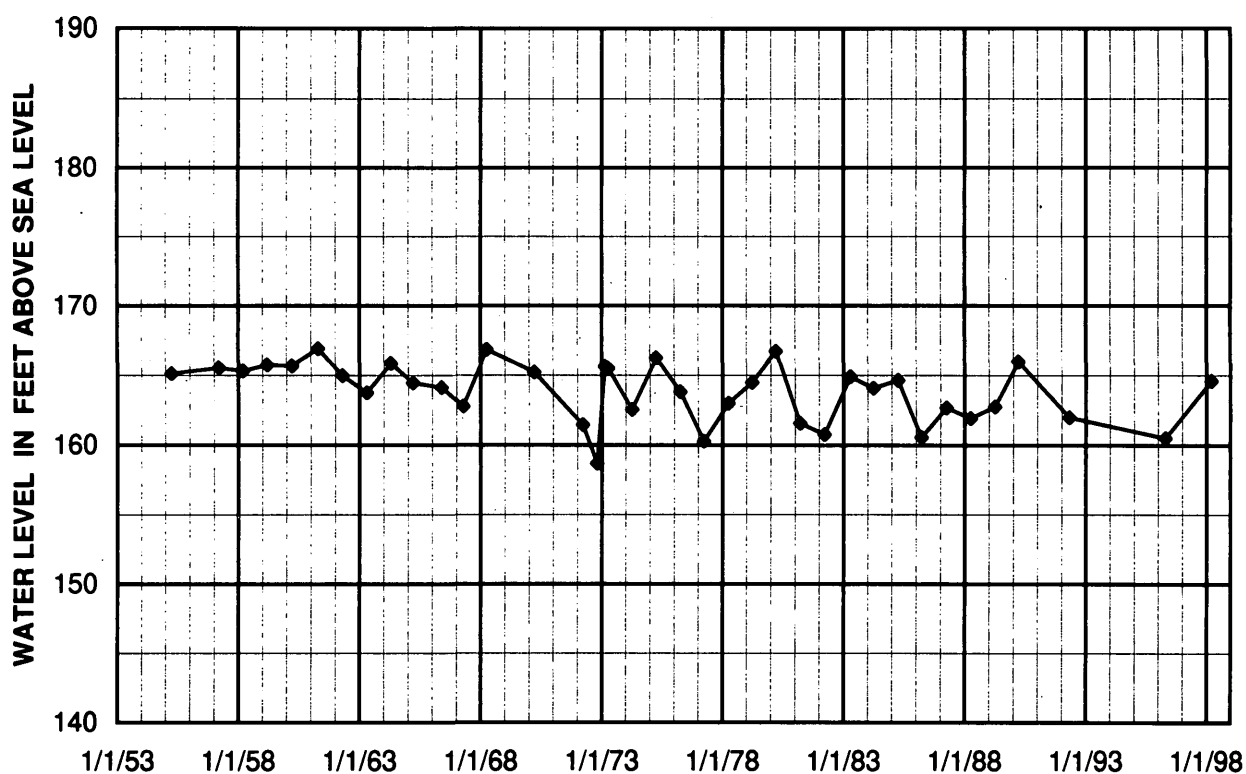


# **P. MONROE COUNTY, WELL 03N01W20ABA1**



**Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued**

## Q. PHILLIPS COUNTY, WELL 02S03E15ACD1



## R. POINSETT COUNTY, WELL 11N02E26AAB1

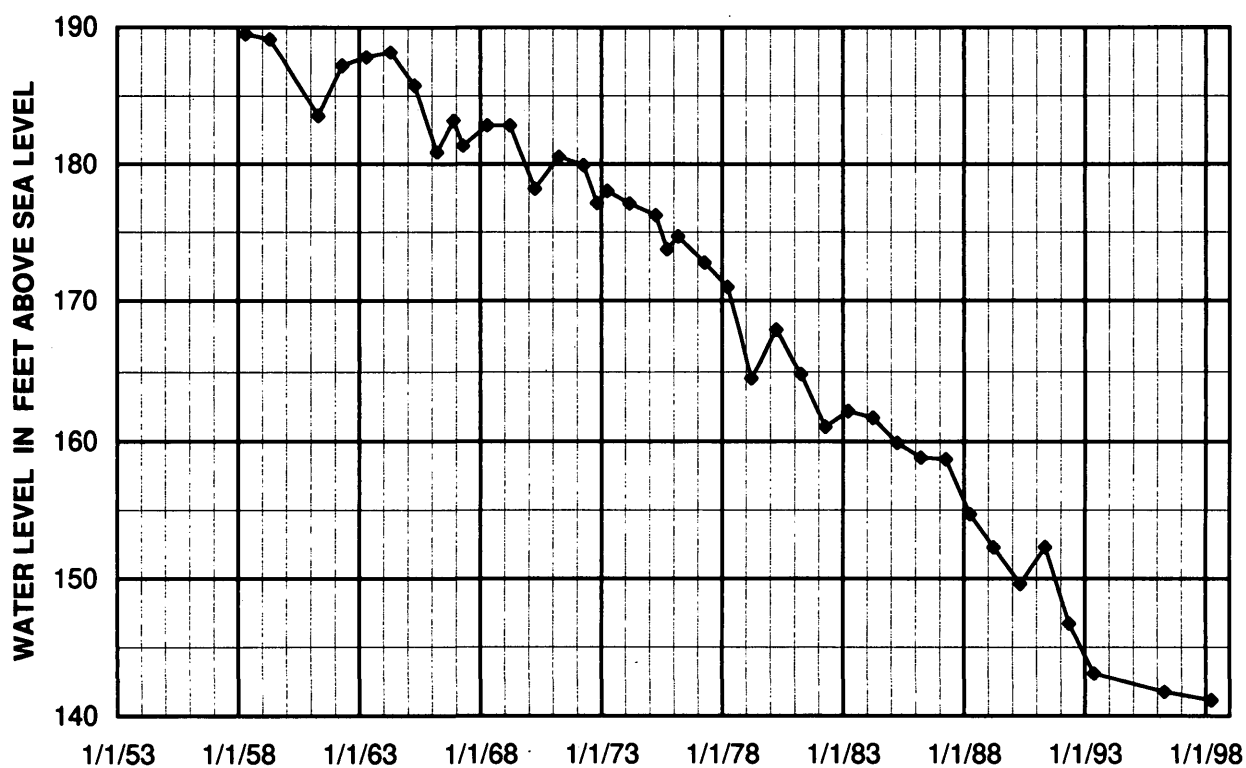
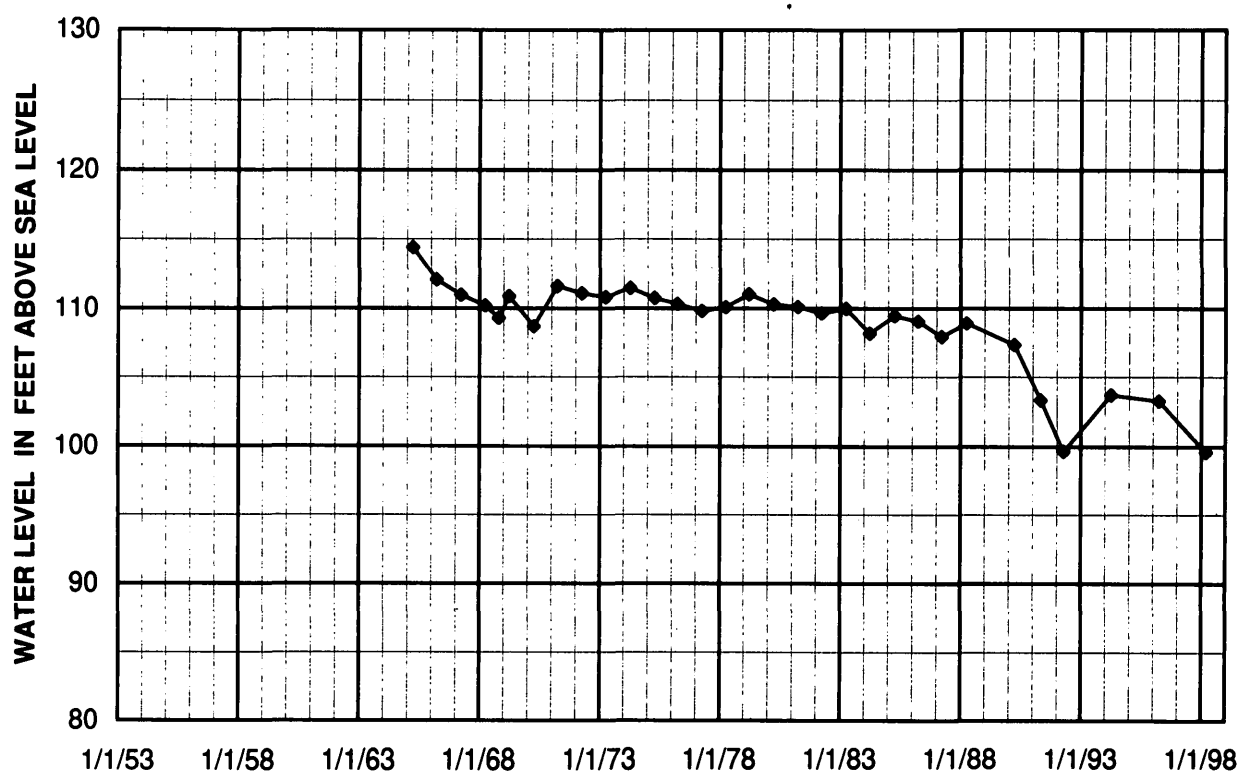


Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

# **S. PRAIRIE COUNTY, WELL 01S05W14BBC1**



# **T. ST. FRANCIS COUNTY, WELL 06N05E22ACC1**

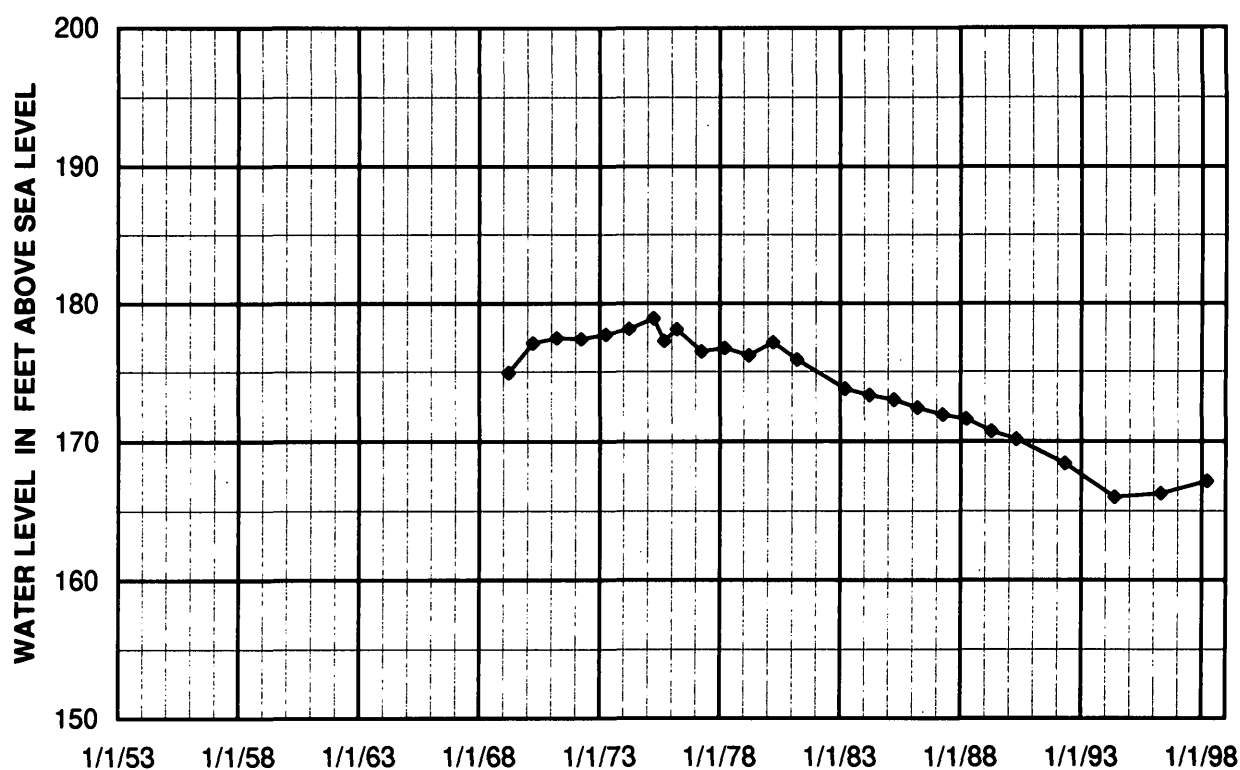
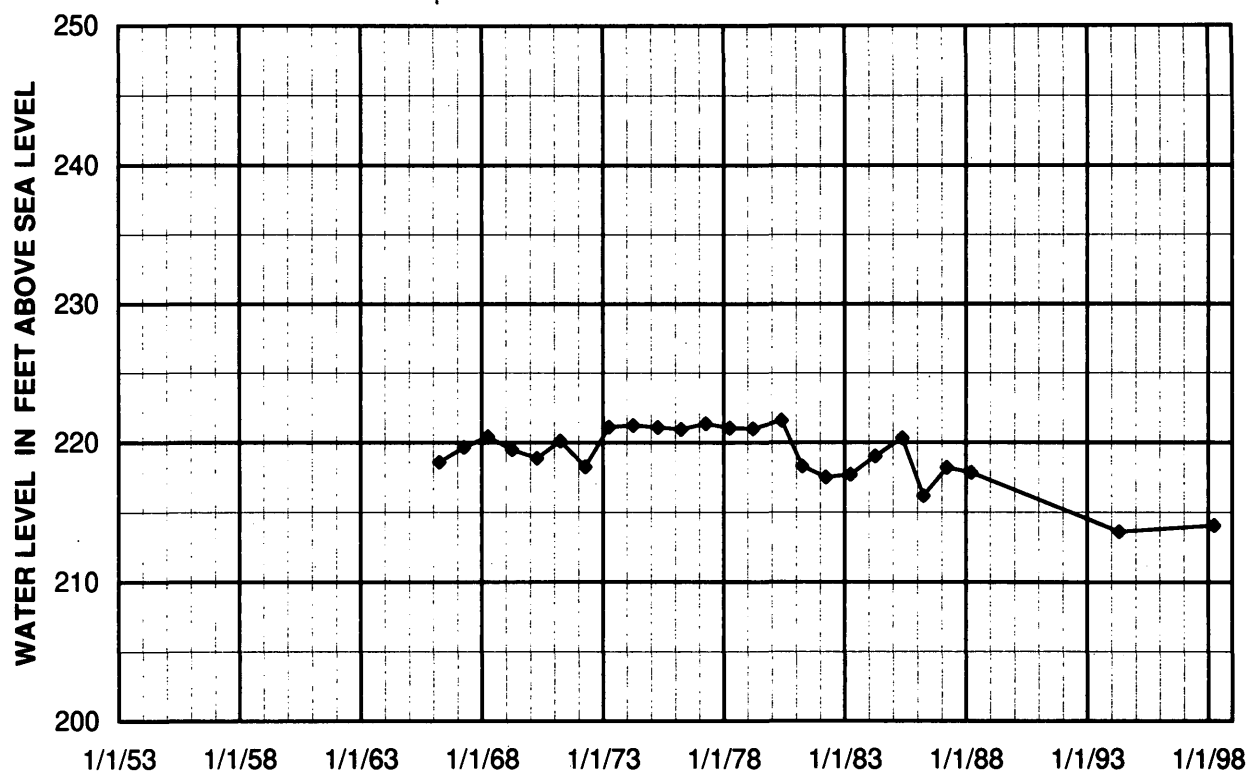
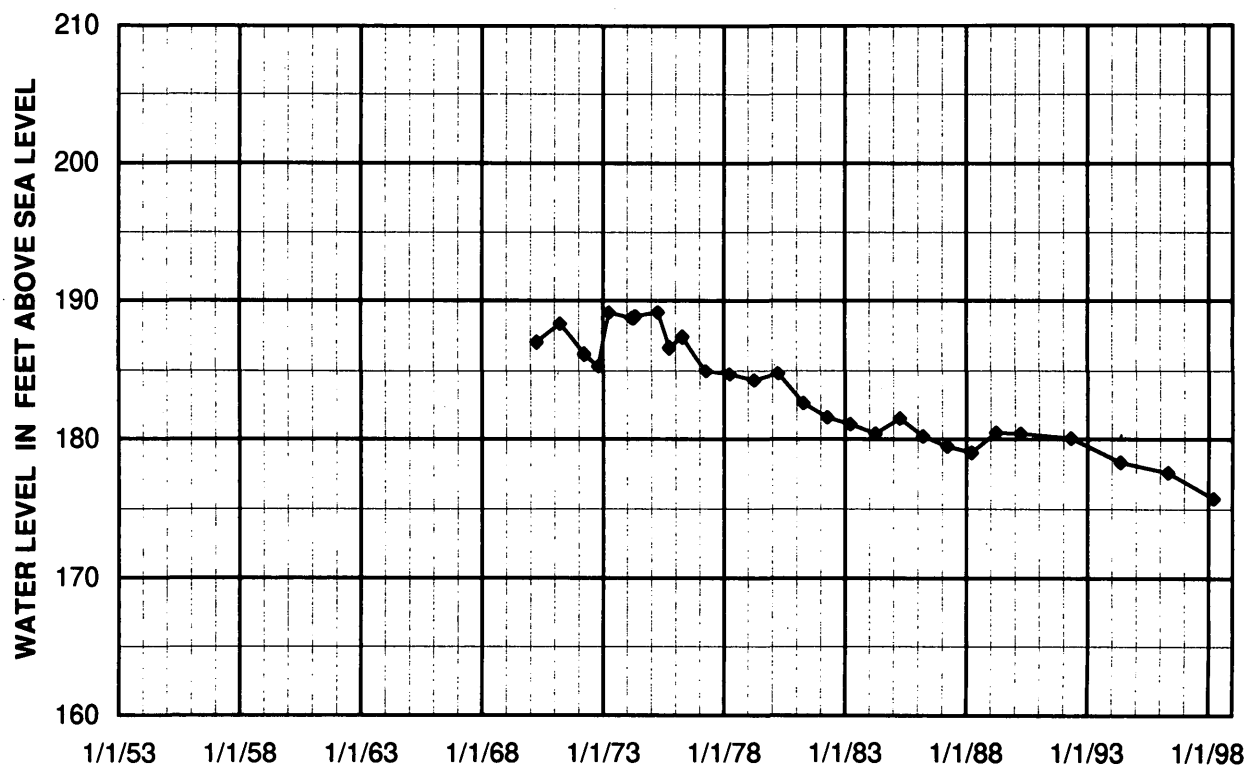


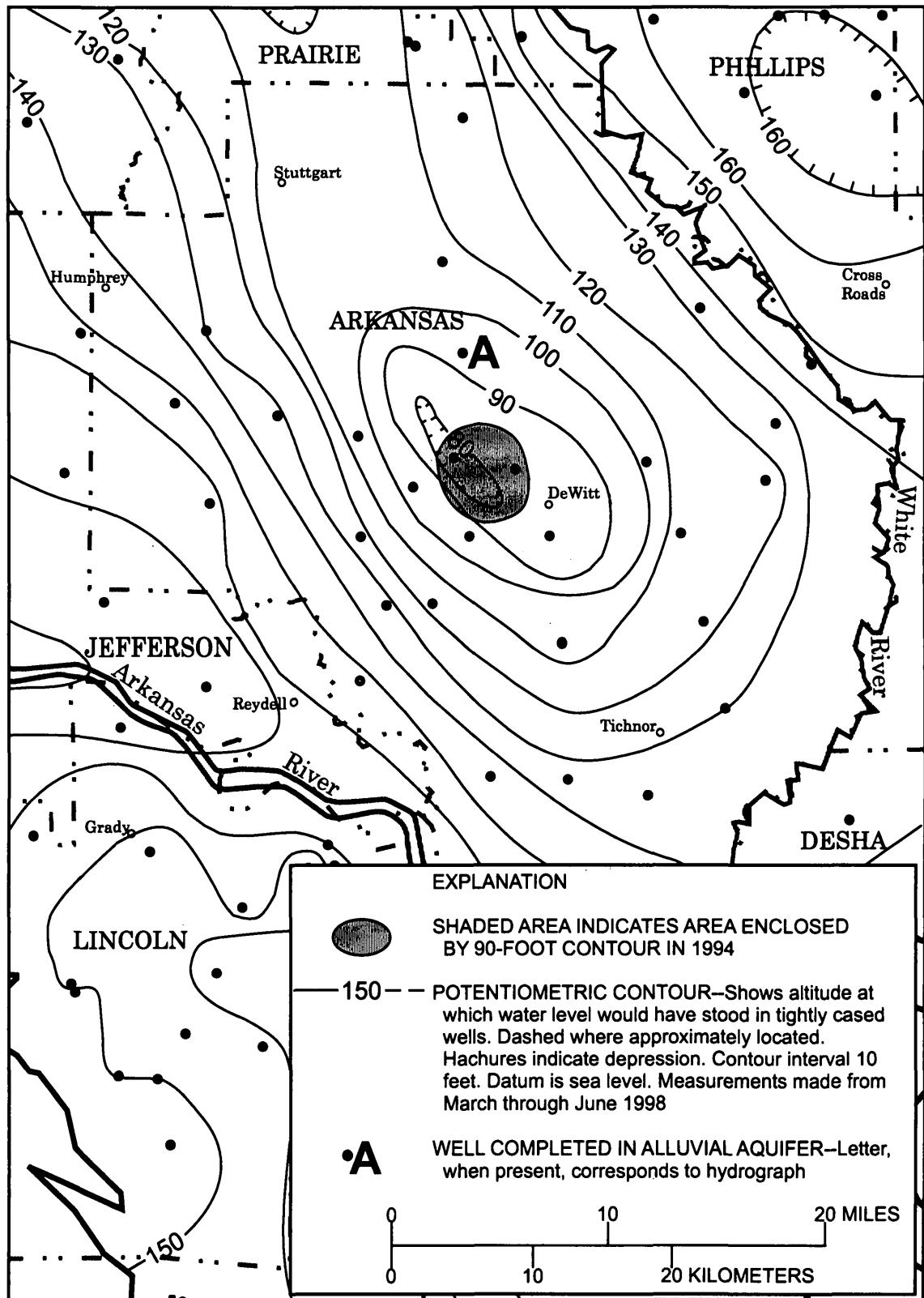
Figure 3. Water-level hydrographs for selected wells in the alluvial aquifer--Continued

## U. WHITE COUNTY, WELL 07N06W19CAB1



## V. WOODRUFF COUNTY, WELL 06N01W06BAB1





**Figure 4.** Comparison of Arkansas County cone of depression, 1994 to 1998.

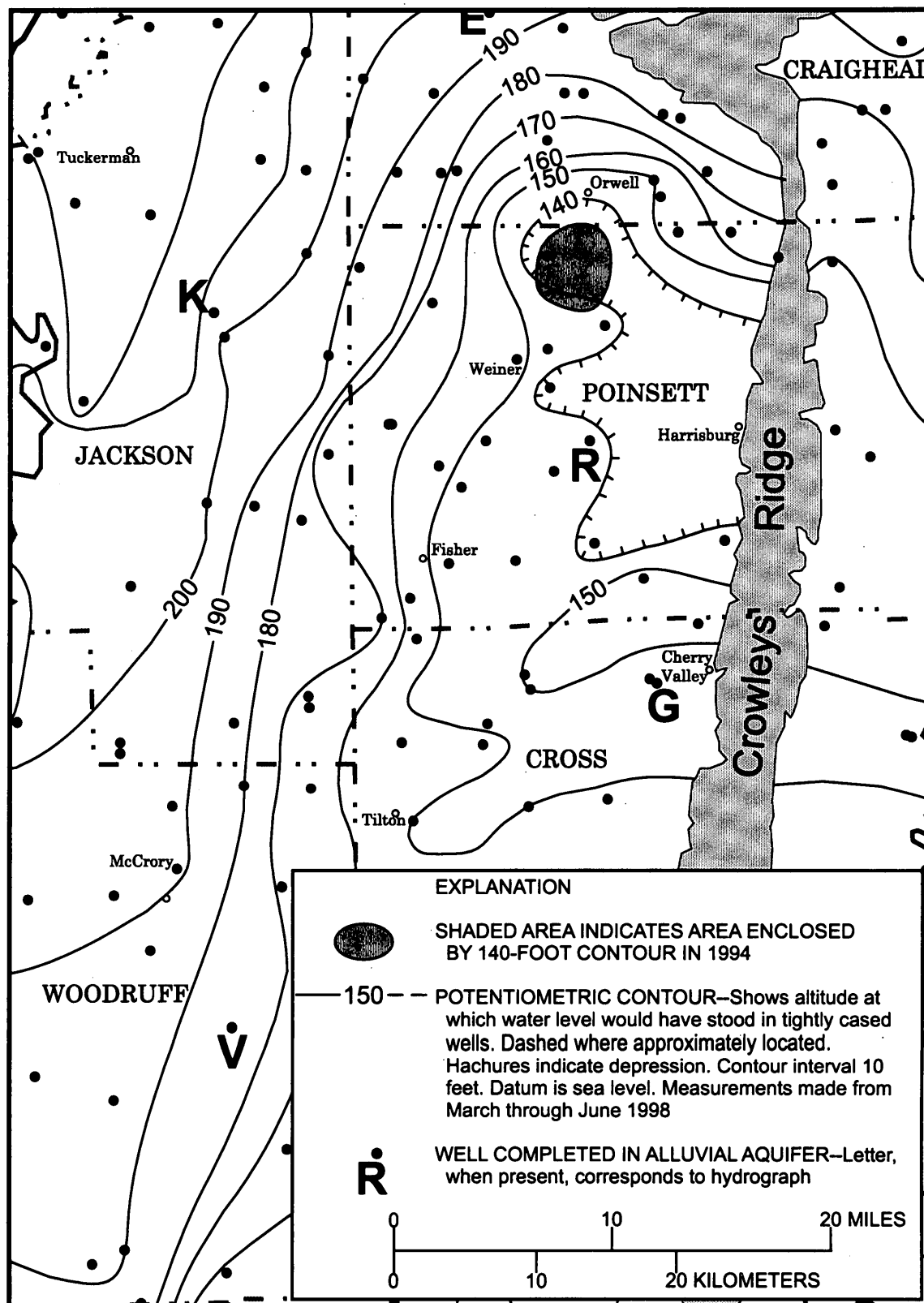


Figure 5. Comparison of Poinsett County cone of depression, 1994 to 1998.



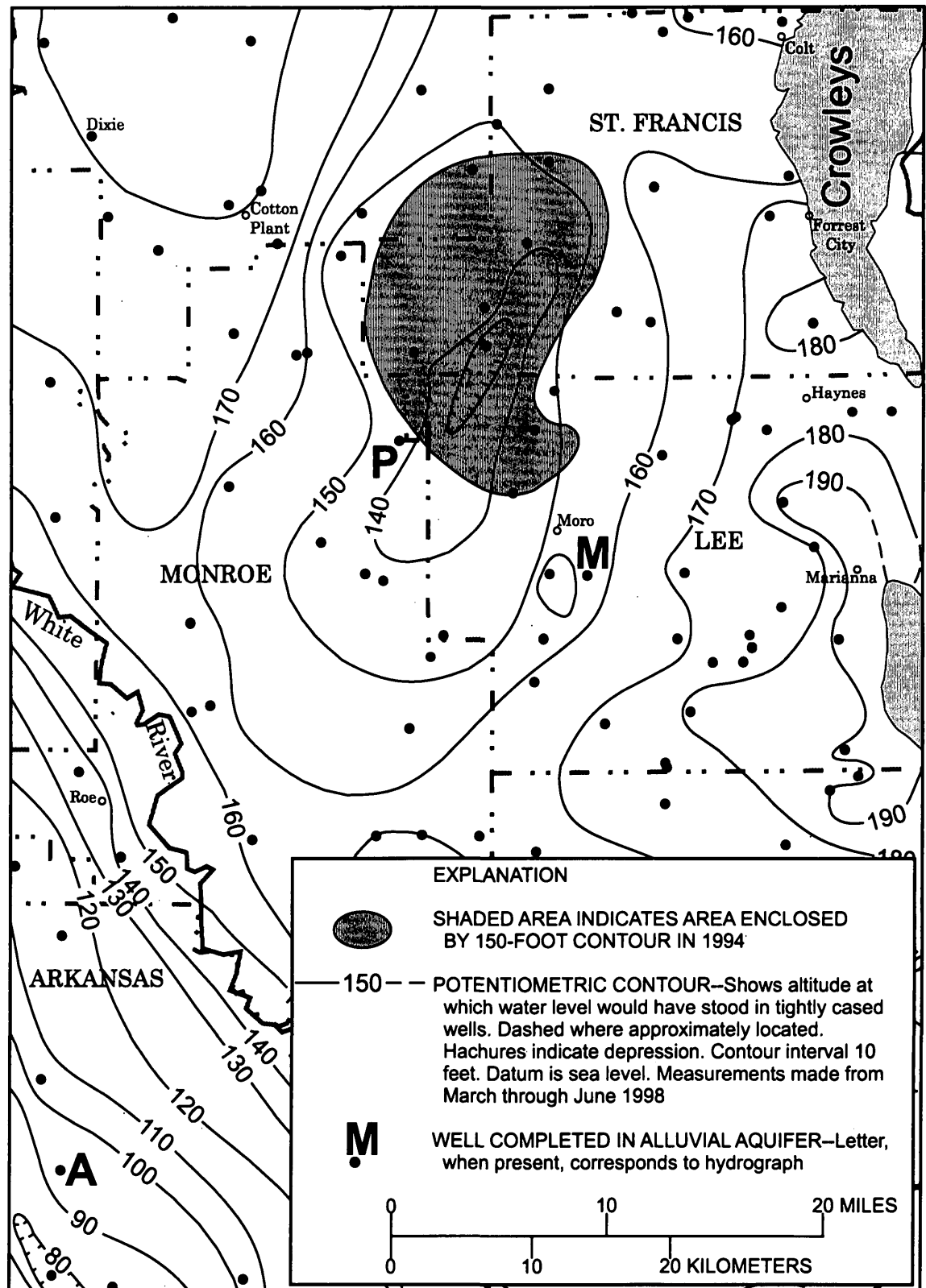


Figure 6. Comparison of St. Francis County cone of depression, 1994 to 1998.

## Long-Term Water-Level Changes in Cones of Depression

The analysis of long-term water-level changes in the cone of depression in central Arkansas County (hydrograph A, fig. 4, plate 1) shows that water levels declined an average of 0.16 foot per year at well A in Arkansas County since 1973. With the elongation of this cone, the water-level change in neighboring counties is more pronounced. Water levels declined an average of 0.56 foot per year in well L (hydrograph L) in Jefferson County, and 0.88 foot per year in well N (hydrograph N) in Lonoke County since 1973.

Long-term water-level changes in the cone of depression in Poinsett County (hydrograph R, fig. 5, plate 1) show that water levels declined an average of 1.40 foot per year in well R (hydrograph R) in Poinsett County since 1973. The cone of depression is expanding northward and southward along Crowleys Ridge. Water levels at well E (hydrograph E, fig. 5, plate 1) in Craighead County declined an average of 0.96 foot per year, and water levels at well G (hydrograph G, fig. 5, plate 1) in Cross County declined an average of 1.28 foot per year since 1973.

Long-term water-level changes in the cone of depression at well P (hydrograph P, fig. 6, plate 1) in Monroe County show that water levels declined an average rate of 0.44 foot per year since 1973. This cone of depression is also expanding in area. Water levels at well M (hydrograph M, fig. 6, plate 1) in Lee County declined an average of 0.56 foot per year and water levels at well V (hydrograph V, fig. 6, plate 1) in Woodruff County declined an average rate of 0.44 foot per year since 1973.

## SPECIFIC CONDUCTANCE AND DISSOLVED CHLORIDE

Water samples were collected from 140 alluvial aquifer wells and measured onsite for specific conductance. Additional samples were collected at 119 wells and were analyzed for dissolved chloride at the USGS National Water-Quality Laboratory in Arvada, Colorado.

Specific-conductance data indicate regional variations of dissolved solids within the alluvial aquifer across the study area (plate 2). Specific conductance ranged from 199 microsiemens per centimeter at 25 degrees Celsius ( $\mu\text{S}/\text{cm}$ ) at a well in Drew County to 3,800  $\mu\text{S}/\text{cm}$  at a well in Chicot County (appendix 2).

The lowest specific conductance value of 199  $\mu\text{S}/\text{cm}$  was collected at a well very close to the western edge of the study area. Ground water in the alluvial aquifer generally has a relatively lower specific conductance along the western border of the study area. An area of particularly high specific conductance (greater than 3,500  $\mu\text{S}/\text{cm}$ ) is centered in western Chicot County.

Generally, the occurrences of high specific conductance in the alluvial aquifer is probably caused by movement of high dissolved solid concentration water from a source or sources at depth (Bryant and others, 1985). Water with high concentrations of dissolved solids may have moved upward where the confining beds are thin or absent, along faults, or through unplugged casings of abandoned oil and gas test wells (Fitzpatrick, 1985). Morris and Bush (1986) cite two possible sources of high dissolved solid concentration water—a zone of ground-water stagnation present in the alluvial aquifer caused by localized restricted horizontal or vertical flow, and upward movement of high dissolved solid concentration water from deeper formations in response to pumping.

Dissolved chloride concentrations ranged from 2.1 milligrams per liter (mg/L) at a well in Mississippi and St. Francis Counties to 820 mg/L at a well in Chicot County (appendix 2). The sample with the highest chloride concentration also had the second highest specific conductance (3,630  $\mu\text{S}/\text{cm}$ ). The areas of greatest chloride concentrations generally coincide with areas of greatest specific conductance.

## SUMMARY

The Mississippi River Valley alluvial aquifer is increasingly relied upon for agriculture and aquaculture irrigation in eastern Arkansas. In 1990, withdrawals from the alluvial aquifer in Arkansas totaled about 4,300 Mgal/d; in 1995 withdrawals increased to about 5,062 Mgal/d.

During the spring of 1998, water levels were measured in 656 wells completed in the alluvial aquifer in eastern Arkansas. Water samples also were collected during the summer of 1998 from wells completed in the alluvial aquifer, on which specific conductance was measured from about 140 wells and dissolved chloride was analyzed from 119 wells.

The regional direction of ground-water flow generally is to the south and east except where affected by intense ground-water withdrawals. A large depression in the potentiometric surface is located in Arkan-

sas, Lonoke, and Prairie Counties; two shallower depressions are centered in Poinsett and St. Francis Counties. The comparison of water-level altitudes from 1994 to 1998 reveals that water levels generally declined and the cones of depression became larger. Potentiometric depressions in the aquifer generally are a result of long-term pumping and probably are affected by variations in aquifer characteristics.

Historic water-level data from 22 wells with 26 or more years of record indicate long-term water levels declined an average of about 0.38 foot per year. Analysis of the last 25 years of record (1974 to 1998) for all 22 sites indicates water levels declined an average of 0.49 foot per year.

Average rates of water-level decline varied across the study area. Water-level measurements indicated an average rate of decline greater than 0.60 foot per year in Craighead, Cross, Desha, Jackson, Lonoke, and Poinsett Counties since 1973. Well hydrographs from Mississippi and Phillips Counties showed very little or no change since 1973.

Specific conductance ranged from 199  $\mu\text{S}/\text{cm}$  at a well in Drew County to 3,800  $\mu\text{S}/\text{cm}$  at a well in Chicot County. Ground water in the alluvial aquifer generally has a lower specific conductance along the western border of the study area. An area of particularly high specific conductance is centered in western Chicot County. Dissolved chloride concentrations ranged from 2.1 mg/L at a well in Mississippi and St. Francis Counties to 820 mg/L at a well in Chicot County. The high chloride concentration occurred in the same area of Chicot County as the high specific conductance. Possible explanations include a zone of ground-water stagnation caused by localized restricted horizontal or vertical flow, or upward movement of high dissolved solid concentration water (through confining beds, along faults or through unplugged casings of abandoned oil and gas test wells) in response to pumping.

## SELECTED REFERENCES

- Ackerman, D.J., 1996, Hydrology of the Mississippi River Valley alluvial aquifer, south-central United States--A preliminary assessment of the regional flow system: U.S. Geological Survey Professional Paper 1416-D, 56 p.
- Baker, N.T., 1991, Summary and analysis of water-use data collection in eastern Arkansas: U.S. Geological Survey Open-File Report 90-4177, 25 p.
- Boswell, E.H., Cushing, E.M., and Hosman, R.L., 1968, Quaternary aquifers in the Mississippi embayment *with a discussion of Quality of the water* by H.G. Jeffery: U.S. Geological Survey Professional Paper 448-E, 15 p.
- Broom, M.E., and Reed, J.E., 1973, Hydrology of the Bayou Bartholomew alluvial-aquifer system, Arkansas: U.S. Geological Survey Open-File Report, 91 p.
- Bryant, C.T., Ludwig, A.H., and Morris, E.E., 1985, Ground-water problems in Arkansas: U.S. Geological Survey Water-Resources Investigations Report 85-4010, 24 p.
- Fenneman, N.M., 1938, Physiography of eastern United States: New York, McGraw-Hill Book Co., Inc., 689 p.
- Freiwald, D.A., 1984, Average annual precipitation and runoff for Arkansas, 1951-80: U.S. Geological Survey Water-Resources Investigations Report 84-4363, 1 sheet.
- Fitzpatrick, D. J., 1985, Occurrence of saltwater in the alluvial aquifer in Boeuf-Tensas Basin, Arkansas: U.S. Geological Survey Water-Resources Investigations Report 85-4029, 1 sheet.
- Gonthier, G.J., and Mahon, G.L., 1993, Thickness of the Mississippi River Valley confining unit, eastern Arkansas: U.S. Geological Survey Water-Resources Investigations Report 92-4121, 4 sheets.
- Holland, T.W., 1993, Use of water in Arkansas, 1990: U.S. Geological Survey Open-File Report 93-48, pamphlet.
- Mahon, G.L., and Poynter, D.T., 1993, Development, calibration, and testing of ground-water flow models for the Mississippi River Valley alluvial aquifer in eastern Arkansas using one-square mile cells: U.S. Geological Survey Water-Resources Investigations Report 92-4106, 33 p.
- Morris, E.E., and Bush, W.V., 1986, Extent and source of saltwater intrusion into the alluvial aquifer near Brinkley, Arkansas, 1984: U.S. Geological Survey Water-Resources Investigations Report 85-4322, 123 p.
- Pugh, A.L., Westerfield, P.W., and Poynter, D.T., 1997, Thickness of the Mississippi River alluvial aquifer in eastern Arkansas: U.S. Geological Survey Water-Resources Investigations Report 97-4049, 1 sheet.
- Stanton, G.P., Joseph, R.L., and Pugh, A.L., 1998, Status of water levels and selected water-quality conditions in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 1994-96: U.S. Geological Survey Water-Resources Investigations Report 98-4131, 72 p.



## **APPENDICES**



**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998  
[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
Arkansas County								
02S04W11DBB1	343233	912415	USGS	116	213.04	97.43	152	3/19/98
03S02W27ABB1	342448	911252	USGS	131	197	66.21	87	3/19/98
03S04W03DCA16	342649	912519	USGS	107	205	98.49	126	4/09/98
03S06W35ADD1	342416	913651	USGS	130	190	60.27	--	3/20/98
04S01W04DBB1	342232	910733	USGS	149	193	44.40	62.5	3/19/98
04S01W19AAD1	342012	910919	USGS	128	196	68.21	157.2	3/19/98
04S01W31DCB1	341753	910949	USGS	114	179	65.16	130	3/19/98
04S02W29CCC1	341846	911536	USGS	103	191	87.97	--	3/19/98
04S03W32BCB1	341832	912158	USGS	85	192	107.19	--	3/19/98
04S04W02ABB1	342312	912426	USGS	95	200	105.04	--	3/20/98
04S05W16CDC1	342047	913326	USGS	132	201	69.05	--	3/20/98
04S05W24DAA1	341957	912935	USGS	108	198	89.90	--	3/20/98
04S06W15DBB1	342122	913826	USGS	159	190	30.96	100	3/20/98
05S02W16ABD1	341553	911359	USGS	117	190	73.36	154	3/19/98
05S04W07CCC1	341556	912931	USGS	121	194	73.50	--	3/20/98
05S04W32BBA1	341311	912820	USGS	131	191	59.71	--	3/20/98
05S06W02DDD1	341723	913649	USGS	165	182.93	18.22	60	3/20/98
06S02W23DCD1	340855	911159	USGS	130	188	57.64	--	3/19/98
06S03W10BBA1	341137	911951	USGS	105	184	78.85	155	3/18/98
06S04W18CBB1	341014	912938	USGS	153	190.43	37.10	--	3/20/98
07S02W17BBA1	340529	911548	USGS	138	184	45.99	95	3/19/98
07S04W01DDD1	340622	912324	USGS	142	186	43.61	155	3/18/98
08S02W08ACA1	340040	911506	USGS	143	179	35.75	--	3/19/98
08S03WT2299	340146	912201	USGS	158	178	19.81	158	3/19/98
04S04W14CCA1	341859	912455	NRCS	78	196	118	--	4/16/98
05S03W16ABD1	341551	912019	NRCS	84	196	112	196	4/16/98
05S04W04BAA1	341750	912654	NRCS	92	186	94	--	4/16/98
05S04W14AAD1	341549	912411	NRCS	92	186	94	160	4/16/98
05S04W34BAC1	341309	912603	NRCS	117	191	74	142	4/16/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
06S02W03AAC1	341215	911256	NRCS	119	187	68	--	4/16/98
07S03W10ACB1	340607	911938	NRCS	133	181	48	--	4/16/98
Ashley County								
15S04W26DCC1	332232	912902	USGS	100	127	27.31	64.1	3/17/98
17S04W15DDC1	331252	912954	USGS	97	116	18.99	57	3/17/98
17S06W01ADD1	331518	913956	USGS	102	182	79.70	144	3/17/98
17S07W05CDD1	331501	915049	USGS	97	185	88.49	--	3/17/98
18S08W01AAB1	331015	915224	USGS	78	181	102.88	128	3/17/98
18S08W28DDD2	330624	915528	USGS	78	163.26	85.21	156	3/17/98
19S04W06BAB2	330504	913330	USGS	92	110	18.35	98	3/17/98
19S06W07BCC1	330404	914607	USGS	105	134.7	29.87	--	3/17/98
16S05W35DDA1	331549	913452	NRCS	111	125	14	100	5/21/98
18S05W11CCD1	330841	913538	NRCS	94	118	24	100	5/21/98
18S05W22DDA1	330712	913555	NRCS	101	125	24.5	100	5/21/98
19S04W14BBB1	330310	912913	NRCS	84	107	23	100	5/21/98
19S05W08ACA1	330405	913815	NRCS	92	111	19	--	5/21/98
19S05W16ABB1	330323	913718	NRCS	96	116	20.5	100	5/21/98
19S05W22DCD1	330139	913615	NRCS	93	107	14	--	5/21/98
Chicot County								
13S03W35BAC1	333154	912245	USGS	106	134	28.37	90	3/17/98
14S03W07BBD1	332925	912704	USGS	114	134	19.78	--	3/17/98
14S03W32DCB1	332613	912551	USGS	103	134	30.62	90	3/17/98
15S02W20DDC1	332225	911919	USGS	100	126	25.98	--	3/17/98
16S03W11ADC1	331920	912234	USGS	93	118	24.83	--	3/17/98
17S01E18ADA1	331340	910755	USGS	113	121	7.75	--	3/17/98
17S01W06BCC1	331500	911507	USGS	95	115	19.75	100	3/17/98
17S03W28DBA1	331125	912440	USGS	89	110	20.94	--	3/17/98
18S01W19DAB1	330706	911422	USGS	97	110	13.24	--	3/17/98
19S01W17BCC1	330249	911406	USGS	90	106	16.33	120	3/17/98
19S03W14ABB1	330304	912249	USGS	89	111	22.22	--	3/17/98
13S03W27AAA1	333253	912310	NRCS	103	138	35	--	5/14/98



**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14S02W09BDD1	332859	911729	NRCS	105	133	28	--	5/15/98
14S02W18BBDD1	332859	912038	NRCS	108	129	21	--	5/15/98
15S01W31ADA1	332113	911401	NRCS	110	126	16	--	5/15/98
17S03W18CBC1	331257	912736	NRCS	91	117	26	--	5/04/98
18S01W33BAD1	330543	911245	NRCS	106	116	10	--	5/04/98
Clay County								
18N08E03DAB1	361323	901153	USGS	251	257	5.99	105	4/02/98
19N03E24AAA1	361654	904157	USGS	261	278	17.50	--	4/02/98
19N08E02ABB1	361858	901103	USGS	265	269	4.34	--	4/02/98
20N04E06BB1	362443	904131	USGS	274	290	16.37	110	4/02/98
20N05E34DBA1	361938	903116	USGS	266	285	19.43	110	4/02/98
20N08E24DDA1	362055	900929	USGS	269	276	7.17	110	4/02/98
21N05E17ABB1	362755	903329	USGS	280	298	18.32	105	4/02/98
21N06E28BB1	362505	902659	USGS	277	292	14.92	130	4/02/98
21N08E18CCC1	362650	901550	USGS	298	324	25.55	110	4/02/98
18N08E11BAA1	361253	901117	NRCS	254	259	5	100	6/02/98
19N04E11DAA1	361805	903621	NRCS	261	280	18.7	--	6/02/98
19N04E19BAA1	361649	904125	NRCS	260	279	19.5	100	6/02/98
19N05E15BBD1	361716	903152	NRCS	264	289	25.5	110	6/02/98
19N06E18DBC1	361642	902815	NRCS	265	297	32.1	--	6/02/98
19N07E25BCB1	361519	901700	NRCS	252	268	16.2	--	6/02/98
19N08E08DCA1	361729	901402	NRCS	263	270	6.6	--	6/02/98
19N09E19CDC1	361539	900908	NRCS	261	265	4.5	--	6/02/98
20N03E25BAA1	362112	904225	NRCS	268	288	20	100	6/02/98
20N04E03ADA1	362425	903725	NRCS	275	290	15.5	--	6/02/98
20N05E15CAA1	362212	903135	NRCS	269	291	22.3	--	6/02/98
20N05E22CAD1	362118	903132	NRCS	267	290	22.9	--	6/02/98
20N05E30CAC1	362003	903454	NRCS	270	283	12.8	--	6/02/98
20N06E09BBA1	362327	902620	NRCS	275	290	15.2	--	6/02/98
20N06E28CCD1	362005	902630	NRCS	269	290	21.1	--	6/02/98
20N08E22BDC1	362111	901220	NRCS	267	275	8.5	--	6/02/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
20N09E09ABC1	362306	900642	NRCS	273	279	6.1	--	6/02/98
20N09E33DDC1	361904	900628	NRCS	265	270	5.5	--	6/02/98
21N03E36CDD1	362450	904214	NRCS	274	290	16.1	--	6/02/98
21N04E09DBC1	362828	903853	NRCS	281	291	10.1	--	6/02/98
21N05E22BAB1	362704	903132	NRCS	278	288	10	105	6/02/98
21N06E11BBB1	362839	902421	NRCS	287	296	8.9	100	6/02/98
21N07E01DDC1	362835	901607	NRCS	284	303	18.9	--	6/02/98
21N07E19BDA1	362640	902148	NRCS	276	295	19.5	--	6/02/98
21N08E04DDC1	362835	901252	NRCS	294	310	16.1	120	6/02/98
21N09E31BDA1	362447	900851	NRCS	280	284	4	100	6/02/98
Craighead County								
13N01E23DAA1	354436	905651	USGS	178	242	63.55	--	3/26/98
13N03E09BAA1	354638	904642	USGS	183	267	84.47	107	3/26/98
13N03E29AAA1	354402	904712	USGS	150	251	101.34	122	3/26/98
13N04E12ABB1	354635	903656	USGS	210	231	21.03	110	3/26/98
13N05E22BAD1	354449	903243	USGS	213	226	12.72	--	3/26/98
13N05E24BAC1	354451	903045	USGS	217	225	8.2	120	3/25/98
13N07E20BBA1	354439	902216	USGS	221	223.2	2.69	22.3	3/26/98
14N02E18BDD1	355049	905506	USGS	196	242	46.48	120	3/26/98
14N06E20CCD1	354921	902812	USGS	221	226	4.97	150	3/26/98
14N07E26DAB1	354828	901838	USGS	222	227	5.04	--	3/26/98
15N03E19ADA1	355506	904802	USGS	224	262	38.02	116	3/26/98
15N06E20DDD1	355426	902739	USGS	228	234	5.98	--	3/26/98
15N07E10DBA1	355627	901944	USGS	228	236	7.61	120	3/26/98
13N01E03AAA1	354739	905753	NRCS	193	240	47.3	128	4/03/98
13N01E21CAB1	354434	905945	NRCS	184	240	56.5	120	3/30/98
13N01E23CAB1	354430	905736	NRCS	185	245	60	120	3/30/98
13N02E02AAB1	354731	905032	NRCS	172	251	79	130	4/03/98
13N02E03AAA1	354733	905129	NRCS	172	250	78.3	101	4/03/98
13N02E15BBD2	354540	905220	NRCS	167	245	78.3	140	3/30/98
13N03E10BDB1	354625	904546	NRCS	187	265	78.3	150	3/30/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
13N03E23CDA1	354419	904434	NRCS	176	249	72.7	130	3/30/98
13N03E28CDB1	354322	904652	NRCS	156	250	94.5	121	3/30/98
13N04E15DBA1	354521	903857	NRCS	206	230	24.4	130	3/30/98
13N04E26BCC1	354340	903829	NRCS	201	225	24.4	100	3/30/98
13N05E02CCC1	354648	903202	NRCS	218	230	11.7	120	3/30/98
13N05E06DCC1	354637	903547	NRCS	211	229	17.7	110	4/07/98
13N06E03ACB1	354711	902610	NRCS	218	221	2.6	105	3/25/98
13N06E21CBD1	354425	902745	NRCS	215	221	6.3	100	3/25/98
13N07E02CAB1	354642	901901	NRCS	223	226	2.9	120	3/25/98
13N07E05ABB1	354716	902158	NRCS	219	225	6.1	120	3/25/98
13N07E23BCD1	354419	901909	NRCS	217	225	7.6	120	3/30/98
13N07E35BCD1	354233	901837	NRCS	210	221	10.6	120	3/28/98
14N01E03ACB1	355246	905816	NRCS	207	249	41.7	96	4/06/98
14N01E10BAB1	355204	905828	NRCS	204	246	42.1	96	4/06/98
14N01E31DCA1	354817	910121	NRCS	200	251	50.7	126	4/03/98
14N02E22AAA1	355007	905129	NRCS	189	255	66	132	3/30/98
14N05E23ADB1	354957	903115	NRCS	217	235	17.7	120	3/30/98
14N05E29BAB1	354915	903454	NRCS	221	236	15.3	120	3/30/98
14N06E06BAA1	355234	902934	NRCS	222	240	18	120	3/30/98
14N07E07BCB1	355124	902323	NRCS	226	230	4.3	98	3/25/98
14N07E14DDC1	354956	901831	NRCS	223	230	7.5	120	3/25/98
15N02E01BCA1	355748	904955	NRCS	228	254	26.2	100	4/06/98
15N02E12DCB1	355626	904930	NRCS	221	250	29.1	120	4/06/98
15N03E31ADA1	355313	904805	NRCS	222	270	47.6	150	4/06/98
15N05E22BAB1	355513	903241	NRCS	230	260	30	120	3/30/98
15N05E32ABC1	355323	903433	NRCS	228	250	22	120	3/30/98
15N06E04BAD1	355744	902706	NRCS	228	239	11	104	3/30/98
15N07E10DAB1	355622	901934	NRCS	228	235	7.3	106	3/25/98
15N07E21DAB1	355444	902043	NRCS	228	236	8.3	110	3/25/98
15N07E35DCB1	355241	901831	NRCS	221	231	9.9	120	3/30/98

Crittenden County

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
04N07E21AAD1	345643	902121	USGS	194	202	8.39	82.1	3/24/98
05N07E28CBA1	350124	902152	USGS	187	201	14.07	--	3/24/98
05N08E11CCD2	350345	901300	USGS	187	211	23.88	63	3/24/98
06N07E13BAA1	350848	901808	USGS	188	205	17.45	130	3/24/98
07N07E05DAD1	351504	902129	USGS	193	215	22.00	132	3/24/98
07N07E31CCC1	351043	902359	USGS	181	207	25.64	110	3/24/98
07N09E05CDD1	351453	900931	USGS	205	214	8.53	120	3/24/98
08N07E14DAA2	351853	901829	USGS	192	219	26.78	--	3/24/98
09N07E10DDA1	352448	901925	USGS	199	221	21.74	--	3/25/98
09N07E31BAB1	352200	902327	USGS	191	221	29.51	--	3/24/98
05N07E08BDC1	350407	902234	NRCS	188	204	16.5	110	4/21/98
05N07E34CDD1	350010	902026	NRCS	191	202	10.7	110	4/21/98
06N07E14ABA1	350848	901858	NRCS	195	211	16.1	110	4/20/98
07N06E29CBC1	351152	902914	NRCS	177	210	33	120	4/20/98
08N06E01DCC1	352021	902408	NRCS	186	215	29	120	4/20/98
08N06E06DDB1	352030	902920	NRCS	184	214	29.6	110	4/20/98
08N07E32DAA1	351618	902146	NRCS	188	215	26.7	110	4/20/98
09N07E02CDB1	352537	901905	NRCS	197	225	27.8	130	4/21/98
09N08E08CDC1	352359	901549	NRCS	203	225	22.5	120	4/20/98
Cross County								
07N01E05CDA1	351520	910052	USGS	153	217	63.78	140	3/24/98
07N02E29DDC1	351136	905408	USGS	155	221	65.67	--	3/24/98
07N03E05ADA1	351541	904738	USGS	143	254	110.61	160	3/24/98
07N03E32DCC1	351045	904810	USGS	158	251	93.38	--	3/24/98
07N05E19CCC1	351238	903644	USGS	175	207	31.84	--	3/24/98
07N05E25ABA1	351228	903039	USGS	176	205	28.58	140	3/24/98
08N05E32ADD1	351632	903438	USGS	175	204	28.87	--	3/24/98
09N01E33BBA1	352204	910002	USGS	155	225	70.48	--	3/24/98
09N03E17DDC1	352411	904731	USGS	145	251	105.88	160	3/24/98
09N05E32BDB1	352151	903511	USGS	184	210	26.14	--	3/24/98
06N02E11BDB1	350934	905132	NRCS	165	220	55	--	5/04/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
06N02E12AAA1	350934	904952	NRCS	164	235	71	--	5/04/98
07N01E06CAA1	351530	910154	NRCS	159	220	61	--	5/04/98
07N01E33BBA1	351134	910010	NRCS	156	215	59	--	5/04/98
07N02E29DDC1	351136	905408	NRCS	158	220	62	--	5/04/98
07N03E05AAD1	351558	904737	NRCS	155	255	100	--	5/04/98
07N04E04DBB1	351534	904021	NRCS	177	201	24	--	5/04/98
07N05E24CCC1	351232	903121	NRCS	177	205	28.2	110	4/21/98
07N05E25ABA1	351223	903047	NRCS	178	205	27	140	5/04/98
08N01E16DBB1	351855	905933	NRCS	150	225	75	--	4/27/98
08N02E12DCC1	351938	905002	NRCS	152	230	78	--	4/27/98
08N02E17AAA1	351923	905354	NRCS	151	225	74	--	4/27/98
08N04E34CCD1	351605	903945	NRCS	179	205	26	--	5/04/98
09N01E04ACD1	352608	905914	NRCS	151	225	74	140	4/27/98
09N01E36AAB1	352155	905605	NRCS	152	225	73	--	4/27/98
09N02E17AAB1	352438	905359	NRCS	150	235	85	193	5/04/98
09N02E20AAA1	352402	905342	NRCS	150	230	80	120	4/27/98
09N02E30CBB1	352243	905551	NRCS	148	225	77	--	4/27/98
09N03E03ACA1	352630	904529	NRCS	153	250	97	--	4/27/98
09N03E17CDD1	352422	904753	NRCS	146	245	99	--	4/27/98
09N04E03DBB1	352614	903918	NRCS	195	215	20	120	5/04/98
09N05E32BCB1	352151	903525	NRCS	181	206	25	--	5/04/98
Desha County								
08S03W33ABD1	335801	912337	USGS	160	165.04	5.29	60	3/16/98
09S02W26DDC1	335258	911523	USGS	129	149.27	20.23	94	3/16/98
09S03W17DCB1	335450	912445	USGS	128	155.08	27.32	126	3/16/98
09S04W06BCA1	335754	913243	USGS	135	161	25.56	--	3/16/98
10S02W24DBC1	334851	911441	USGS	123	143	19.82	--	3/16/98
10S03W26CAA1	334810	912206	USGS	117	155	37.98	96	3/16/98
11S03W31BBA1	334130	912651	USGS	126	148	21.87	--	3/17/98
12S01W33BAA1	333706	911207	USGS	120	135	15.28	95	3/17/98
13S02W27CAC1	333212	911736	USGS	104	133	29.02	120	3/17/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
13S03W10DAA1	333503	912304	USGS	102	140	37.74	86	3/17/98
07S01E19ABA1	340422	910605	NRCS	139	154	15	120	4/30/98
09S01W08BDA1	335608	911234	NRCS	135	156	21	--	4/22/98
09S02W20DAB1	335419	911835	NRCS	127	152	25	--	4/27/98
09S03W05BAC1	335704	912506	NRCS	123	161	38	--	4/22/98
09S03W13BAB1	335500	911922	NRCS	130	156	26	--	4/22/98
10S01W23CDA1	335305	911032	NRCS	137	151	14	--	4/22/98
10S02W11ADD1	335045	911517	NRCS	127	146	19	--	4/22/98
10S02W23ABC1	334913	911534	NRCS	120	147	27	--	4/22/98
11S02W15ADD1	334446	911635	NRCS	117	144	27	--	4/22/98
11S03W16CBA1	334439	912433	NRCS	130	155	25	--	4/22/98
13S02W05CDC1	333533	911936	NRCS	108	146	38	--	4/22/98
13S02W32DBD1	333126	911917	NRCS	100	135	35	--	4/22/98
13S03W11CAB1	333503	912241	NRCS	103	142	39	--	4/22/98
Drew County								
11S04W08DBA1	334535	913134	USGS	138	160	21.65	--	3/18/98
11S04W35CCD1	334140	912906	USGS	132	154.21	22.18	65.2	3/18/98
11S05W08CCC1	334545	913837	USGS	148	185	37.39	153	3/18/98
11S06W34DAC2	334231	914205	USGS	146	209	63.49	175	3/18/98
13S04W33ABA1	333205	913040	USGS	124	140	16.46	100	3/18/98
13S05W25CDD1	333211	913415	USGS	131	171	40.15	40.9	3/18/98
13S06W03DDC1	333545	914200	USGS	134	191	56.74	110	3/18/98
14S05W23DCB1	332802	913512	USGS	133	161	27.66	--	3/18/98
11S04W31DBA1	334207	913243	NRCS	143	153	10.3	100	4/23/98
12S04W25DBB1	333739	912738	NRCS	122	149	27	90	4/23/98
12S05W04AAB1	334159	913700	NRCS	142	181	39.3	130	4/23/98
13S04W09ACD1	333512	913034	NRCS	131	145	14.4	90	4/23/98
13S04W29CAB1	333231	913206	NRCS	124	135	11.4	100	4/23/98
13S06W21DAA1	333324	914258	NRCS	135	207	71.8	142	4/23/98
14S04W03ADD1	333050	912929	NRCS	120	141	21	92	4/23/98
14S04W05CBA1	333047	913218	NRCS	121	131	9.7	90	4/23/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14S04W08CDB1	332947	913213	NRCS	121	132	11	90	4/23/98
14S04W22CAA1	332805	912957	NRCS	116	135	19	100	4/23/98
15S04W13DAD1	332311	912702	NRCS	99	131	32	--	5/07/98
Greene County								
16N03E03BA1	360316	904515	USGS	237	260	23.47	100	4/02/98
16N06E03CCC1	360219	902625	USGS	214	258	43.93	194	4/02/98
16N06E28ABB1	355940	902655	USGS	227	251	24.14	--	4/02/98
17N03E02BDB1	360830	904412	USGS	243	266	22.52	115	4/02/98
17N07E18ABB1	360638	902235	USGS	238	245	6.69	--	4/02/98
18N04E21CBD1	361052	903725	USGS	244	294	49.68	--	4/02/98
18N07E20BBA1	361109	902104	USGS	251	257	5.92	--	4/02/98
19N03E26AD1	361555	904301	USGS	256	281	25.26	100	4/02/98
16N03E29ACC1	355926	904722	NRCS	234	257	23.3	90	4/07/98
16N06E09ABB1	360215	902651	NRCS	215	261	46.2	90	4/06/98
16N06E21BAA1	360031	902705	NRCS	221	249	27.6	130	4/06/98
17N03E28CDB1	360422	904626	NRCS	237	260	23.5	100	4/07/98
17N06E15ABC1	360631	902546	NRCS	236	268	31.8	168	4/07/98
17N06E22CBB1	360520	902521	NRCS	236	268	31.8	200	4/06/98
17N07E03CCC1	360744	901951	NRCS	240	246	6	87	4/08/98
17N07E29CBC1	360419	902201	NRCS	242	245	2.8	80	4/06/98
18N04E28DCD1	360946	903903	NRCS	238	270	31.9	100	4/08/98
18N07E17BAB1	361203	902105	NRCS	256	262	6.2	100	4/07/98
18N08E29CBA1	360952	901447	NRCS	246	250	4	105	4/08/98
19N04E30DBB1	361532	904119	NRCS	255	281	26.4	100	4/08/98
19N05E34AAD1	361437	903102	NRCS	258	282	24.1	130	4/07/98
19N05E34BDD1	361426	903141	NRCS	257	287	29.7	100	4/07/98
Independence County								
12N04W09CAA1	354047	912535	USGS	215	236	21.22	--	3/27/98
12N04W14DD1	353950	912250	USGS	211	231	19.92	60	3/27/98
12N04W34CBB1	353718	912506	USGS	219	231	11.92	--	3/27/98
12N05W36AAD2	353736	912826	USGS	220	235	15.38	--	3/27/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14N03W14DAA2	355107	911602	USGS	228	230	1.77	--	3/27/98
14N03W12CAB1	355152	911541	NRCS	228	230	2.3	--	6/15/98
Jackson County								
09N01W22ADD1	352330	910432	USGS	161	218	56.65	125	3/30/98
09N02W32CBB1	352151	911347	USGS	195	220	25.27	117	3/30/98
10N02W29ABB1	352829	911309	USGS	205	227	21.84	--	3/30/98
10N03W30DBB1	352739	912144	USGS	205	221	16.18	100	3/30/98
11N01W25BBC1	353330	910323	USGS	168	231	63.32	--	4/01/98
11N03W06DAB1	353652	912034	USGS	213	223	9.71	100	3/30/98
12N02W25ABB2	353909	910851	USGS	206	234	28.08	--	4/01/98
12N03W35BCA1	353800	911706	USGS	212	220	8.12	95	3/30/98
13N01W20AAA1	354513	910625	USGS	211	242	31.08	147	4/01/98
13N03W15CDD1	354526	911749	USGS	218	232	13.57	--	4/01/98
14N01W09AAA1	355219	910512	USGS	215	251	35.51	--	4/01/98
09N01W15DDD1	352357	910433	NRCS	169	216	47.5	90	4/13/98
09N01W30BAC1	352258	910813	NRCS	182	218	35.7	120	4/13/98
09N02W32BBB1	352215	911344	NRCS	194	220	26.1	100	4/13/98
10N01W05ADD1	353132	910702	NRCS	189	227	38.5	--	4/13/98
10N01W10ABA1	353055	910445	NRCS	174	223	49.4	135	4/13/98
10N03W30CAB1	352737	912158	NRCS	203	221	17.8	120	4/13/98
11N02W25BBD1	353141	910921	NRCS	200	221	21.2	100	4/13/98
11N03W12DDB1	353542	911515	NRCS	221	231	10	150	4/13/98
12N01W11BCB1	354127	910416	NRCS	200	233	33.2	110	4/13/98
12N01W30CCC2	353812	910821	NRCS	200	227	26.9	140	4/13/98
12N01W36CBC1	353724	910317	NRCS	190	236	45.9	120	4/13/98
13N01W23BCC1	354444	910413	NRCS	208	246	38	100	4/13/98
13N02W34CBB1	354306	911151	NRCS	225	240	15	100	4/13/98
13N03W15DCB1	354540	911718	NRCS	229	238	8.6	80	4/13/98
13N03W36ABB1	354337	911532	NRCS	229	241	12	110	4/13/98
14N01W08AAA1	355216	910623	NRCS	224	252	28.2	80	4/13/98
14N01W19BBB1	355032	910823	NRCS	221	246	25.2	100	4/13/98



**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14N01W26BCB1	354922	910407	NRCS	210	247	37	110	4/13/98
14N01W33CCD1	354759	910610	NRCS	213	245	31.6	100	4/13/98
14N02W22BBC1	355026	911145	NRCS	229	250	21.5	100	4/13/98
Jefferson County								
03S08W24BBC1	342621	914950	USGS	160	202	41.52	--	3/13/98
03S09W06DDA1	342837	920039	USGS	191	225	34.32	--	3/13/98
03S09W29CBD1	342517	920023	USGS	191	216	24.78	--	3/13/98
04S08W13DCB1	342123	914926	USGS	168	204	35.67	110	3/13/98
05S06W31CAA1	341329	914200	USGS	178	189.22	11.39	--	3/13/98
05S07W19BCC1	341530	914905	USGS	179	199.23	20.22	59	3/13/98
06S06W23AAD1	341007	913707	USGS	173	189.01	15.65	107	3/13/98
07S07W18CAC1	340647	915037	USGS	164	186	21.54	--	3/13/98
07S08W06BAA1	340901	915646	USGS	186	202.31	16.30	160	3/13/98
03S07W36ACC1	342410	914253	NRCS	158	185	27.4	--	4/24/98
03S09W14BCD1	342712	915712	NRCS	188	220	32	--	4/27/98
03S09W27AAB1	342542	915742	NRCS	183	219	36	--	4/27/98
03S09W36ACC1	342428	915555	NRCS	185	214	28.8	--	4/27/98
03S10W26BBB2	342427	920249	NRCS	199	215	16.1	--	4/27/98
04S07W35DDB1	341836	914347	NRCS	162	185	23.1	--	4/24/98
04S08W33CDA1	341848	915244	NRCS	181	209	28	--	4/24/98
04S09W01DAA2	342333	915526	NRCS	181	213	31.6	--	4/27/98
04S09W32DDA1	341859	920008	NRCS	195	212	17.2	--	4/27/98
07S07W18ADA2	340708	914959	NRCS	162	188	26.2	--	4/24/98
Lawrence County								
15N01W35CBB1	355330	910352	USGS	210	250	39.94	--	4/01/98
15N01E26DDA1	355412	905651	USGS	210	251	41.09	100	4/01/98
16N01E11DAC2	360203	905639	USGS	217	262	45.47	--	4/01/98
16N01W30DDC1	355937	910723	USGS	238	255	17.09	105	4/01/98
17N02E19CDD1	360516	905449	USGS	232	265	33.37	--	4/01/98
15N01E11ADD1	355657	905638	NRCS	219	255	36.4	100	5/20/98
15N01E23DAD1	355502	905637	NRCS	212	250	38.3	100	5/21/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
15N01W03BAB1	355831	910441	NRCS	232	259	27.4	105	5/21/98
15N01W23BCD1	355527	910352	NRCS	217	255	37.7	110	5/28/98
15N01W30AAA1	355509	910710	NRCS	227	254	27.5	110	5/20/98
16N01E12AAB1	360235	905503	NRCS	223	260	36.9	110	5/26/98
16N01E29ADD1	355943	905945	NRCS	222	261	39.2	105	5/11/98
16N01E35AAA1	355908	905632	NRCS	217	256	38.7	105	5/11/98
16N02E09AAD1	360219	905212	NRCS	228	261	32.8	110	5/20/98
16N02E19ACA1	360031	905442	NRCS	224	260	36.1	110	5/26/98
16N02E34CBB1	355831	905208	NRCS	217	255	38	100	5/20/98
17N01E02BBA1	360901	905707	NRCS	252	260	8	90	5/06/98
17N01E21CBC1	360543	905931	NRCS	248	265	16.6	110	5/06/98
17N01E27AAA1	360519	905732	NRCS	241	270	28.8	110	5/19/98
17N01W26BBC1	360520	910348	NRCS	242	260	18.4	82	5/19/98
17N01W36AAB1	360435	910158	NRCS	249	257	7.7	85	5/19/98
17N02E04DCA1	360758	905224	NRCS	239	270	31.3	110	5/19/98
17N02E19CDC1	360516	905459	NRCS	236	265	29.5	105	5/19/98
17N02E21ABD1	360554	905225	NRCS	234	268	33.9	105	5/19/98
17N02E25CBD1	360423	904948	NRCS	237	265	28.2	100	5/19/98
Lee County								
01N03E02BBC1	344341	904600	USGS	196	236.43	40.58	168	3/20/98
01N03E35BBA1	343923	904549	USGS	198	202	4.44	120	3/20/98
02N01E23BAA2	344630	905817	USGS	156	202	45.59	137	3/19/98
02N04E15DAC1	344636	903949	USGS	174	192	18.19	--	3/20/98
03N01E16CBA1	345223	910041	USGS	148	202	54.06	110	3/19/98
03N02E13BBA1	345237	905103	USGS	167	212	44.68	--	3/19/98
03N03E32CAB1	344914	904837	USGS	191	204	12.88	116	3/19/98
03N05E14DDA1	345148	903202	USGS	178	193	15.32	120	3/20/98
01N01E04AAB1	344358	910025	NRCS	158	175	17.5	140	5/05/98
01N01E09CCC1	344215	910054	NRCS	163	182	19.5	140	5/05/98
01N01E24CBD1	344033	905729	NRCS	176	185	9.1	140	5/05/98
01N02E01ADD1	344330	905016	NRCS	174	207	33.5	140	5/28/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
01N02E09BAB1	344255	905208	NRCS	177	202	25	140	5/27/98
01N02E12ABB1	344254	905040	NRCS	172	206	34	140	5/27/98
01N02E22CBA1	344056	905318	NRCS	181	200	19.5	140	5/05/98
01N02E33CBB1	343858	905434	NRCS	177	186	8.7	140	5/05/98
01N02E33CCB1	343851	905433	NRCS	176	185	8.6	140	5/05/98
02N01E21BAA1	344633	910005	NRCS	162	185	23.30	140	4/29/98
02N01W34DDC1	344410	910520	NRCS	145	180	35.3	140	5/01/98
02N02E22BBB1	344628	905327	NRCS	174	200	26.40	140	4/29/98
02N02E33DCD1	344351	905352	NRCS	168	205	37	140	5/27/98
02N02E36DDC1	344355	905020	NRCS	175	205	30	140	5/27/98
02N03E09DDD1	344723	904707	NRCS	180	220	40.30	140	4/30/98
02N03E29CAD1	344500	904846	NRCS	176	220	44	140	5/27/98
02N04E03ABD1	344855	903954	NRCS	170	192	22	140	5/28/98
03N01E03CBC1	345355	905941	NRCS	150	205	55	140	4/29/98
03N01E32BCC1	344951	910150	NRCS	145	200	55	140	4/29/98
03N02E12CDC1	345239	905053	NRCS	171	210	39.20	140	4/28/98
03N02E21CBC1	345111	905428	NRCS	163	209	46.30	140	4/28/98
03N03E11DCC1	345245	904507	NRCS	177	229	52	140	5/28/98
03N03E18DAB1	345206	904919	NRCS	176	196	20	140	5/28/98
03N04E07CBB1	345245	904312	NRCS	176	200	24.5	140	5/28/98
03N05E03ADB1	345403	903316	NRCS	177	197	20	140	5/28/98
03N05E26ADC1	345020	903215	NRCS	180	185	5.5	140	5/28/98
Lincoln County								
08S04W08BBB2	340254	913100	USGS	158	171	12.67	65.2	3/16/98
08S04W31CBA1	335858	913154	USGS	137	161.9	24.48	99	3/16/98
08S06W02ACB1	340336	913955	USGS	147	181.03	33.58	68	3/16/98
08S07W09BBD1	340248	914845	USGS	164	189.8	26.12	--	3/16/98
09S05W08CCB1	335619	913820	USGS	142	171	29.42	97	3/16/98
09S05W14ABC1	335545	913435	USGS	143	172.5	29.91	98	3/16/98
09S06W04BCD1	335821	914346	USGS	148	181	32.88	62.6	3/16/98
09S06W23CDB1	335440	914136	USGS	150	175	25.36	--	3/16/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
10S05W06DCC1	335155	913908	USGS	151	175	24.14	--	3/16/98
07S06W03CCA2	340828	914114	NRCS	175	190	15	116	5/01/98
07S07W36CBD1	340411	914529	NRCS	158	183	25	123	5/01/98
08S04W06ABD1	340341	913116	NRCS	160	171	11	95	5/01/98
08S05W12AAD1	340246	913214	NRCS	149	165	16	83	5/01/98
08S05W21DDC1	340116	913527	NRCS	153	174	21	120	5/01/98
08S05W29ABC1	340021	913044	NRCS	140	176	36	100	5/01/98
08S05W32DCC1	335840	913644	NRCS	137	172	35	100	5/01/98
09S04W06CBB1	335721	913252	NRCS	136	163	27	110	5/01/98
09S05W19CCC1	335428	913941	NRCS	150	171	21	110	5/01/98
09S06W04BDD1	335759	914335	NRCS	151	178	27	100	5/01/98
Lonoke County								
01N09W13DAB1	344235	915517	USGS	143	226	83.26	--	4/09/98
01N10W11BBD1	344355	920321	USGS	215	240	25.19	--	4/09/98
01S07W12BCB1	343820	914308	USGS	122	211	89.29	120	4/09/98
01S09W36CCC1	343435	915619	USGS	166	220	54.26	--	4/09/98
01S10W01ACB1	343929	920213	USGS	194	236	41.99	--	4/09/98
02N08W16ABC1	344811	915203	USGS	119	230	110.56	128	4/09/98
02N09W17CCB1	344746	920006	USGS	173	253.2	80.49	127	4/15/98
02S07W10CCB1	343238	914524	USGS	145	201	55.77	--	4/09/98
02S08W34DBB1	343002	915150	USGS	153	214	60.78	--	4/09/98
02S09W30CDD1	343014	920116	USGS	190	226	36.48	--	4/09/98
03N07W15DBC2	345254	914415	USGS	150	227	77.36	144.5	4/10/98
03N07W35CDC2	344957	914332	USGS	119	232	112.95	--	4/10/98
03N08W21BCC1	345157	915224	USGS	190	247	56.53	155	4/10/98
03N10W34ABB1	345101	920352	USGS	202	257	55.24	116	4/10/98
04N08W15BCB2	345833	915120	USGS	195	225	29.68	104	4/10/98
01N07W07ABB2	344351	914748	NRCS	108	226	118.3	--	4/08/98
01N08W03DDA1	344411	915050	NRCS	110	229	119.2	--	4/08/98
01N08W14DAA1	344237	914946	NRCS	109	230	120.8	--	4/08/98
01N08W18CCB1	344228	915459	NRCS	132	222	90.1	--	4/08/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
01N09W07DAA1	344337	920029	NRCS	194	240	45.6	--	4/08/98
01N09W25BAA1	344120	915537	NRCS	147	226	79.3	--	4/08/98
01N10W15CDA1	344236	920414	NRCS	220	240	20.3	--	4/08/98
01S06W17BCD1	343714	914040	NRCS	119	206	86.8	--	4/08/98
01S06W32BBB1	343501	914056	NRCS	129	201	71.9	--	4/08/98
01S08W16DCC1	343702	915220	NRCS	143	216	73.3	100	4/08/98
01S09W02DDD1	343857	915623	NRCS	155	230	74.8	--	4/08/98
01S09W36CCC1	343435	915619	NRCS	165	220	55	--	4/08/98
02N07W07DAA1	344845	914707	NRCS	114	232	118.5	--	4/08/98
02N08W23CAB1	344659	915118	NRCS	102	229	127	--	4/08/98
02N09W18ABB1	344822	920046	NRCS	183	261	78	--	4/08/98
02N10W15ACC1	344807	920352	NRCS	211	241	30.1	--	4/08/98
02N10W24DBA1	344708	920158	NRCS	190	237	46.8	--	4/08/98
02S07W05CDC1	343326	914715	NRCS	144	205	60.7	--	4/08/98
02S07W20ACD1	343112	914655	NRCS	149	201	52.1	--	4/08/98
02S07W29BCC1	343021	914728	NRCS	153	203	49.8	--	4/04/98
02S08W22CCC1	343058	915055	NRCS	158	216	57.6	--	4/08/98
02S09W22AAA1	343153	915727	NRCS	171	226	55	--	4/08/98
02S09W26DC1	343019	915643	NRCS	174	216	42.4	100	4/08/98
03N07W32CCD2	345003	914650	NRCS	132	238	106.4	--	4/08/98
03N08W26CDC1	345100	915007	NRCS	136	235	98.9	--	4/08/98
Mississippi County								
10N08E22ABA2	352851	901312	USGS	205	224	19.38	100	3/31/98
11N09E34BBB1	353213	900727	USGS	223	235	11.53	94	3/31/98
12N08E08BCB1	354050	901559	USGS	217	225	7.82	120	3/31/98
12N09E32DAA1	353708	900837	USGS	214	226	11.54	--	3/31/98
13N09E30CCD1	354250	901030	USGS	221	230	9.08	--	3/31/98
13N10E34DBB1	354218	900024	USGS	229	235	6.08	98	3/31/98
14N08E12DAB1	355102	901051	USGS	230	235	5.16	--	3/31/98
14N10E18ABC1	355005	900346	USGS	225	236	11.03	101	3/31/98
14N12E05DCB1	355133	894937	USGS	240	250	10.25	--	3/31/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
15N08E08DBC2	355606	901527	USGS	227	236	9.07	120	3/31/98
16N10E28BBD1	355906	900156	USGS	229	238	8.92	120	3/31/98
16N11E23AAD1	355949	895233	USGS	243	255	12.35	--	3/31/98
10N08E21ABA1	352852	901415	NRCS	204	224	20	110	6/02/98
10N08E21BDC1	352830	901407	NRCS	203	224	21.08	100	6/02/98
11N10E09BCB1	353530	900202	NRCS	224	236	12.08	120	6/02/98
12N08E28DDB1	353707	901406	NRCS	212	225	12.9	120	6/02/98
12N09E12ABC1	354054	900449	NRCS	220	232	11.58	120	6/01/98
12N10E04CAA1	354124	900136	NRCS	229	235	6.08	120	6/02/98
12N10E07BCD1	354036	900404	NRCS	222	234	11.9	110	6/01/98
12N10E21DBA1	353842	900122	NRCS	226	236	10.3	110	6/02/98
13N08E24ABB1	354428	901112	NRCS	223	230	7	120	6/02/98
14N08E20DAA1	354921	901458	NRCS	221	225	4.3	110	6/02/98
14N08E26DCC1	354804	901215	NRCS	227	230	3.5	110	6/02/98
14N11E17CCB1	354955	895639	NRCS	233	240	7.5	120	6/02/98
14N11E33CAA1	354727	895508	NRCS	229	240	11	120	6/02/98
15N10E21ABC1	355447	900135	NRCS	228	240	12	120	6/02/98
15N12E01BCD1	355704	894601	NRCS	251	258	7.5	100	6/02/98
16N10E28BBD1	355921	900155	NRCS	232	240	7.67	120	6/02/98
Monroe County								
01N01W21CDC2	344034	910706	USGS	154	181	27.06	150	3/19/98
01N03W24BBB1	344135	911651	USGS	161	185	23.51	125	3/18/98
01N04W33BBB2	343959	912648	USGS	128	218	90.37	--	3/19/98
01S01W13CDD1	343613	910344	USGS	166	178	12.07	135	3/18/98
01S01W18DCD1	343617	910848	USGS	160	178	18.08	110	3/18/98
01S02W20BBB1	343614	911451	USGS	161	170	9.12	100	3/18/98
01S03W29BBA1	343539	912118	USGS	141	210	69.07	140	3/19/98
01S04W01BAB1	343906	912317	USGS	138	210	71.73	160	3/19/98
02N01W19BBA1	344645	910910	USGS	145	191	46.29	--	3/19/98
02N02W11CBB1	344802	911119	USGS	146	195	49.32	93	3/19/98
02S02W01BCA1	343318	911030	USGS	163	171	8.09	--	3/19/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
03N01W20ABA1	345201	910721	USGS	149	189	39.79	--	3/19/98
03N03W36AAA1	345021	911547	USGS	159	176	16.88	120	3/19/98
04N02W27CDD3	345539	911150	USGS	159	200	41.33	181	3/19/98
04N02W28DDD3	345535	911221	USGS	165	192	27.37	137	3/19/98
04N02W30BBB1	345628	911524	USGS	171	185.16	14.25	119	3/19/98
01N01W03CDB1	344322	910557	NRCS	144	185	41	100	4/27/98
01N03W23BAC1	344124	911743	NRCS	161	170	9	100	4/28/98
01S01W16DB1	343615	910632	NRCS	160	175	15	100	4/27/98
01S02W20BBB1	343614	911451	NRCS	162	170	8	100	4/27/98
02N01W19ADD1	344624	910814	NRCS	143	188	45	100	4/27/98
02N03W35BCA1	344455	911745	NRCS	164	188	24	100	4/28/98
02S01W01BCD1	343305	910408	NRCS	153	176	23	100	4/27/98
04N02W01BCC1	345929	911004	NRCS	141	175	34	100	4/27/98
04N02W05BBB1	345957	911311	NRCS	173	188	15	100	4/27/98
Phillips County								
01S02E09CBB1	343718	905433	USGS	177	185	7.66	110	3/18/98
02S01E28CCB1	342916	910058	USGS	160	174	13.96	108	3/18/98
02S03E15ACD1	343108	904626	USGS	165	174	9.38	112	3/18/98
02S04E27AAC1	342932	904002	USGS	172	179	7.39	75	3/18/98
03S02E35DDA1	342258	905133	USGS	149	163	13.62	--	3/18/98
04S01E23CCA1	341928	905853	USGS	146	156	10.08	--	3/18/98
05S02E18BDA1	341534	905630	USGS	141	156	14.68	130	3/18/98
01S01E20DDB1	343529	910058	NRCS	168	185	17	114	4/30/98
01S02E32BCC1	343350	905526	NRCS	167	200	33	120	4/30/98
01S03E02ADD1	343814	904511	NRCS	185	200	15	120	4/30/98
01S03E10ABB1	343741	904634	NRCS	190	205	15	120	4/30/98
01S03E20BDD1	343533	904846	NRCS	177	210	33	120	4/30/98
01S04E05DCD1	343802	904151	NRCS	187	230	43	120	4/30/98
02S02E29DDD1	342901	905444	NRCS	157	180	23	125	4/30/98
02S02E33ACC1	342824	905412	NRCS	155	177	22	120	4/30/98
02S03E34BCD1	342828	904653	NRCS	149	165	16	120	4/30/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
03S04E02CAA1	342732	903918	NRCS	161	176	15	110	4/30/98
04S01E14CDD1	342014	905837	NRCS	143	155	12	120	4/30/98
04S01E29CDC1	341844	910148	NRCS	141	150	9	120	4/30/98
04S02E01DBB1	342220	905053	NRCS	154	163	9	--	4/30/98
Poinsett County								
10N01E14CC1	352906	905737	USGS	149	231	81.67	150	3/25/98
10N02E13BCC1	352948	905027	USGS	138	237	99.16	167	3/25/98
10N03E14DAB1	352947	904407	USGS	141	263	122.08	--	3/25/98
10N05E15BDD1	352936	903250	USGS	194	207	12.66	--	3/25/98
10N07E22AAC1	352847	901935	USGS	192	215	23.36	--	3/25/98
11N01E17DDD1	353437	910024	USGS	161	230	68.69	100	3/25/98
11N02E05BDA1	353704	905405	USGS	155	245	89.92	175	3/26/98
11N02E26AAB1	353349	905035	USGS	141	241	99.86	158	3/25/98
11N07E18CAB1	353435	902320	USGS	202	217	14.57	100	3/25/98
12N01E07CDA1	354051	910142	USGS	187	236	49.08	120	3/25/98
12N03E04DAD1	354158	904602	USGS	151	247	96.14	120	3/25/98
12N05E34ABA1	353804	903231	USGS	208	215	7.18	100	3/25/98
12N07E04BAA1	354201	902100	USGS	217	223	5.51	--	3/25/98
10N01E02AAA1	353205	905654	NRCS	148	235	87	100	4/03/98
10N01E32CBB1	352657	910053	NRCS	177	222	45	120	4/03/98
10N01E33ACB1	352746	905931	NRCS	153	220	67	120	4/03/98
10N02E20BAB1	352906	905418	NRCS	146	237	91	100	4/03/98
10N03E29BBD1	352820	904805	NRCS	151	236	85	100	4/03/98
10N04E35BBA1	352745	903831	NRCS	194	212	18	100	4/02/98
11N01E17DDC1	353437	910015	NRCS	162	232	70	100	4/03/98
11N01E34AAA1	353256	905759	NRCS	151	229	78	100	4/03/98
11N02E10CBC1	353555	905228	NRCS	136	245	109	200	4/03/98
11N02E30BBB1	353352	905540	NRCS	146	239	93	100	4/03/98
11N02E34CBA1	353238	905222	NRCS	149	240	91	180	4/03/98
11N04E23CCB1	353356	903834	NRCS	193	215	22	100	4/02/98
11N04E36ABA1	353251	903654	NRCS	195	211	16	100	4/02/98



**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
12N01E22DAB1	353922	905809	NRCS	168	235	67	100	4/02/98
12N02E10CBD1	354108	905229	NRCS	139	250	111	200	4/03/98
12N02E25DCC1	353820	904944	NRCS	145	245	100	120	4/02/98
12N02E34CCC1	353724	905230	NRCS	142	245	103	180	4/03/98
12N03E01CBD1	354154	904329	NRCS	164	250	86	140	4/02/98
12N04E08CDA1	354053	904112	NRCS	169	250	81	100	4/02/98
12N04E15AAA1	354040	903833	NRCS	200	225	25	60	4/02/98
12N05E16ABA1	354039	903333	NRCS	212	221	9	100	4/02/98
12N07E10CBB1	354042	902022	NRCS	209	220	11	100	4/02/98
Prairie County								
01N05W20DCB1	344118	913348	USGS	93	211	118.07	157	3/11/98
01N06W05CCB1	344354	914049	USGS	107	220	112.66	155	3/11/98
01N06W26CDD1	344015	913708	USGS	141	218	77.03	105	3/10/98
01S04W28BDB1	343521	912630	USGS	112	205	93.00	112	3/11/98
01S05W14BBC1	343722	913108	USGS	100	211	111.36	118	3/11/98
02N04W02BCB1	344916	912418	USGS	167	188	21.31	140	3/12/98
02N04W32CCB1	344436	912737	USGS	139	221	81.92	--	3/11/98
02N05W06BAB1	344956	913454	USGS	135	221	86.11	145	3/12/98
02N05W13AAB1	344805	912854	USGS	169	223	53.56	130	3/11/98
02N05W29DDB2	344544	913308	USGS	114	228	114.22	--	3/11/98
02N06W17ABB1	344809	913959	USGS	106	235	128.75	180	3/11/98
02S06W14BBB1	343213	913729	USGS	142	201	58.78	105	3/10/98
03N04W03AAC1	345439	912423	USGS	163	187	23.81	106	3/12/98
03N05W03BDD2	345444	913115	USGS	148	207	59.36	110	3/12/98
03N06W19BDD1	345207	914110	USGS	143	221	78.03	105	3/12/98
04N04W07ADC1	345851	912732	USGS	172	195	23.49	110	3/12/98
04N05W07CDC1	345843	913446	USGS	139	212	73.37	--	3/12/98
04N05W31DDC1	345514	913406	USGS	135	206	70.59	104	3/12/98
04N06W05CCC1	345934	914018	USGS	149	206	57.22	100	3/12/98
05N05W14DCD1	350252	913034	USGS	172	205	33.02	--	3/12/98
01S04W28BBC1	343529	912650	NRCS	110	206	95.8	180	5/27/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
04N06W08DAB1	345900	913930	NRCS	145	206	60.8	140	5/27/98
05N05W25BAA1	350153	912949	NRCS	177	187	10.5	100	5/27/98
05N05W28DDA1	350119	913228	NRCS	163	191	28.4	85	5/27/98
Pulaski County								
01S10W29CC1	343544	920635	USGS	219	233	14.23	100	4/07/98
02N10W05BCC1	344953	920635	USGS	218	239	20.96	97	4/07/98
02S10W14DC1	343213	920309	USGS	200	225	24.68	60	4/07/98
02S11W23BCB1	343150	921024	USGS	230	236.76	6.73	80.3	4/07/98
Randolph County								
18N01E34AAC1	360942	905729	USGS	251	266	14.62	--	4/01/98
18N02E22DC1	361054	905057	USGS	245	276	31.11	110	4/01/98
19N02E09DCA1	361759	905158	USGS	264	267	2.71	--	4/01/98
20N02E01ADD1	362424	904811	USGS	270	280	9.87	65	4/01/98
20N03E28BA1	362101	904532	USGS	266	276	9.98	--	4/01/98
18N01E13BAB1	361230	905551	NRCS	256	266	10.1	110	6/02/98
18N01E28AAD1	361040	905820	NRCS	252	265	12.7	120	5/21/98
18N02E03DAD1	361336	905043	NRCS	256	280	24.4	120	6/02/98
18N02E20BDA1	361125	905332	NRCS	245	274	28.7	110	6/02/98
19N02E04AAB1	361930	905145	NRCS	261	268	7	80	5/21/98
19N02E09ABD1	361826	905157	NRCS	259	266	6.8	80	5/21/98
20N02E12BAA1	362352	904848	NRCS	271	281	10.1	120	5/22/98
20N02E14DAB1	362232	904930	NRCS	264	274	9.9	100	5/21/98
20N02E21CDD1	362117	905107	NRCS	262	270	8.5	110	5/21/98
20N03E07AAD1	362424	904811	NRCS	269	281	11.8	110	5/22/98
20N03E33CCA1	361941	904552	NRCS	268	287	18.6	--	5/22/98
St. Francis County								
04N01W28CDD1	345536	910634	USGS	145	208	62.86	--	3/23/98
04N02E19BBB1	345701	905633	USGS	158	209	51.03	72.2	3/23/98
04N03E21DAD1	345623	904656	USGS	185	236	51.40	--	3/23/98
04N05E22BBB1	345654	903359	USGS	173	200	26.88	--	3/24/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
05N01E15BCB1	350303	905942	USGS	152	209	56.65	94.1	3/23/98
05N02E20ADC1	350157	905437	USGS	163	211	47.73	79	3/23/98
05N03E20AAA2	350214	904801	USGS	159	250	90.69	153.45	3/23/98
05N04E25BCC1	350054	903815	USGS	171	203	31.80	122.2	3/24/98
05N06E34CAB1	350029	902658	USGS	177	200	23.07	110	3/24/98
06N01E33ACA2	350557	905943	USGS	153	211	58.50	--	3/23/98
06N02E15BDD1	350842	905247	USGS	163	214.64	51.82	75	3/23/98
06N05E22ACC1	350723	903249	USGS	167	200	32.82	--	3/24/98
04N01E05AAA1	345952	910054	NRCS	141	207	66	140	5/05/98
04N01W20BBB1	345716	910303	NRCS	147	200	53	140	5/05/98
04N01W25DBD1	345549	910303	NRCS	129	199	70	140	5/05/98
04N02E20ACC1	345635	905456	NRCS	157	211	54	120	5/05/98
04N04E15ABA1	345752	903948	NRCS	171	201	30.5	120	5/06/98
05N01E06CDA1	350437	910218	NRCS	150	211	61.5	--	5/05/98
05N03E29CCB1	350039	904858	NRCS	177	221	44	140	5/05/98
05N05E21CAB1	350144	903448	NRCS	169	203	34.5	120	5/06/98
05N06E05BBB1	350508	902922	NRCS	167	195	28	120	5/06/98
06N02E16CCC1	350804	905403	NRCS	158	216	58	120	5/05/98
06N02E18ABB1	350854	905535	NRCS	156	211	55.5	140	5/05/98
06N03E17CAA1	350822	904810	NRCS	163	258	95	--	5/05/98
06N06E17DDC1	350749	902830	NRCS	174	202	28	--	5/06/98
06N06E20ABB1	350745	902849	NRCS	174	200	26	120	5/06/98
White County								
05N07W09AAA1	350447	914441	USGS	190	205	15.34	29.5	3/25/98
06N06W04BAD1	351037	913903	USGS	177	215	38.26	--	3/30/98
06N06W18BBC1	350858	914051	USGS	193	210	17.45	--	3/30/98
06N06W34AAB1	350623	913752	USGS	154	213	58.58	--	3/25/98
06N07W17DCC1	350821	914634	USGS	206	217	11.39	90	3/30/98
06N08W26DDB1	350641	914928	USGS	216	230	13.81	89	3/30/98
07N05W01AAA1	351553	912858	USGS	191	205	13.55	--	3/25/98
07N05W32BAB1	351137	913358	USGS	187	213.7	27.15	80	3/25/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
07N06W19CAB1	351258	914132	USGS	214	224	9.92	38	3/30/98
08N04W06CCB1	352028	912847	USGS	199	214	14.99	74	3/25/98
08N05W32CBC1	351616	913417	USGS	197	199	2.16	--	3/25/98
09N04W01ABC1	352613	912250	USGS	201	215	13.92	--	3/20/98
06N06W13DBB1	350918	913552	NRCS	160	213	53	--	6/24/98
06N06W18BCA1	350835	914150	NRCS	184	210	26.5	--	6/24/98
Woodruff County								
04N03W03AB1	345951	911900	USGS	174	185	11.06	100	3/23/98
05N02W20DCB1	350209	911356	USGS	180	192	11.80	--	3/23/98
05N04W12DBA1	350426	912211	USGS	183	186	3.06	92	3/23/98
06N01W06BAB1	351047	910832	USGS	176	202	26.22	--	3/24/98
06N01W33ADB2	350600	910559	USGS	155	216	60.88	--	3/24/98
06N03W15BAB1	350905	911812	USGS	184	188.79	4.33	111	3/23/98
07N03W19AAA1	351337	912027	USGS	193	202.59	9.17	--	3/23/98
08N01W06DDD1	352028	910747	USGS	180	218	37.64	--	3/23/98
08N02W31DDD1	351611	911411	USGS	192	194.55	2.24	40	3/23/98
08N04W27AAA1	351757	912341	USGS	198	200	2.30	--	3/23/98
09N03W29AAD1	352258	911921	USGS	200	220	20.19	--	3/23/98
05N01W13CDC1	350244	910331	NRCS	146	210	64.1	135	3/18/98
05N01W31CCC1	350106	910900	NRCS	149	210	61.1	140	4/27/98
05N03W25ddb1	350133	911531	NRCS	182	190	7.9	120	3/18/98
05N03W31BAC1	350110	912127	NRCS	175	178	3	120	4/27/98
06N02W19AAA1	350802	911419	NRCS	183	225	42	130	3/18/98
06N04W22BDA1	350807	912428	NRCS	184	186	2.2	120	3/18/98
07N01W04ACB1	351624	910601	NRCS	170	225	55	125	4/27/98
07N02W16DBB1	351353	911225	NRCS	186	206	19.8	110	4/27/98
07N03W05AAD1	351603	911824	NRCS	194	213	18.6	120	3/18/98
07N03W06BAC1	351607	912109	NRCS	190	211	21.5	100	3/18/98
07N03W31BBA1	351152	912103	NRCS	182	190	8.4	120	4/27/98
08N01W10AAA1	352018	910431	NRCS	163	211	47.8	160	3/18/98
08N02W15ACA1	351942	911115	NRCS	191	209	18.1	100	3/18/98

**Appendix 1.** Information pertaining to measured wells completed in the alluvial aquifer, 1998--Continued  
 [USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
08N02W27DDB1	351711	911107	NRCS	192	213	21.1	120	3/18/98
09N03W28ABB1	352310	911845	NRCS	203	220	17.2	120	3/18/98
09N03W32ACA1	352205	911936	NRCS	202	217	15	120	4/27/98



**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
Arkansas County						
02S03W09DCD1	343204	911951	7/21/98	158	563	11
02S04W11DBB1	343233	912415	7/21/98	152	925	42
03S02W27ABB1	342448	911252	7/21/98	87	538	5.8
04S02W11AAA1	342207	911125	7/21/98	--	588	9
04S02W29CCC1	341846	911536	7/21/98	--	1,090	77
04S03W32BCB1	341832	912158	7/20/98	--	882	34
04S04W02ABB1	342312	912426	7/20/98	--	1,250	75
04S06W16BD1	342130	914000	7/8/98	--	541	--
05S04W07CCC1	341556	912931	7/20/98	--	1,120	120
06S03W27AAA1	340857	911811	7/21/98	132	1,460	200
07S02W04BBB1	340704	911451	7/21/98	--	506	16
07S04W01DDD1	340622	912324	7/21/98	155	1,090	65
Ashley County						
15S04W23DBD1	332245	912852	7/23/98	--	398	17
16S06W27BAB1	331729	914240	7/23/98	115	663	23
17S07W05CDD1	331501	915049	7/23/98	--	896	22
18S04W27DA1	330606	912941	7/6/98	100	537	--
18S08W01AAB1	331015	915224	7/22/98	128	726	28
Chicot County						
13S03W35BAC1	333154	912245	8/17/98	90	425	17
14S03W32DCB1	332613	912551	8/17/98	90	456	23
17S01E17CDA1	331308	910748	8/17/98	110	723	4.8
17S03W09ADA1	331415	912426	8/17/98	--	3,630	820
17S03W28BAA2	331147	912502	8/17/98	--	3,800	750
18S02W01BAA1	331011	911540	7/28/98	--	521	--
19S01W17BCC1	330249	911406	7/22/98	120	699	7.9
Clay County						
19N04E19AAA1	361651	904045	8/20/98	--	485	5
19N08E28BB1	361519	901318	6/30/98	90	343	--
19N08E31DAB1	361412	901503	6/30/98	100	386	9.1

**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998--Continued

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
20N05E34DBA1	361938	903116	8/20/98	110	745	11
21N04E34DDC1	362445	903729	6/29/98	104	498	5.7
Craighead County						
13N02E02AD1	354712	905038	7/7/98	110	954	--
15N06E19AAB1	355516	902856	6/30/98	110	744	7.9
16N07E32ADD1	355813	902139	7/7/98	100	286	4.4
Crittenden County						
06N07E11BBB1	350942	901940	7/13/98	110	522	2.5
06N07E13BAA1	350848	901808	8/20/98	130	718	2.8
07N07E09BC1	351434	902140	7/14/98	100	601	--
07N07E31CCC1	351043	902359	8/20/98	110	822	3.8
07N08E01BBB1	352104	901823	7/14/98	60	592	6.6
07N08E26BDA1	351204	901240	7/13/98	125	651	5.4
Cross County						
07N01E05CDA1	351520	910052	8/19/98	140	895	86
07N02E29DDC1	351136	905408	8/19/98	--	747	32
07N05E19CCC1	351238	903644	8/20/98	--	555	6.6
07N05E32AA1	351136	903443	6/18/98	120	831	--
09N05E32BDB1	352151	903511	8/20/98	--	468	5.2
Desha County						
09S01W15CBB1	335501	911056	7/30/98	--	978	--
09S02W22 ABB1	335442	911639	7/30/98	105	978	35
09S04W06BCA1	335754	913243	8/18/98	--	795	72
10S03W26CAA1	334809	912209	8/18/98	--	880	49
10S04W08BDD1	335046	913144	8/18/98	106	657	27
12S01W31AAB1	333709	911342	8/18/98	96	944	18
13S02W27CAC1	333212	911736	8/18/98	120	808	91
13S03W10DAA1	333503	912304	8/18/98	86	738	47
Drew County						
11S04W08DBA1	334535	913134	8/17/98	--	608	42
11S05W08CCC1	334522	913837	7/23/98	153	199	26



**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998--Continued

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
14S04W27AA1	332734	912925	7/30/98	100	680	--
Greene County						
16N06E28ABB1	355940	902655	8/20/98	--	621	15
17N04E30CDC1	360410	904209	8/20/98	100	937	6.9
19N03E26AD1	361555	304301	6/29/98	100	329	--
Jackson County						
09N01W20BDD1	352338	910805	6/16/98	60	601	5.5
10N02W08CD1	353040	911257	6/16/98	110	423	--
11N01W26AAD1	353326	910329	8/20/98	95	682	12
12N02W25ABB2	353909	910851	8/20/98	--	618	8.5
13N01W23BCB1	354455	910415	6/17/98	100	718	41
13N02W28DDC1	354341	911208	6/17/98	102	525	6.9
Jefferson County						
03S07W16AAA1	342714	914538	8/21/98	102	962	52
03S09W18CCB1	342657	920139	7/16/98	100	1080	71
03S09W31DDA1	342415	920048	7/20/98	--	763	48
04S08W02DDA1	342304	915000	7/27/98	110	530	20
04S08W13DCB1	342123	914926	8/21/98	110	610	12
05S06W31CAA1	341329	914200	8/21/98	--	947	17
06S06W23AAD1	341007	913707	8/21/98	107	669	35
06S08W24CD1	341052	915130	7/16/98	110	793	--
07S07W18CAC1	340647	915037	8/21/98	--	646	23
07S08W06BAA1	340901	915646	8/21/98	160	280	13
Lawrence County						
16N02E05BA1	360326	905352	7/1/98	100	710	--
16N02E34BDA1	355839	905150	7/1/98	120	708	7.2
Lee County						
01N03E02BBC1	344341	904600	7/29/98	168	502	6.5
01N03E23CCC1	344025	904604	7/15/98	120	924	10
02N02E21ABC1	344620	905358	7/29/98	120	589	7.3
03N03E33CB1	344941	904804	7/15/98	120	867	--

**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998--Continued

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
Lincoln County						
07S06W28CBB1	340508	914232	7/24/98	90	604	32
08S04W08BBB2	340254	913100	7/24/98	65.2	767	14
08S04W19CCC1	340021	913201	7/28/98	100	1,240	140
09S05W13CDB1	335505	913350	7/23/98	133	458	25
09S06W04BCD1	335821	914346	7/24/98	62.6	460	13
09S07W01DC1	335714	914637	7/27/98	100	266	--
10S05W06DCC1	335155	913908	8/17/98	--	622	98
Lonoke County						
01N07W29BBB1	344114	914720	7/28/98	--	491	7.7
02N01W23BCA1	344725	920321	7/28/98	--	504	14
02N07W02BBA1	344957	914338	7/27/98	--	389	10
02N08W16ABC1	344811	915203	7/27/98	128	333	19
02S07W04DA1	343339	914535	6/9/98	105	721	--
02S08W13BBB1	343230	914950	7/28/98	--	757	46
03N08W21BCC1	345157	915224	7/27/98	155	331	21
Mississippi County						
12N08E08BCB1	354050	901559	8/20/98	120	1,220	6.8
12N08E20DAD1	353841	901459	7/8/98	110	485	2.6
14N10E22BB1	354941	900101	7/20/98	120	674	--
15N13E08AAB1	355639	894302	7/20/98	85	740	2.1
Monroe County						
01N02W12CBC1	344242	911030	6/9/98	110	677	12
01N03W24BBB1	344135	911651	7/28/98	125	334	9.5
01N04W33BBB2	343959	912648	7/28/98	--	894	15
02S02W01BCA1	343318	911030	7/29/98	--	484	7.5
03N02W31ADC1	344958	911446	7/28/98	--	421	17
Phillips County						
02S01E28CCB1	342916	910058	8/18/98	108	729	36
02S04E27AAC1	342932	904002	8/18/98	75	614	5

**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998--Continued

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
03S02E35AD1	342320	905033	7/17/98	120	730	--
04S01E23CCA1	341928	905853	8/18/98	--	937	14
Poinsett County						
10N02E13BCC1	352948	905027	8/20/98	167	1,340	140
10N03E14DAB1	352947	904407	8/20/98	--	889	9
10N03E35CDD1	352651	904437	8/20/98	--	777	11
10N06E16 ADD1	352934	902654	7/8/98	100	759	7
11N01E17DDD1	353437	910024	8/20/98	100	694	12
11N02E05BDD1	353658	905408	6/16/98	180	716	11
11N02E26AAB1	353349	905035	8/20/98	158	926	8.4
12N05E27DB1	353830	903202	6/16/98	150	726	--
Prairie County						
01N05W20DCB1	344118	913348	8/19/98	157	623	11
01S05W14BBC1	343722	913108	8/19/98	118	533	31
02N04W02BCB1	344916	912418	8/19/98	140	440	12
02N05W29DDB2	344544	913308	8/19/98	--	701	28
02N06W20CB1	344643	914031	7/13/98	142	730	--
02S06W14BBB1	343213	913729	8/19/98	105	486	36
04N05W31DDC1	345514	913406	8/19/98	104	702	18
04N06W05CCC1	345934	914018	8/19/98	100	874	50
05N05W14DCD1	350252	913034	8/19/98	--	1,040	45
Pulaski County						
01S10W29CC1	343544	920635	8/18/98	--	969	9.5
02S10W14DC1	343213	920309	8/18/98	60	1,090	110
Randolph County						
21N03E31DA1	362505	904710	6/17/98	65	290	--
St. Francis County						
04N01E13DDA1	345708	905638	7/30/98	--	893	50
04N01W24DAA1	345647	910245	7/6/98	64.05	956	26
04N01W28CDD1	345536	910634	7/30/98	--	868	43
04N02E22DAC1	345631	905220	7/9/98	120	665	11

**Appendix 2.** Water-quality data from wells completed in the alluvial aquifer and sampled during the summer of 1998--Continued

[ $\mu$ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Specific conductance ( $\mu$ S/cm)	Chloride, dissolved (mg/L)
04N06E19DAA1	345628	902957	7/14/98	100	492	2.1
06N02E13DCA1	350812	905002	7/29/98	--	731	33
White County						
06N06W34AAB1	350623	913752	8/19/98	--	648	19
06N07W17DCC1	350821	914634	8/19/98	90	228	18
Woodruff County						
05N03W35CC2	350021	911735	8/19/98	--	228	6.8
06N01W10ABB1	350944	910512	6/18/98	150	571	8.9
06N01W33ADB2	350600	910559	8/19/98	--	816	18
07N01W32CCD1	351046	910741	8/19/98	--	575	7.5
07N02W04ADA1	351550	911201	6/15/98	127	399	6.4
08N03W31AAD1	351655	912028	8/19/98	110	684	17

☆ U.S. GOVERNMENT PRINTING OFFICE: 1999-755-177 / 40032

Joseph, Robert L.—STATUS OF WATER LEVELS AND SELECTED WATER-QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY  
ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 1998—U.S. Geological Survey WRIR 99-4035