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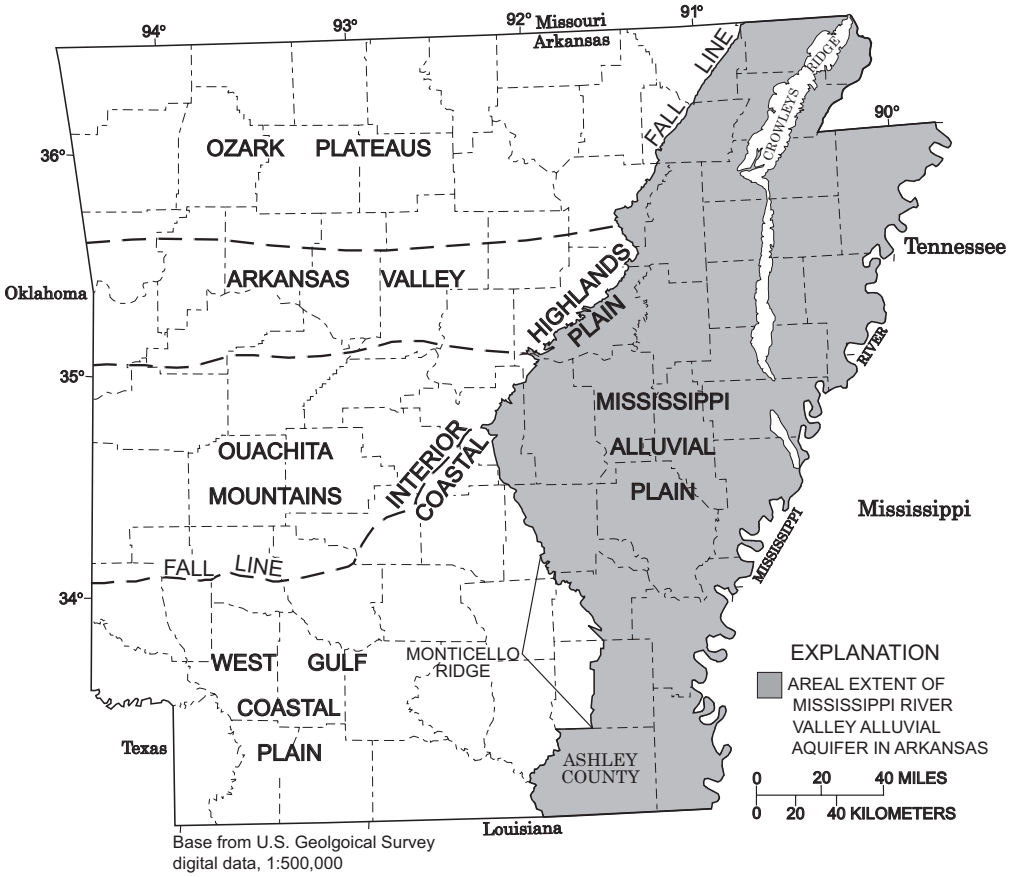
Status of Water Levels and Selected Water-Quality Conditions in the Mississippi River Valley Alluvial Aquifer in Eastern Arkansas, 2004



Prepared in cooperation with the
Arkansas Natural Resources Commission and the
Arkansas Geological Commission

Scientific Investigations Report 2006-5128

U.S. Department of the Interior
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U.S. Department of the Interior
Dirk Kempthorne, Secretary

U.S. Geological Survey
P. Patrick Leahy, Acting Director

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[In pocket]

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Conversion Factors, Vertical Datum, and Abbreviations

Multiply	By	To obtain
	Length	
inch (in)	2.54	centimeter (cm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
	Flow rate	
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

°F = (1.8 x °C) + 32

Temperature in degrees Fahrenheit (°F) may be converted to degrees Celsius (°C) as follows:

°C = (°F-32)/1.8

Vertical coordinate information is referenced to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)

Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD of 1983)

Specific conductance is given in microsiemens per centimeter at 25 degrees Celsius (µS/cm at 25°C).

Status of Water Levels and Selected Water-Quality Conditions in the Mississippi River Valley Alluvial Aquifer in Eastern Arkansas, 2004

by T.P. Schrader

Abstract

During the spring of 2004, water levels were measured in 684 wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas. Ground-water levels are affected by intense ground-water withdrawals resulting in extensive potentiometric depressions. In 2004, the highest water-level altitude measured was 293 feet above National Geodetic Vertical Datum of 1929 in northeastern Clay County. The lowest water-level altitude measured was 76 feet above National Geodetic Vertical Datum of 1929 in the center of Arkansas County. A large depression in the potentiometric surface was located in Arkansas, Lonoke, and Prairie Counties during 1998 and persisted to 2002. The area enclosed in the 100-foot contour in Arkansas County in 2004 is about the same as in 2002, however, the area enclosed in the 100-foot contour in Lonoke and Prairie Counties in 2004 has receded. Two shallower cones of depressions were located in Craighead, Cross, and Poinsett Counties and St. Francis, Woodruff, Lee, and Monroe Counties west of Crowleys Ridge during 1998. The 2004 potentiometric-surface map shows that the areas enclosed by the 140-foot contour have continued to expand.

A map of changes in water-level measurements between 2000 and 2004 was constructed using the difference between water-level measurements from 625 wells reported in this report and the 2000 Mississippi River Valley alluvial aquifer report. Water-level changes between 2000 and 2004 ranged from -31.1 feet to 16.3 feet, with a mean of -0.7 feet (negative changes indicating water-level declines, positive changes indicating water-level rises). The largest rise of 16.3 feet is in Arkansas County and the largest decline of -31.1 feet is in Prairie County.

Long-term water-level changes were calculated for 134 wells in the alluvial aquifer for the period from 1980 to 2004. The mean annual decline in water level for the entire study area was -0.31 feet per year with a range of -1.35 feet per year to 0.84 feet per year. The analysis of long-term water-level changes (1980-2004) in the depression in Arkansas and Prairie Counties shows the effects of the elongation of this depression.

Water samples were collected from 138 wells completed in the alluvial aquifer and measured onsite for specific conductance and temperature. Samples were collected at 71 wells for dissolved chloride analysis at the U.S. Geological Survey National Water Quality Laboratory. Specific conductance ranged from 205 microsiemens per centimeter at 25 degrees Celsius at a well in Lonoke County to 1,440 microsiemens per centimeter at 25 degrees Celsius at a well in Monroe County.

Introduction

The Mississippi Alluvial Plain (fig. 1) encompasses an area of approximately 32,000 square miles and includes parts of Arkansas and nearby states. 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 West Gulf Coastal Plain and the Interior Highlands) and the Monticello Ridge (a topographic feature in southeastern Arkansas), and near the western Ashley County line (fig. 1).

The land use in eastern Arkansas has become increasingly agricultural since 1900 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 46-54 inches precipitation annually to support these crops (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. Increasingly farmers and aquaculturists are relying on water from the alluvial aquifer for agriculture and aquaculture.

In 1985, estimated water withdrawals from the alluvial aquifer in Arkansas totaled about 3,500 million gallons per day (Mgal/d) (Holland, 1987) (fig. 2); estimated withdrawals increased to 4,300 Mgal/d in 1990 (Holland, 1993). In 1995, estimated water withdrawals totaled about 5,062 Mgal/d (Holland, 1999); and in 2000, estimated water withdrawals totaled about 7,050 Mgal/d (Holland, 2004). The increase in estimated water withdrawals from 1995 to 2000 in the alluvial aquifer in Arkansas is about 39 percent.

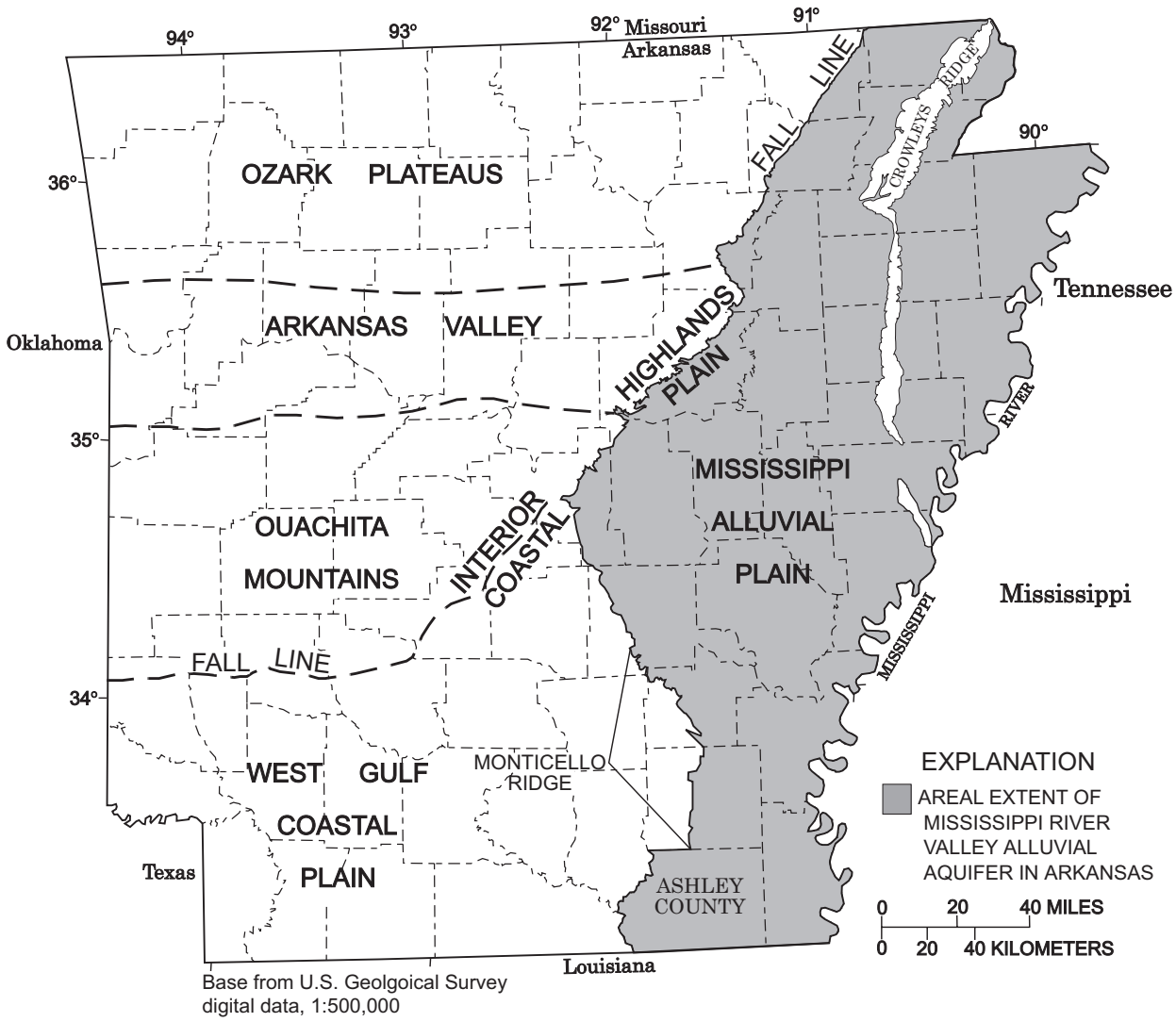


Figure 1. Location of study area.

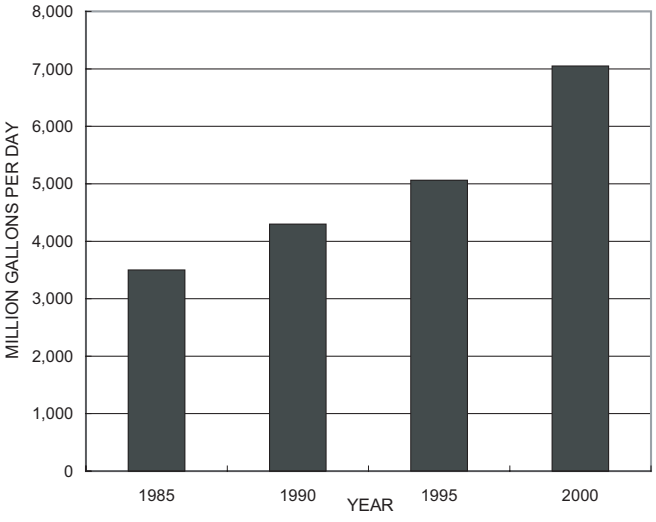


Figure 2. Water use in the Mississippi River Valley alluvial aquifer in Arkansas.

In the spring of 2004, the U.S. Geological Survey (USGS), in cooperation with the Arkansas Natural Resource Commission (ANRC) and the Arkansas Geological Commission, measured water levels in 361 wells in the alluvial aquifer in eastern Arkansas. The U.S. Department of Agriculture-Natural Resources Conservation Service (NRCS) measured water levels in 337 wells completed in the alluvial aquifer and provided these data to the ANRC. 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. Because the USGS and NRCS both measure water levels in 14 wells for quality assurance of measurement techniques, a total of 698 measurements were made in 684 wells.

During the summer of 2004, water samples from 138 wells were analyzed for specific conductance and water samples from 71 wells were analyzed for dissolved chloride. These analyses provided information for a database of selected water-quality data for the alluvial aquifer.

The purpose of this report is to describe the status and trends of water levels and the status of selected water-quality constituents in the alluvial aquifer. The report includes maps, long-term hydrographs, and data tables. Scheduled monitoring and evaluation of conditions in the alluvial aquifer provide information necessary for resource management.

The well-numbering system used in this report is based upon the locations 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. 3) 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.

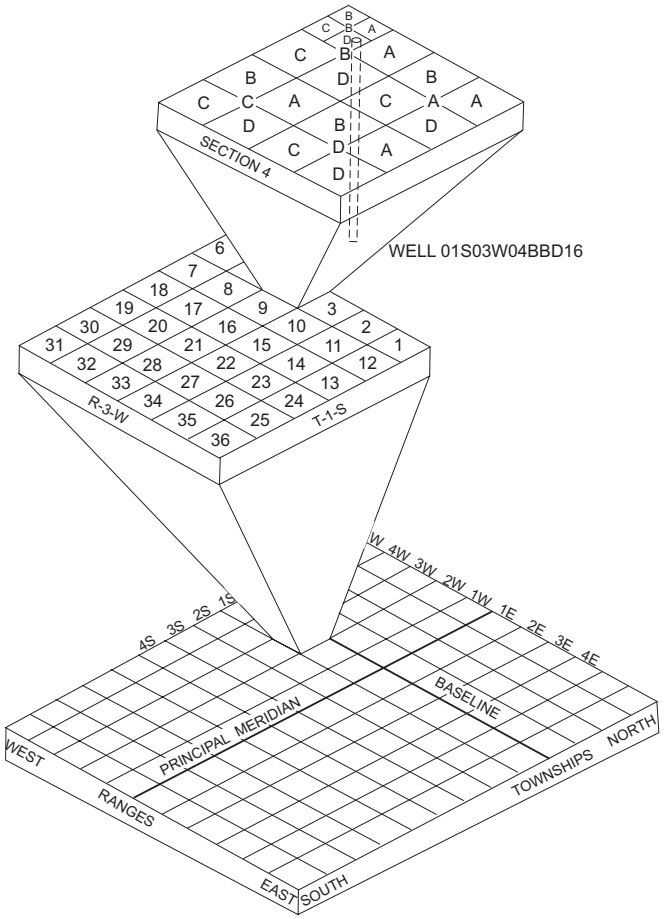


Figure 3. Well-numbering system.

Methods

Personnel from the USGS and the NRCS measured water levels from February 2004 to May 2004 from wells screened in the alluvial aquifer. Measurements by USGS were made with steel or electric tapes graduated in hundredths of a foot, whereas those made by NRCS were in tenths of a foot or whole feet. The steel and electric tapes used by USGS personnel were calibrated during January 2004 prior to collecting measurement from wells. Calibration of steel and electric tapes was performed by comparing the field steel or electric tape to a standardized steel tape used only for calibration of field tapes.

Well locations were measured using Global Positioning System receivers to acquire the horizontal coordinate information (latitude and longitude), based on the North American Datum of 1983. Land-surface altitude (feet above National Geodetic Vertical Datum of 1929 (NGVD of 1929)) was determined for each well by superposition of the wells latitude and longitude on a topographic map and is accurate to about one-half the topographic contour interval at 5 or 10 feet (ft).

Specific conductance was measured in samples from selected wells using specific-conductance meters with temperature compensation. Specific-conductance meters were calibrated twice daily by use of standard solutions. Most of the wells sampled were irrigation wells sampled during pumping. Specific conductance and temperature were checked for 5 minutes or until stabilized before sample collection. Public supply and industrial wells were pumped for a minimum of three well volumes and specific conductance and temperature were checked for 5 minutes or until stabilized before sample collection. Samples collected for chloride analysis were collected after specific conductance and temperature had stabilized, then chilled until shipped for analysis at the USGS National Water Quality Laboratory in Ocala, Florida. The analytical method is an ion chromatographic method, I-2057-85 (Fishman and Friedman, 1989). Preservation is not required for chloride analysis.

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). Because coarse sediments are contained in the lower sections of the alluvial and terrace deposits, the aquifer is capable of sustaining high yielding wells (Ackerman, 1996). Finer sediments in the upper sections of the alluvial and terrace deposits form a confining unit above much of the aquifer. This confining unit is thin or has been completely removed by erosion in some areas, especially near large rivers within the study area (Gonthier and Mahon, 1993). Channel fill, point bar, and backswamp deposits, associated with present or former channels of large rivers, have produced abrupt changes in lithology resulting in large spatial variations in the hydraulic properties of the aquifer (Joseph, 1999).

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

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

Water Levels

Water levels measured in wells screened in the alluvial aquifer (appendix 1) were used to produce a regional potentiometric-surface map (plate 1). A water-level difference map from 2000 to 2004 (plate 2) was produced by subtracting 2004 water-level measurements from 2000 water-level measurements (appendix 2). Data from wells that have at least 25 years of record were used to produce hydrographs shown on figure 4. The hydrographs indicate long-term trends in water levels, which in some cases reflect the development of depressions in the potentiometric surface.

The USGS and NRCS both measure water levels within 14 control wells for quality assurance of measurement techniques. Comparing the depth-to-water measurements (appendix 1) between the USGS and NRCS measurements, the difference in the measurements shows a range of 0.15 ft to 11.65 ft, with the elapsed time between measurements ranging from 6 to 31 days. The median difference is 1.91 ft between measured water levels. Of the 14 quality-assurance sites, 10 have differences of less than 2.5 ft.

Potentiometric Surface

The potentiometric-surface map (plate 1) shows the altitude at which water would have risen in tightly cased wells completed in the alluvial aquifer. The map on plate 1 is based on 698 water-level measurements (361 by USGS and 337 by NRCS) made in 684 wells during the spring of 2004 (appendix 1). The surface was mapped using the altitude of the water levels measured in the wells and is represented on the map by contours that connect points of equal altitude. The general direction of ground-water flow is perpendicular to the contours in the direction of decreasing potentiometric altitude.

Ground-water levels are affected by intense ground-water withdrawals within the study area, resulting in extensive depressions. In 2004, the highest measured water-level altitudes of 293 ft above NGVD of 1929 was in northeastern Clay County. The lowest measured water-level altitude of 76 ft above NGVD of 1929 was in the center of Arkansas County.

Previous reports described three large depressions in the alluvial aquifer potentiometric surface (Stanton and others, 1998; Joseph, 1999; Schrader, 2001; Reed, 2004). The depressions or other areas of reduced water level are shaded on plate 1. A large, elongated area of depression extended across Arkansas, Lonoke, and Prairie Counties. Two shallower potentiometric depressions were documented in Lee, Monroe, St. Francis,

and Woodruff Counties, and also in Craighead, Cross, and Poinsett Counties.

The elongated depression in Arkansas, Lonoke, and Prairie Counties has two areas with different status when compared to previous conditions of the aquifer. The area in Arkansas County at the southeastern half of the depression has not expanded horizontally from recent years, although the center of the depression has deepened. The area enclosed by the 100-ft contour in Arkansas County in 1998 had contracted in 2000 and further contracted in 2002. In 2004, the area enclosed by the 100-ft contour is about the same area as in 2002. The Arkansas and White Rivers that bound Arkansas County on the southwestern and eastern county lines are connected hydrologically and provide recharge to the alluvial aquifer. A comparison of measured water-level altitudes from 1998 to 2004 at the lowest measurement point in the depression in central Arkansas County indicates that water levels were recovering from 1998 to 2002. The lowest measured water-level altitudes in the alluvial aquifer in Arkansas County in 1998, 2000, and 2002 were 78, 80, and 86 ft above NGVD of 1929, respectively (Joseph, 1999; Schrader, 2001; Reed, 2004). The lowest measured water-level altitude in 2004 showed a decline of 10 ft to 76 ft above NGVD of 1929.

The area in Lonoke and Prairie Counties in the northwestern half of the depression has expanded horizontally with the deeper part of the depression declining in area. The boundary of the depression has moved westward into Lonoke County and northward into Prairie County. The area enclosed by the 100-ft contour in 1998 in Prairie and Lonoke Counties expanded further into Lonoke County in 2000 and 2002 but contracted in Prairie County by 2002. The area in Lonoke County covers significantly less area than in 2002. The lowest measured water-level altitude in Lonoke County shows little change from 2002 to 2004 with an altitude of 88 ft and 89 ft above NGVD of 1929, respectively.

Along the west side of Crowleys Ridge the two previously documented areas of depression expanded and coalesced to a single depression by 2002 (Reed, 2004). The 2004 potentiometric-surface map shows very little change in the area of this depression, although the deeper areas within the depression have expanded. The 2004 potentiometric-surface map shows that the areas enclosed by the 140-ft contour have continued to expand. Areas enclosed by 140-ft contours in different areas in northern and east-central Monroe, northwestern Lee, and western St. Francis Counties contracted and later expanded from 1998 to 2002. The lowest water-level measurement in the depression in Lee, Monroe, St. Francis, and Woodruff Counties has deepened to 125 ft above NGVD of 1929 in 2004.

In central Drew County, near the western boundary of the study area, a cone of depression was first noted in the 2002 potentiometric-surface map (Reed, 2004). The area enclosed by the 130-foot contour has expanded and the deepest water level measured in the center of the depression has declined by 8 ft to an altitude of 118 ft above NGVD of 1929.

Three potentiometric-surface depressions were noted by Schrader (2001) in southeastern Arkansas—one that extends from southern Desha County into northern Chicot County, a second in eastern Lincoln County, and a third that extended from western Chicot County into eastern Ashley County. The depression in southern Desha and northern Chicot Counties was first evident in the 1998 potentiometric surface (Joseph, 1999) and had expanded radially and vertically by 2000 (Schrader, 2001). This depression expanded southward by 2002 but had not appreciably deepened. This area shows very little change in the 2004 potentiometric surface from the 2002 potentiometric surface. The depressions in eastern Lincoln County and in western Chicot and eastern Ashley Counties were not evident in 1996 and 1998. The depression in eastern Lincoln County continued to deepen through 2004, a maximum depth of 118 ft above NGVD of 1929, while the depression in western Chicot and eastern Ashley Counties shows very little change in the 2004 potentiometric surface from the 2002 potentiometric surface.

A potentiometric-surface depression in Greene County was noted first in 1998 by Joseph (1999) and in 2000 by Schrader (2001) and deepened by 2002 (Reed, 2004). This depression has contracted in area in 2004. In 2004, a potentiometric-surface depression present since 1994 in St. Francis, Crittenden, and Cross Counties east of Crowleys Ridge (Stanton and others, 1998, plate 1) is no longer evident. Continued monitoring of the potentiometric surface will determine if these depressions are the result of short-term variations or long-term changes in the hydrologic conditions in the alluvial aquifer.

The regional direction of ground-water flow is generally to the south and east except where flow is affected by “intense” ground-water withdrawals; however, the flow direction is affected over substantial areas by depressions. Ground-water flow is indicated by black arrows on plate 1. Ground-water flows from all directions around the depressions towards the center of the depressions in Arkansas, Lonoke, and Prairie Counties and west of Crowleys Ridge. The flow along large sections of the Arkansas, Mississippi, and White Rivers is away from the rivers. These large sections would be called ‘losing streams,’ where water from the river is flowing into the aquifer. East of Crowleys Ridge water flows from north to south along Crowleys Ridge and northeast to southwest along the Mississippi River. South of the Arkansas River the flow is towards the southeast, except in northwestern Desha County where flow is towards the depression and along the Mississippi River where flow is towards the south.

Water-Level Difference from 2000 to 2004

A map showing the difference in water level (plate 2) was constructed using the difference in water levels measured in 625 wells in 2004 (appendix 2) and 2000 (Schrader, 2001). Differences in water level were calculated by subtracting the 2004 depth-to-water measurement from the 2000 depth-to-water measurement. Positive values indicate a rise and negative values indicate a decline in water level. Rises in water level are indicated on plate 2 with blue triangles pointing upward; declines in the water level are indicated with red triangles pointing downward. The triangles are scaled to the value of the rise or decline.

The change in measured water levels from 2000 to 2004 ranged from -31.1 ft to 16.3 ft, with a mean of -0.7 ft. The largest rise of 16.3 ft occurred in Arkansas County and the largest decline of -31.1 ft occurred in Prairie County. The area adjacent to the westside of Crowleys Ridge is dominated by declines in water level, except at the southern end in Lee and Phillips Counties where there is an area of mostly rises in water level. East of Crowleys Ridge in Clay, Craighead, Greene, Mississippi, and Poinsett Counties, the change in water level is dominated by rises in water level. Clay, Randolph, Lawrence, Independence, Jackson, White, and Woodruff Counties along the western boundary of the study area is an area with mostly rises in water level. An area of mostly declines in water level occurs in Jefferson, Lonoke, and Prairie Counties. The southern end of the study area is an area with mostly rises in water level in Ashley and Chicot Counties.

In Arkansas County approximately equal numbers of wells had rises or declines in water level. The distribution of data shows that rises in water level occur mostly in the southern and western parts of Arkansas County near the Arkansas River. The declines in water level occur mostly in the northern part of Arkansas County. Two of the larger changes in water level, a rise of 16.3 ft at well 04S01W31DCB1 and a decline of -17.2 ft at well 05S01W16BAB1, are in close proximity in eastern Arkansas County. The water withdrawn from these wells is used for irrigation. Zero water use was reported for well 04S01W31DCB1 from 2000 to 2004. Water use of 495-840 acre-ft per year was reported for well 05S01W16BAB1 from 2000 to 2004 (Terrance W. Holland, U.S. Geological Survey, written commun., 2005).

Long-Term Water-Level Trends

Long-term water-level trends were evaluated using hydrographs from 134 wells in the alluvial aquifer for the period 1980 to 2004. Linear regression was used to calculate the trend in water-level change for each well for this period. The slope of the trend line represents the annual change per year in water level during the 25-year period. Negative values denote a decline in water level. The minimum 25-year period is used to show long-term trends not dominated by variations in climate and localized pumping rates on water levels in a single well. The hydrographs were grouped by county. Table 1 shows the number of wells, the range of values for the annual rise or decline in water level, the mean, and the median for each county. The mean annual decline in water level for the entire study area was 0.31 ft/yr and with a range of -1.35 to 0.84 ft/yr. Selected hydrographs are shown in figure 4 (wells A-BB, plate 1).

Long-term water-level changes vary substantially across the study area. Independence County is the only county with a mean annual rise from 1980-2004. The rise in Independence County is determined from data of one well. Mean annual declines between -0.50 ft/yr and 0.00 ft/yr occurred in Arkansas, Ashley, Chicot, Clay, Craighead, Crittenden, Drew, Greene, Jefferson, Lincoln, Mississippi, Monroe, Phillips, Prairie, Randolph, White, and Woodruff Counties. Mean annual declines between -1.00 ft/yr and -0.50 ft/yr occurred in Cross, Desha, Jackson, Lee, Lonoke, and St. Francis Counties.

The analysis of long-term water-level changes (1980-2004) in Arkansas and Prairie Counties shows the elongation of this depression. Both Arkansas and Prairie Counties have two different rates of annual decline for the two hydrographs shown for each county. In Arkansas County, well 04S03W32BCB1 (fig. 4A) shows an annual water-level decline of about 0.69 ft/yr since 1980. Well A is located near the center of the depression in Arkansas County and generally shows a water-level decline during the 68-year period of record. Well 07S04W01DDD1 (fig. 4B) has an annual water-level rise of about 0.11 ft/yr since 1980. Well B is located near the Arkansas River and shows a stable water level for the 77-year period of record. The water level in the Arkansas River is maintained by a lock and dam system and can be a source of water for the alluvial aquifer in southern and western Arkansas County. In Prairie County, well 02N04W32CCB1 (fig. 4X) is near the depression and the White River. This well has an annual water-level decline of about 0.29 ft/yr since 1980. Well 04N05W07CDC1 (fig. 4W) is located in the northern part of Prairie County and has an annual decline of about 0.73 ft/yr since 1980. These two hydrographs show that the rate of decline is about two and a half times greater in the northern part of the depression than near the White River. In Arkansas and Prairie Counties, water levels in the two wells near the Arkansas and White Rivers either have risen or are declining at a slower rate than in the two wells in the center and northern part of the cone of depression. These rates of water-level change indicate that this depression is expanding in an elongated direction north and west into Lonoke and Prairie Counties.

Water-level declines in neighboring counties are further evidence of the expansion of the depression centered in Arkansas, Lonoke, and Prairie Counties. In Lonoke County, well 02S07W10CCB1 (fig. 4Q) has an annual decline of about 0.88 ft/yr since 1980 and shows a nearly continuous water-level decline during the 47 years of record. In Jefferson County, well 03S08W24BBC1 (fig. 4N) has an annual water-level decline of about 0.69 ft/yr during the period 1980 to 2004. In Monroe County, well 01S04W01BAB1 (fig. 4S) has an annual water-level decline of about 0.26 ft/yr during the period 1980 to 2004. Long-term declines in these outlying wells indicate that the depression is expanding.

The depression west of Crowleys Ridge has five wells with hydrographs in or near the depression that can be used to characterize the rates of water-level change within the depression. Well 07N03E05ADA1 (fig. 4H) in Cross County and well 06N01E33ACA2 (fig. 4Z) in St. Francis County are in the depression and have annual declines of about 1.10 ft/yr and 0.91 ft/yr, respectively, since 1980. Wells 02N01E23BAA2 (fig. 4O) in Lee County, 11N02E05BDA1 (fig. 4U) in Poinsett County, and 05N02W20DCB1 (fig. 4BB) in Woodruff County near the outskirts of the depression have annual water-level declines of about 0.58 ft/yr, 0.80 ft/yr, and 0.15 ft/yr, respectively, since 1980. The rate of decline in the well in Woodruff County is less than that in the other wells west of Crowleys Ridge because it is further away from the center of the cone of depression than the others.

Table 1. Range, mean, and median of annual rise-decline in water level by county for wells in the Mississippi River Valley alluvial aquifer, 1980-2004.

[Annual rise or decline in water level for each well is calculated using linear regression]

County	Number of wells	Range of annual rise-decline in water level (feet/year)	Mean annual rise-decline in water-level (feet/year)	Median annual rise-decline in water-level (feet/year)
Arkansas	28	-0.69 to 0.84	-0.10	-0.13
Ashley	7	-0.37 to 0.11	-0.14	-0.15
Chicot	2	-0.47 to -0.11	-0.29	-0.29
Clay	4	-0.55 to 0.03	-0.29	-0.33
Craighead	4	-1.05 to -0.02	-0.48	-0.42
Crittenden	4	-0.55 to -0.11	-0.37	-0.42
Cross	5	-1.10 to -0.33	-0.88	-1.02
Desha	4	-0.77 to -0.26	-0.55	-0.58
Drew	1	-0.15[1]	-0.15[a]	-0.15[a]
Greene	4	-0.77 to -0.03	-0.46	-0.53
Independence	1	0.04[a]	0.04[a]	0.04[a]
Jackson	4	-0.84 to -0.26	-0.65	-0.75
Jefferson	6	-0.69 to -0.11	-0.29	-0.24
Lee	4	-0.65 to -0.29	-0.51	-0.55
Lincoln	2	-0.44 to -0.18	-0.31	-0.31
Lonoke	4	-1.21 to -0.51	-0.79	-0.73
Mississippi	9	-0.15 to 0.00	-0.06	-0.07
Monroe	6	-0.58 to -0.03	-0.31	-0.29
Phillips	3	-0.29 to -0.11	-0.19	-0.18
Poinsett	5	-1.35 to -0.02	-0.53	-0.33
Prairie	9	-0.73 to 0.29	-0.29	-0.29
Randolph	2	-0.18 to -0.04	-0.11	-0.11
St Francis	7	-0.91 to -0.07	-0.56	-0.69
White	4	-0.22 to 0.22	-0.03	-0.06
Woodruff	5	-0.55 to -0.00	-0.17	-0.07

[1]Value determined from one well within the county.

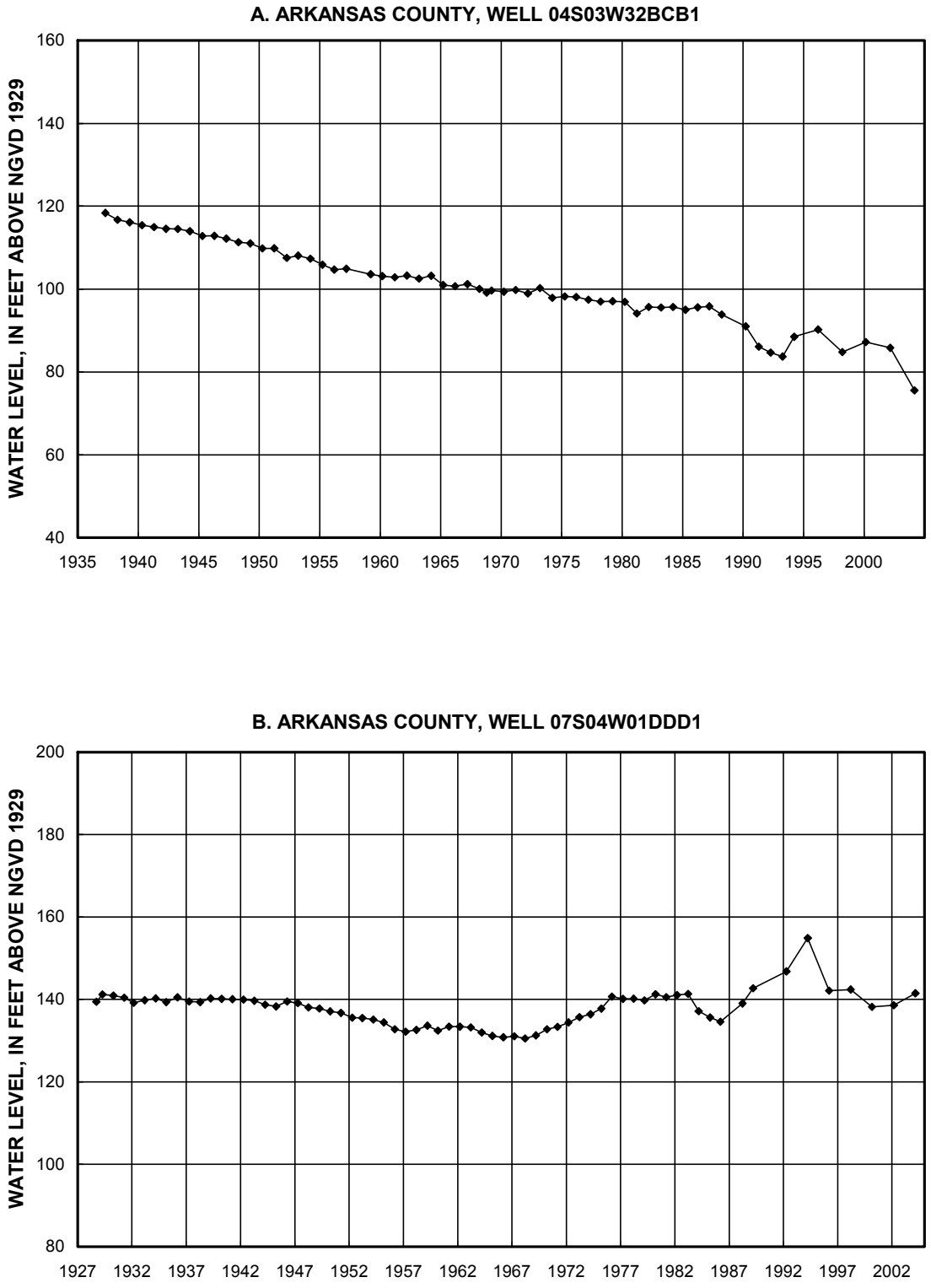
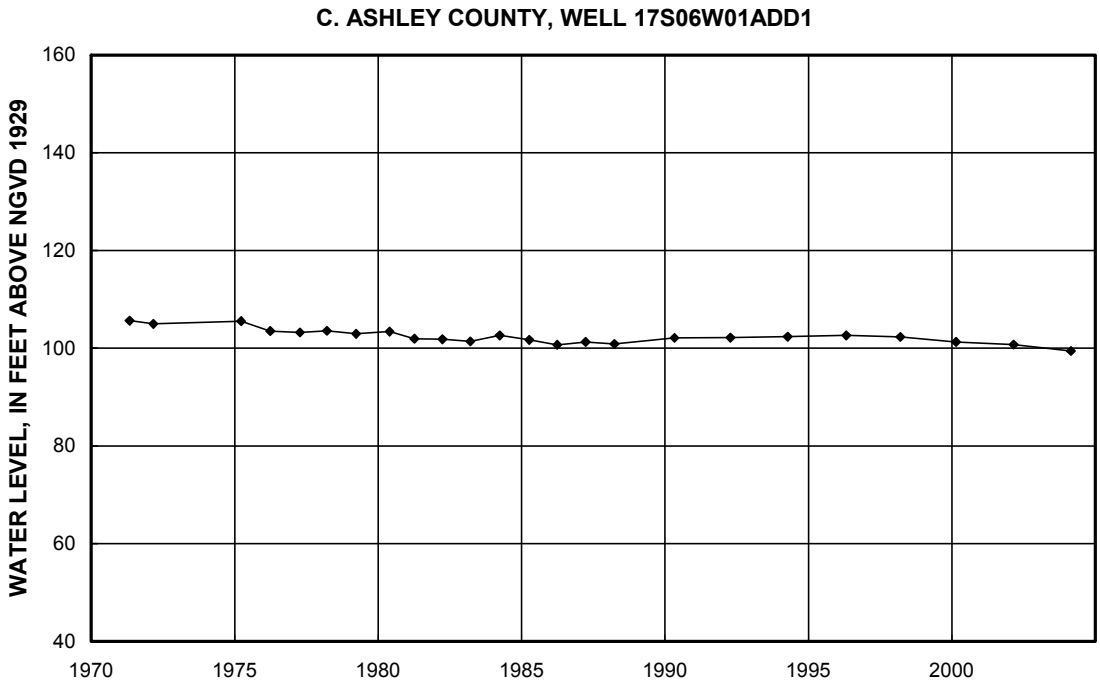


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.



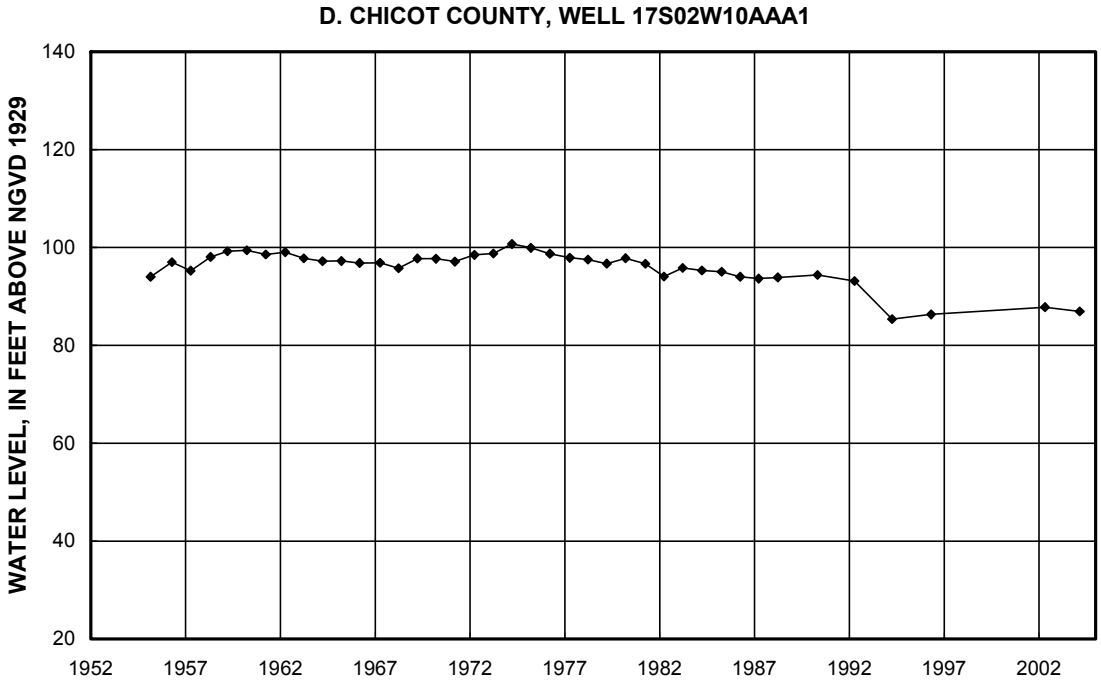
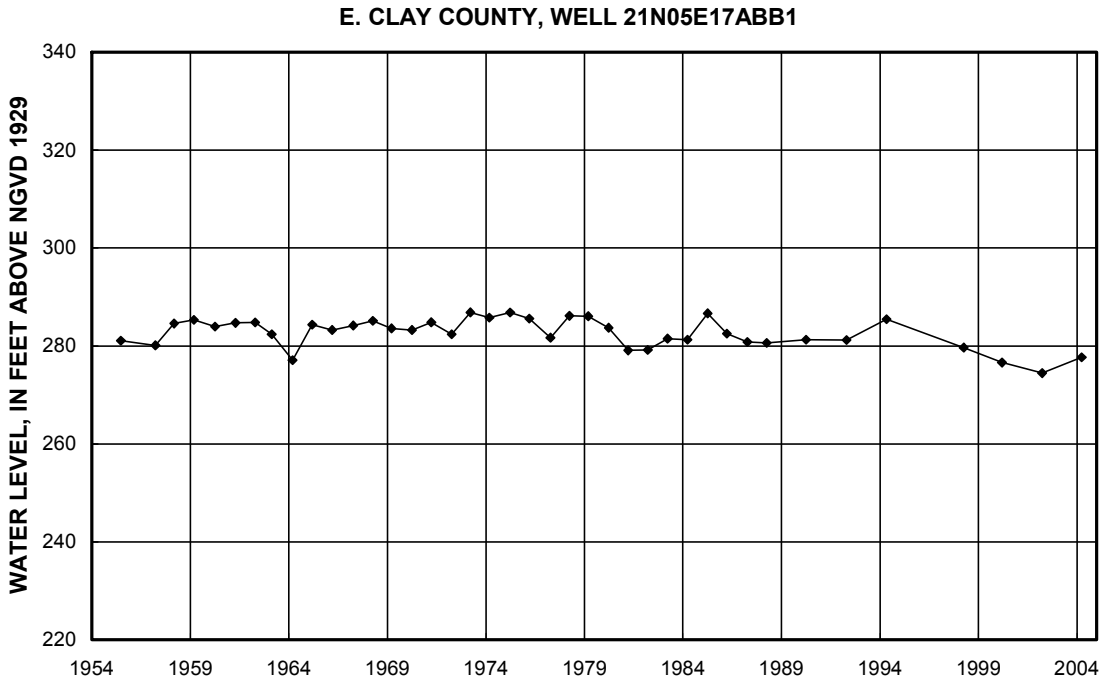


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



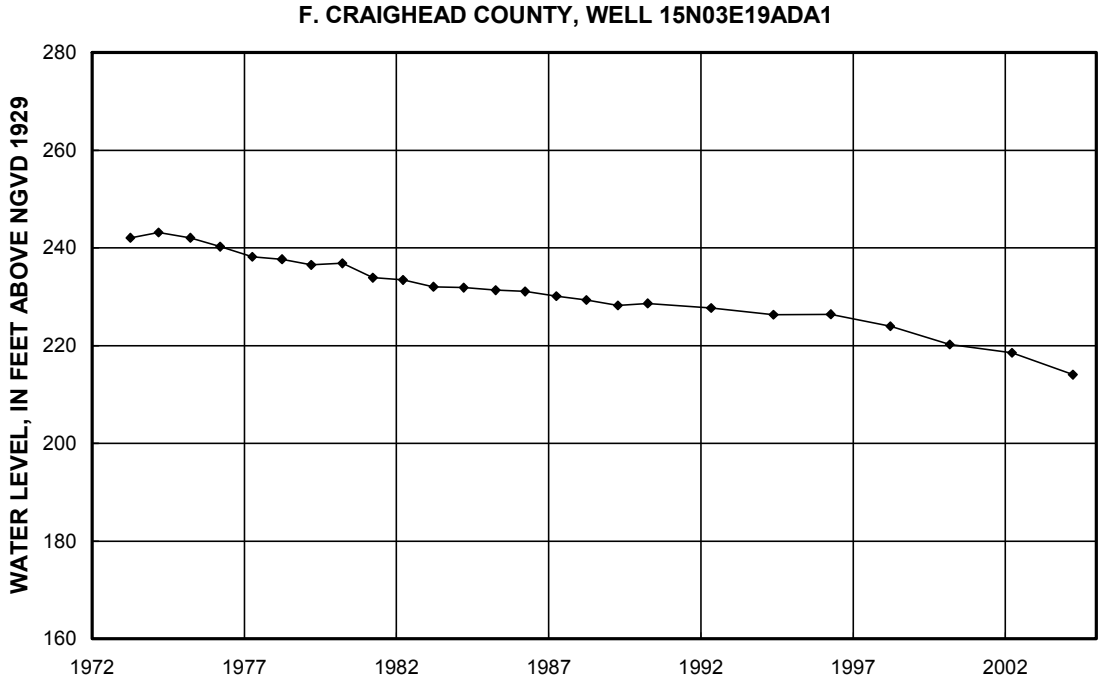
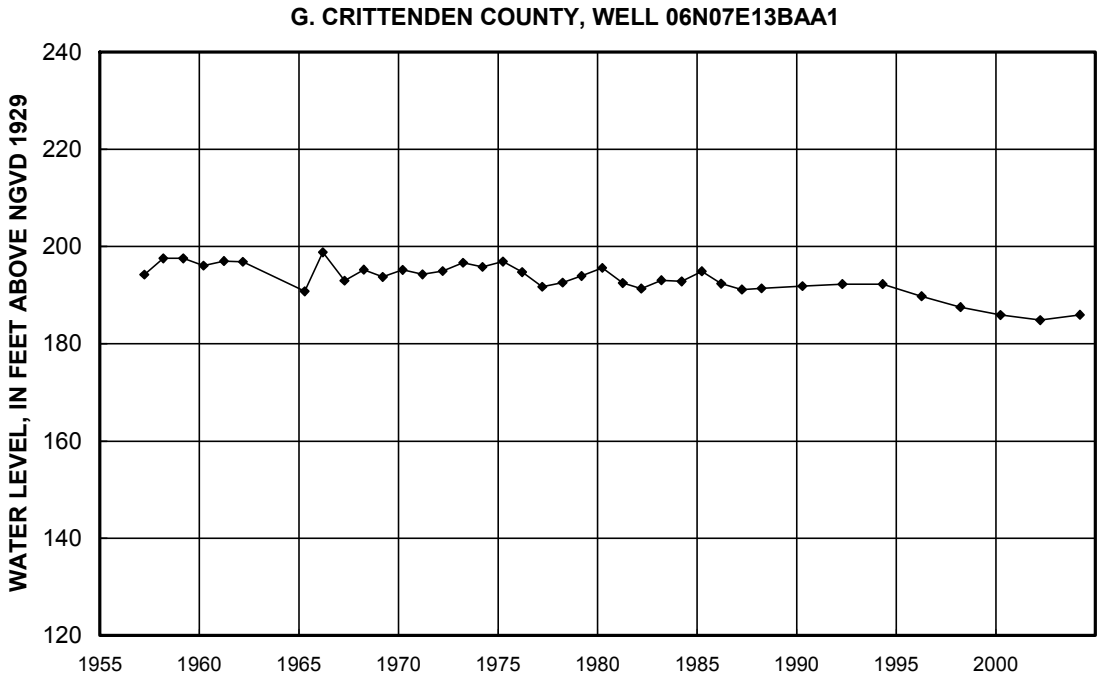


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



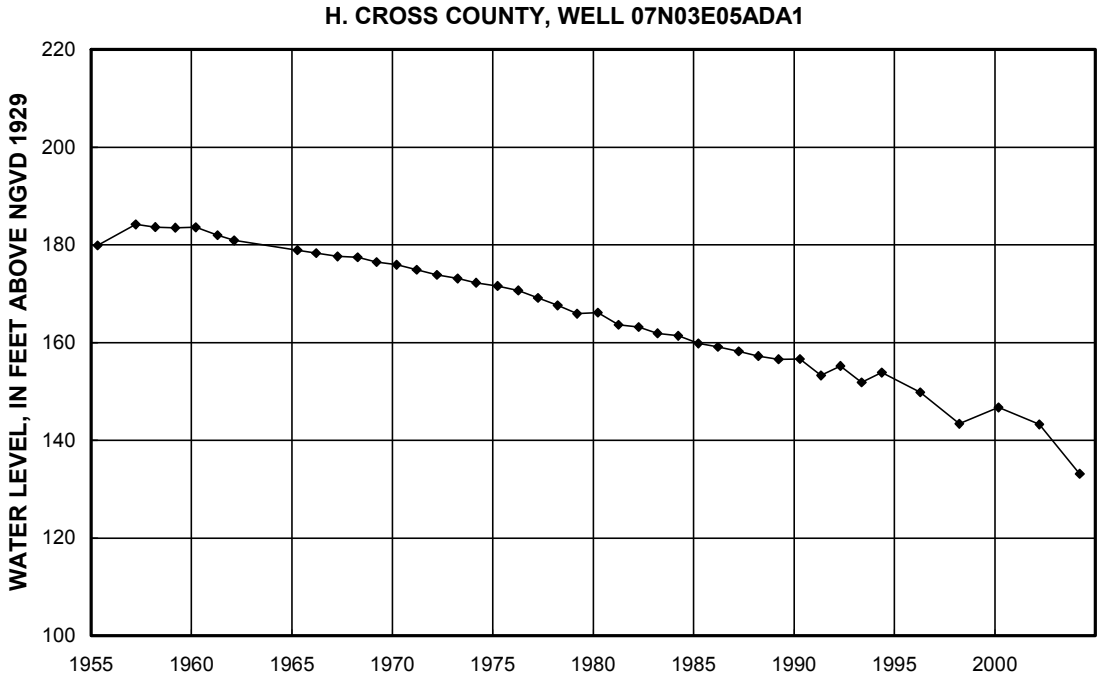
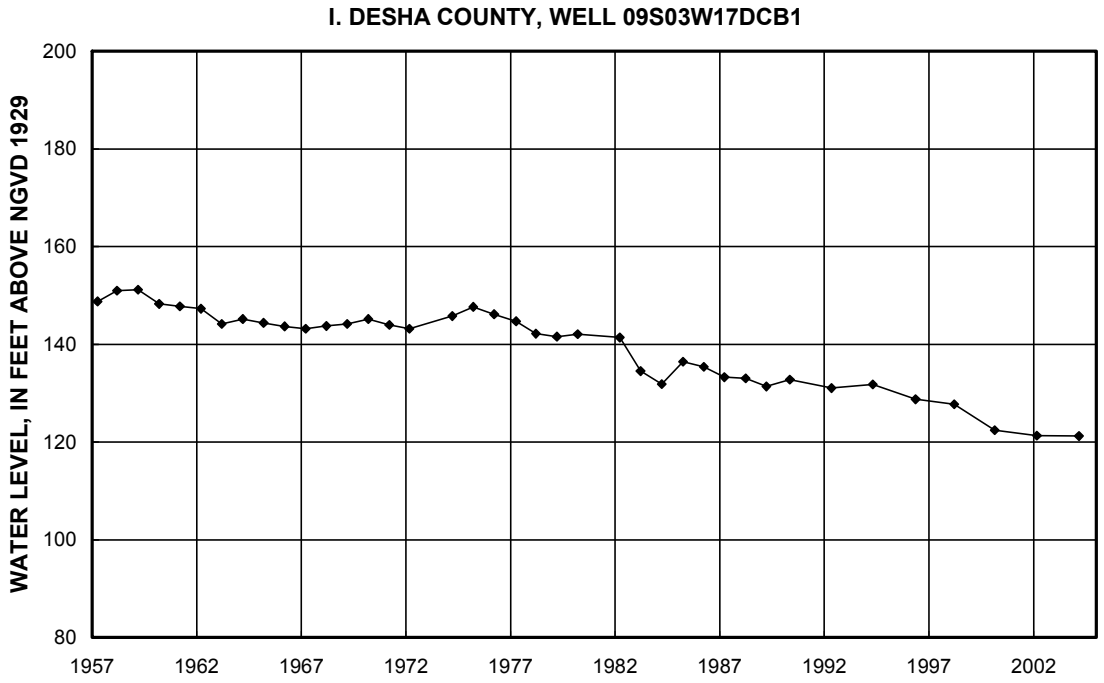


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



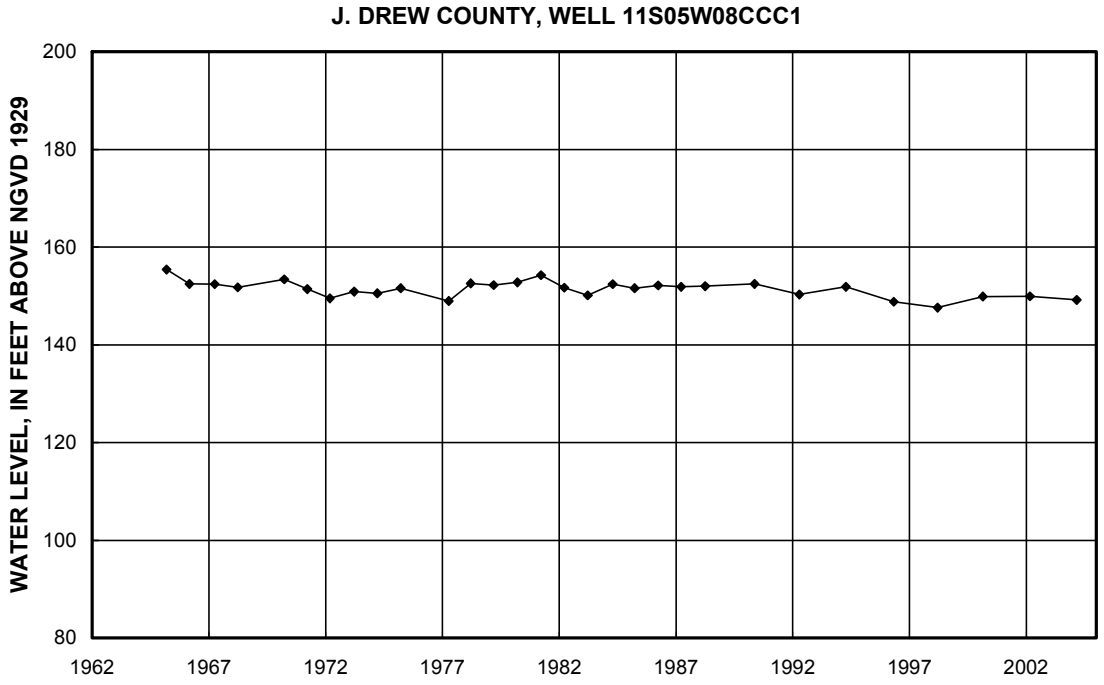
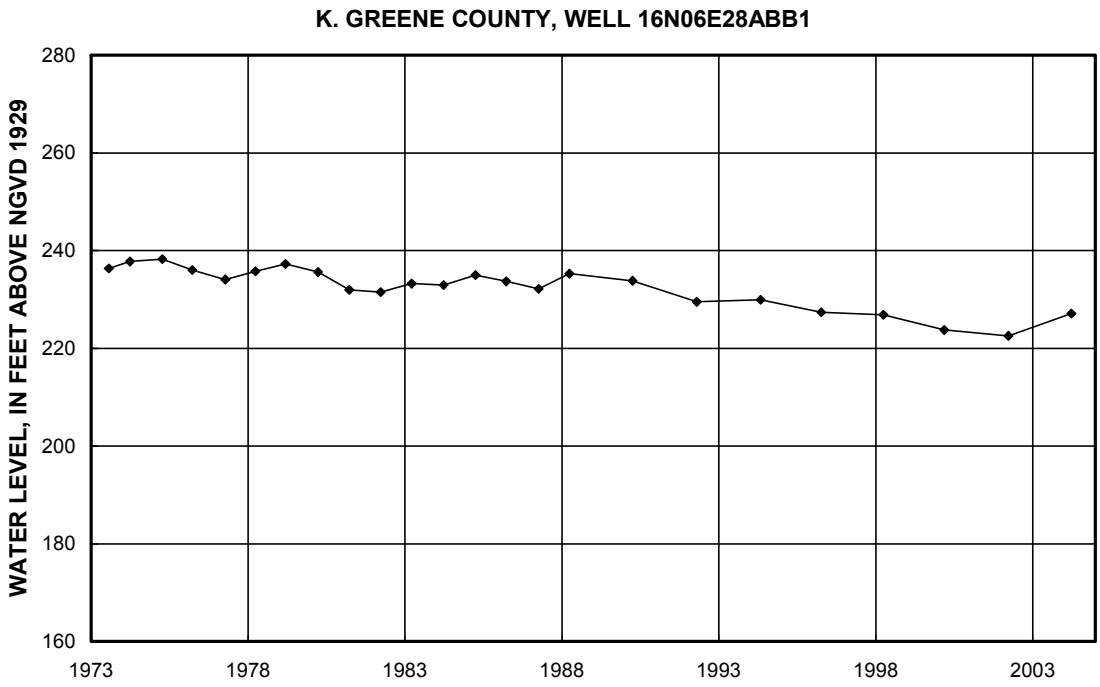


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



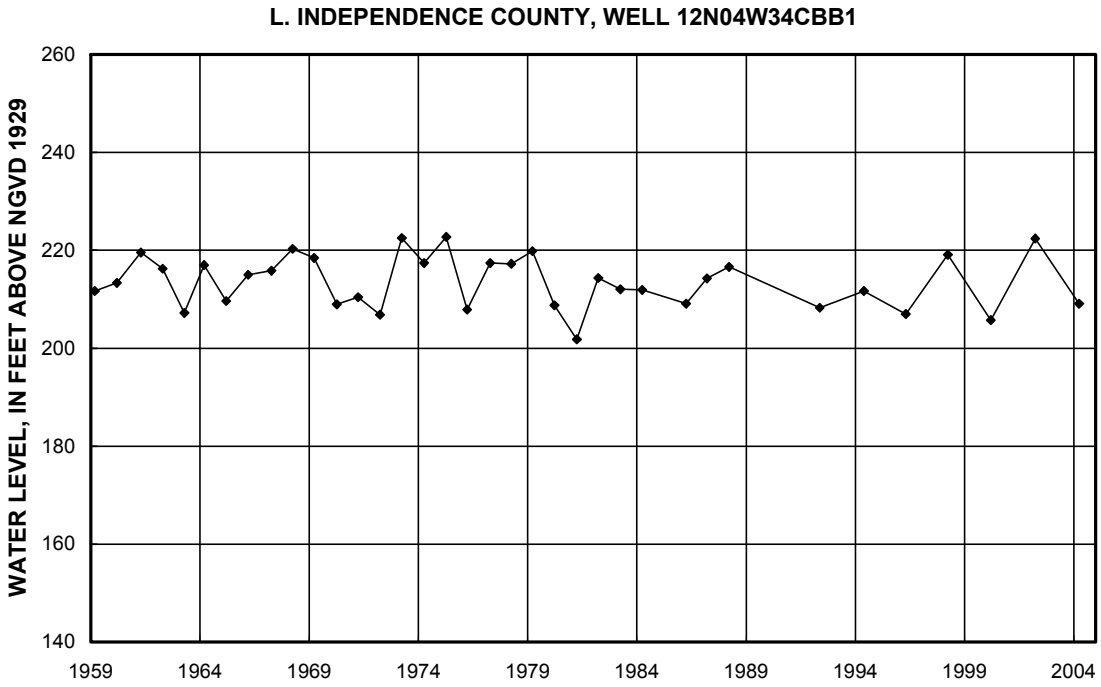
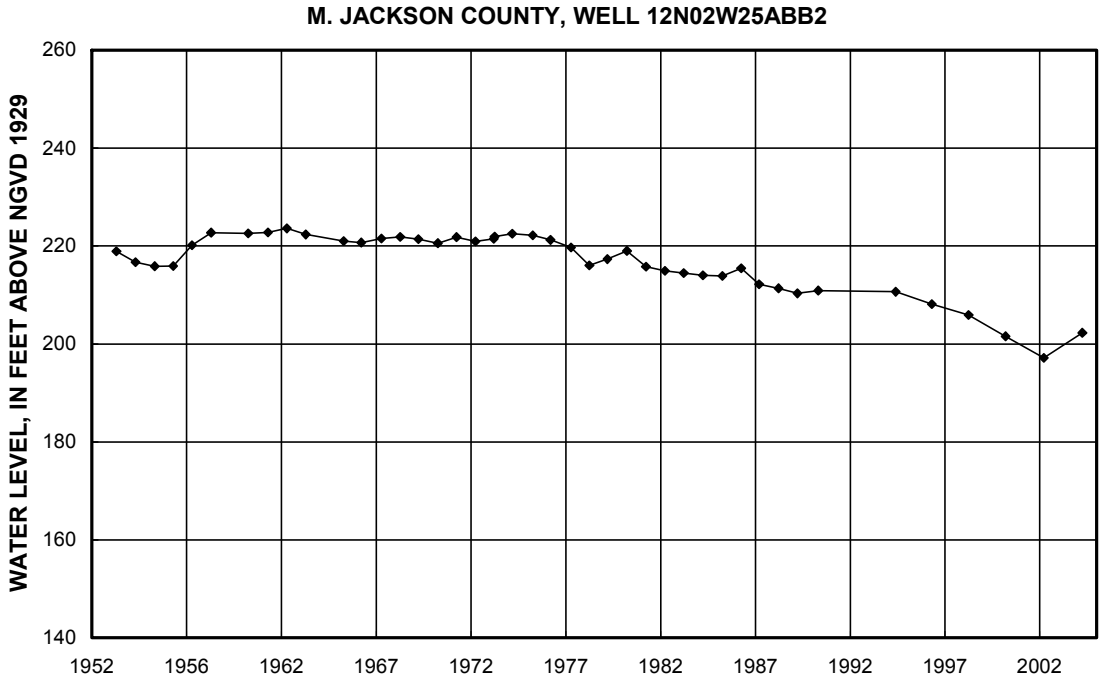


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



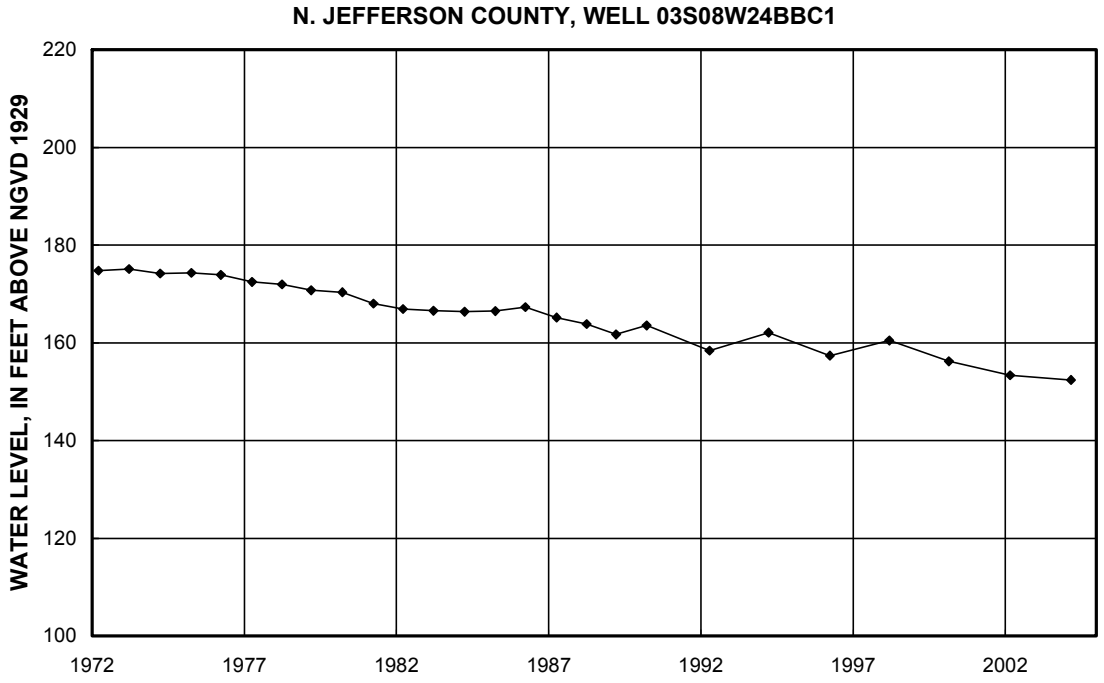
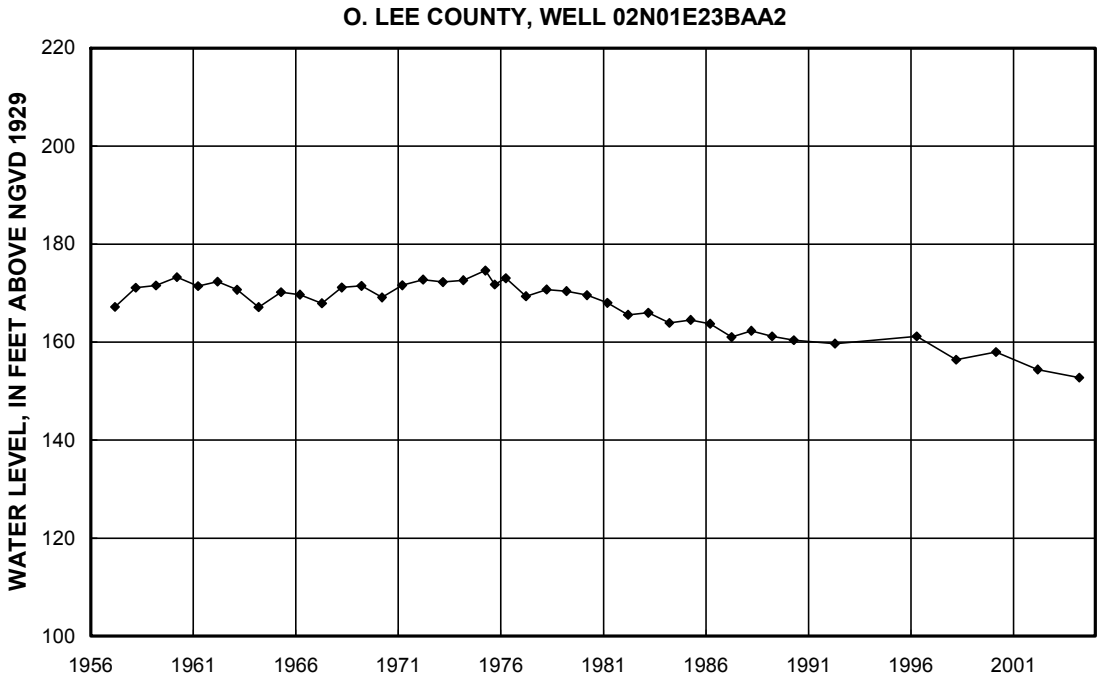


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



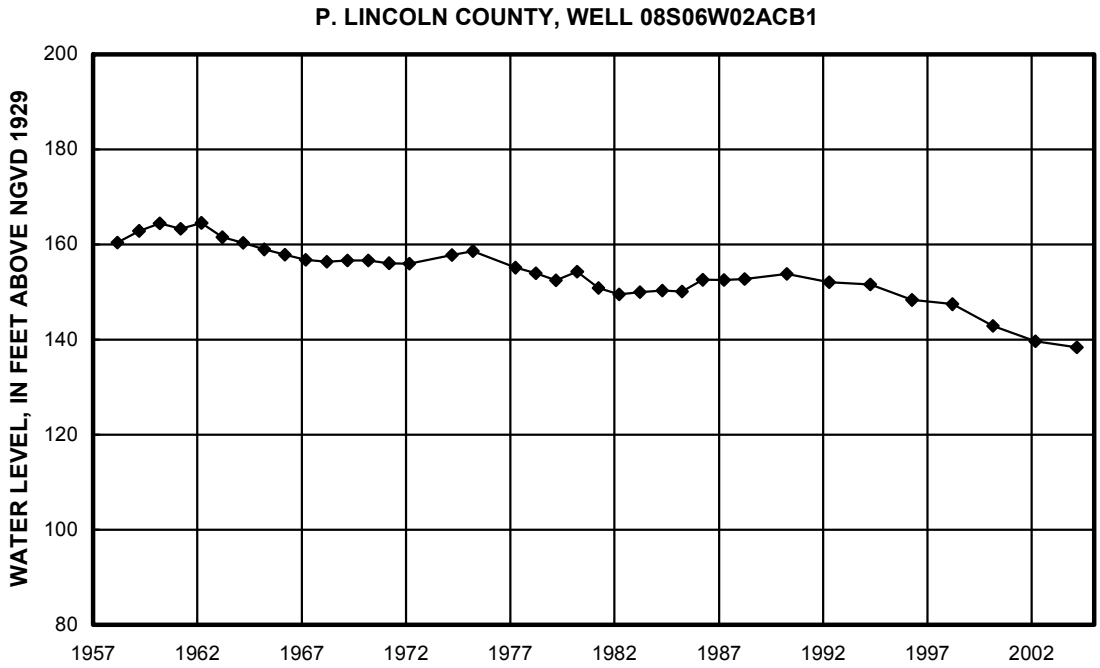
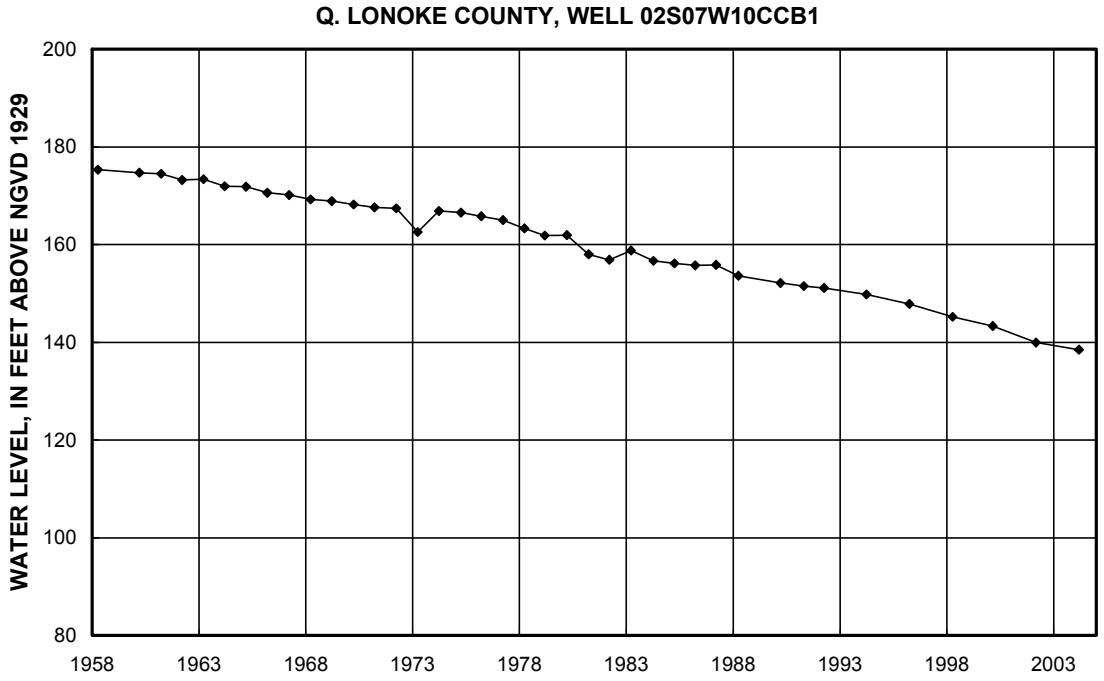


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



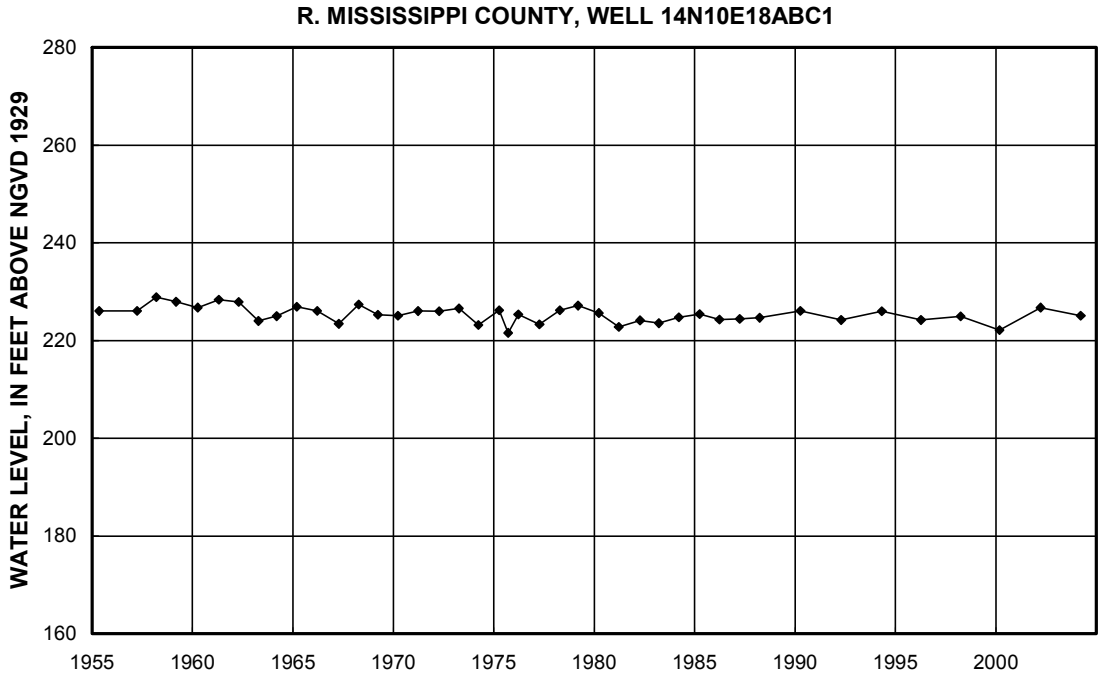
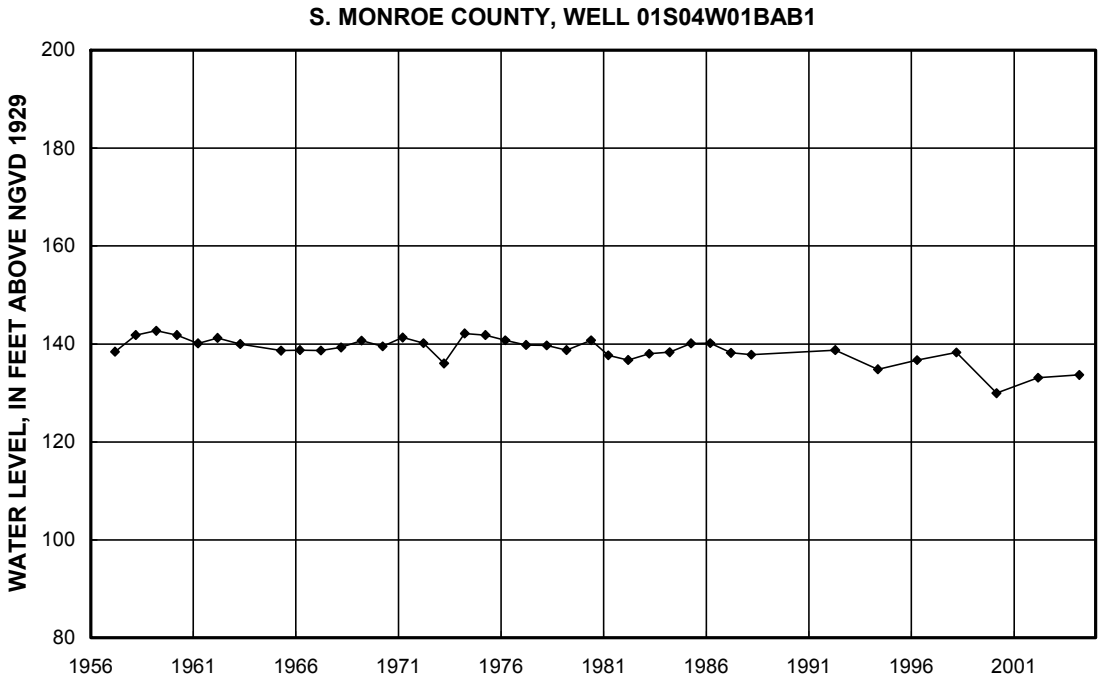


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



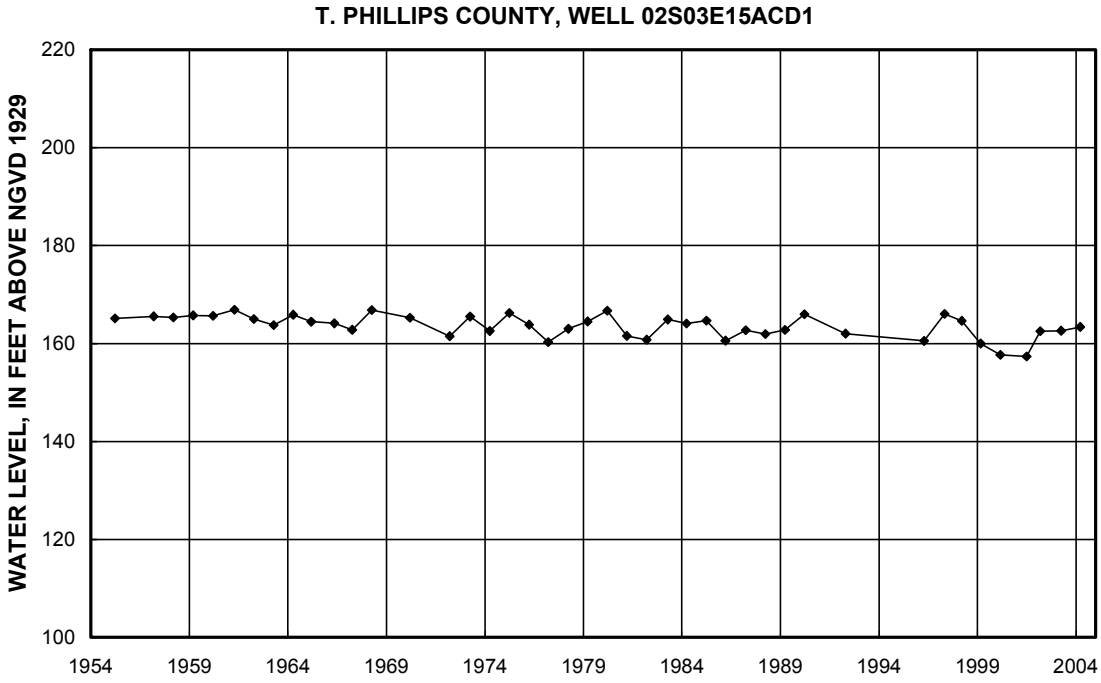
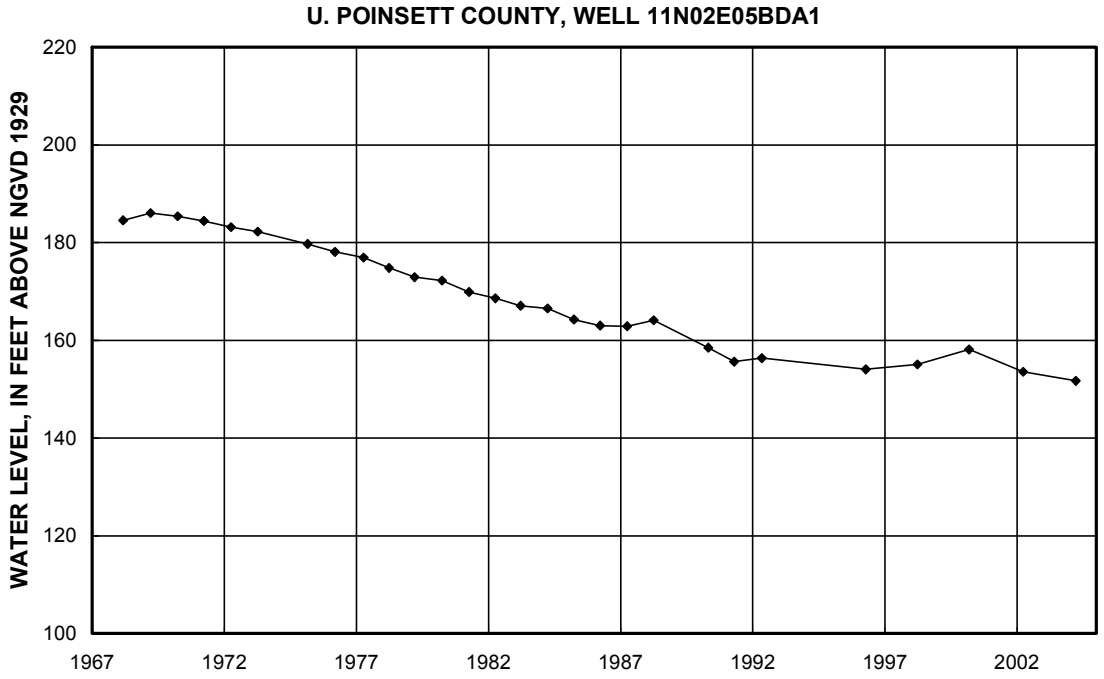


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



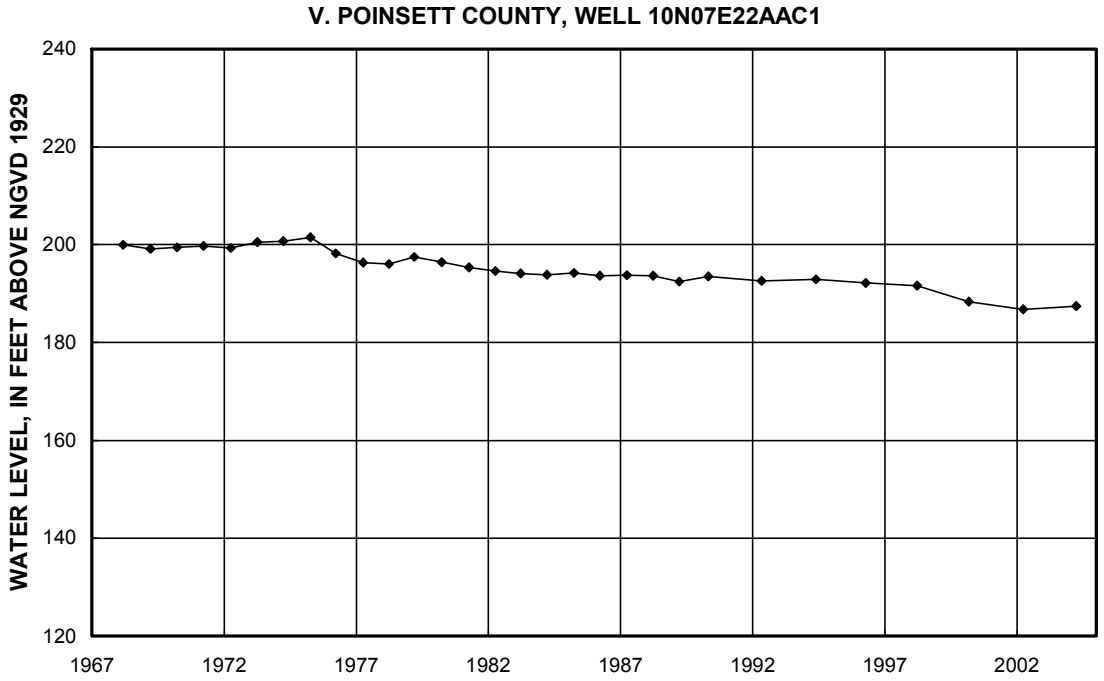
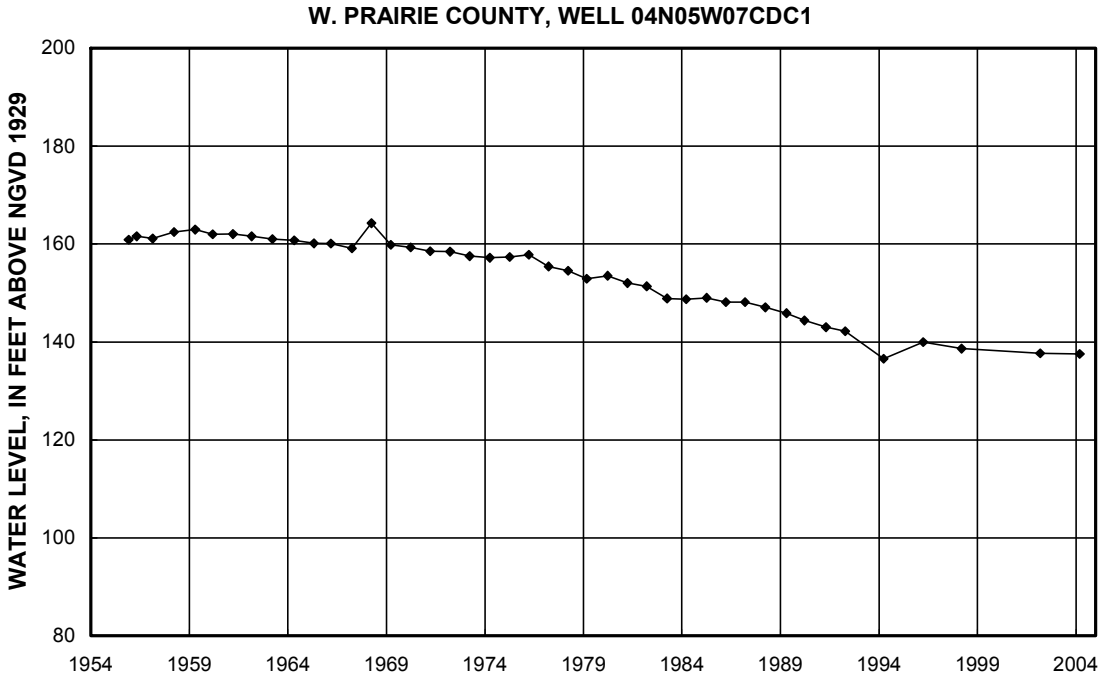


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



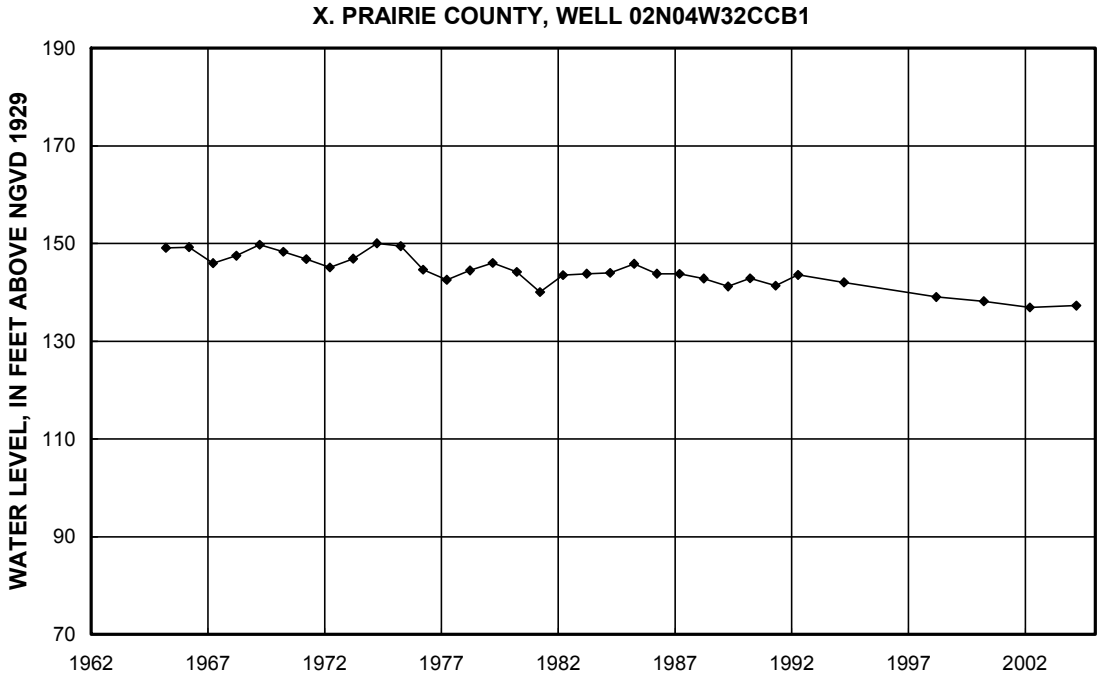
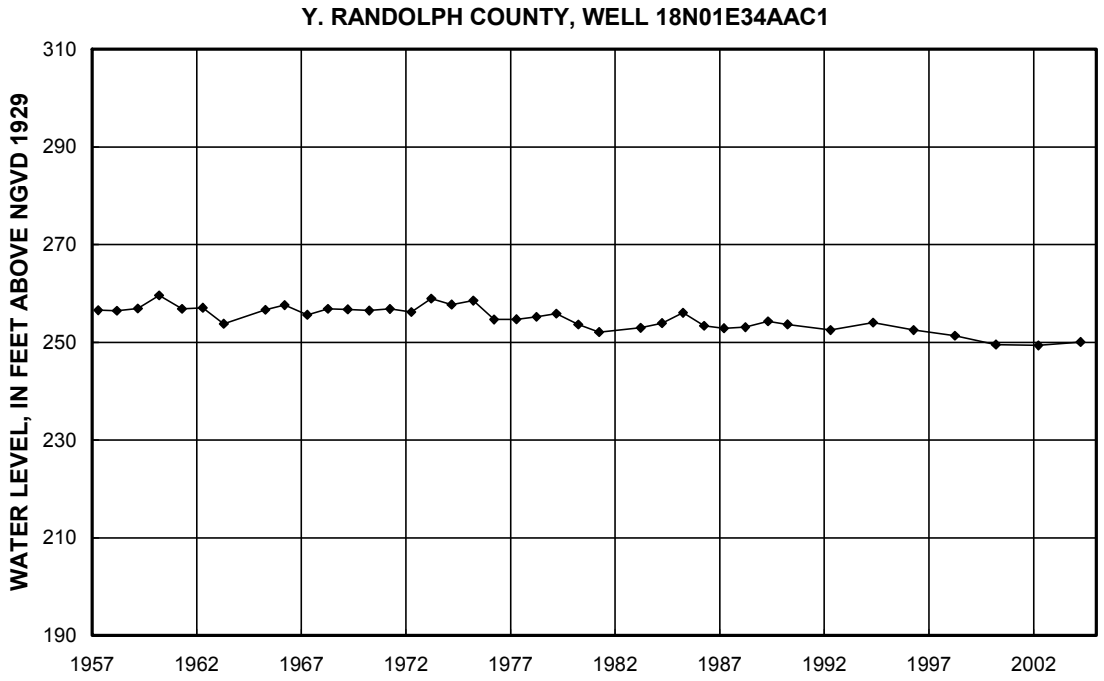


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



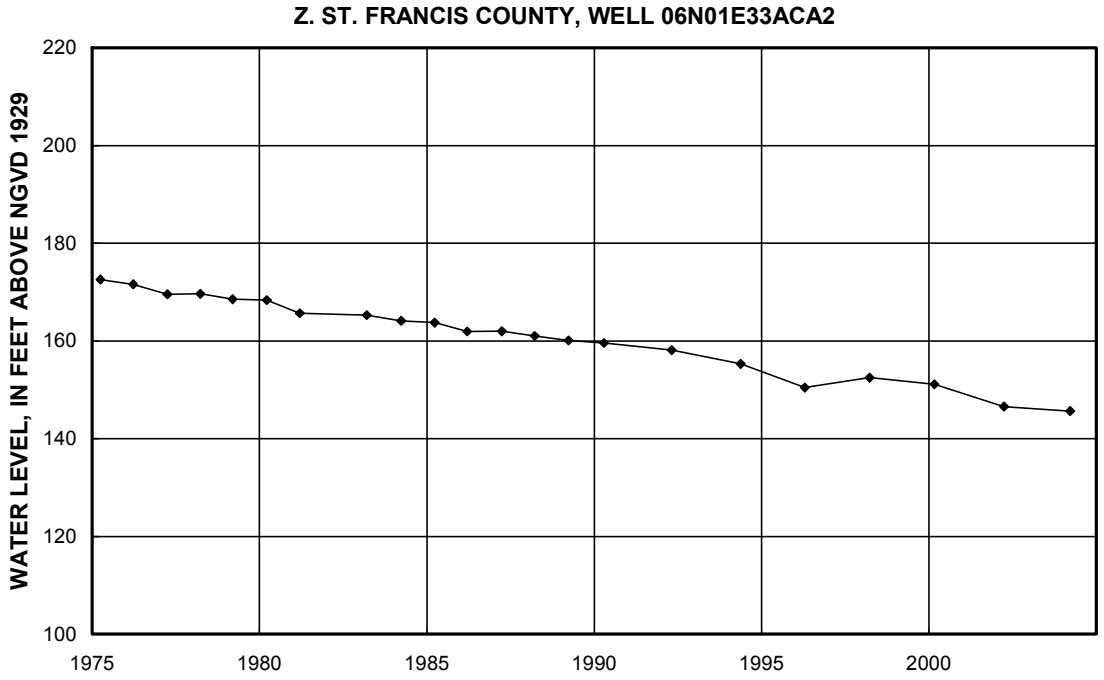
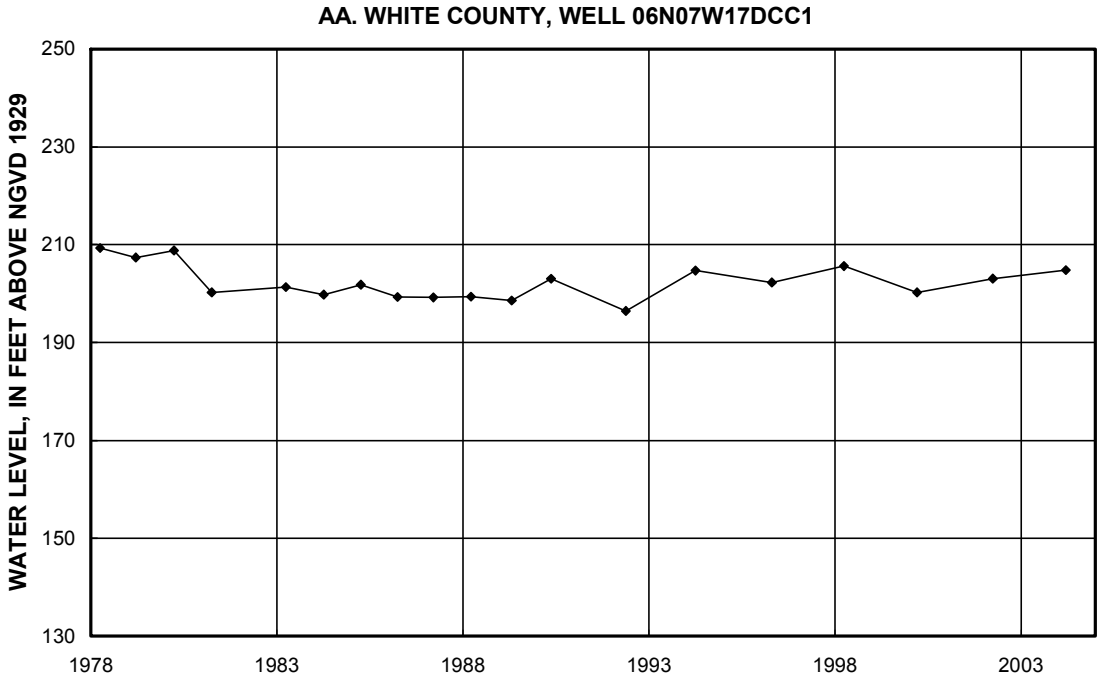


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued



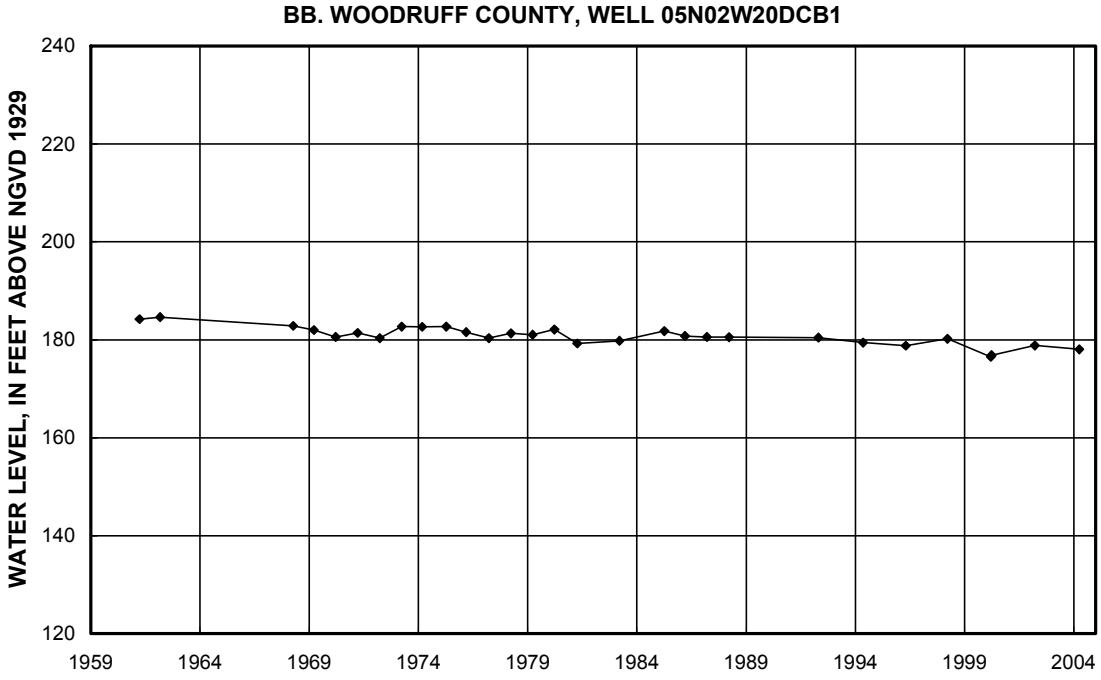


Figure 4. Water-level hydrographs (A to BB) for selected wells in the Mississippi River Valley alluvial aquifer.—Continued

Water-Quality Conditions

Specific conductance is a measure of the electrical conductance of a substance and can be used as an indicator of the relative salinity of water. As the dissolved solids concentration in ground water increases, specific conductance increases.

Water samples were collected from 138 wells completed in the alluvial aquifer and measured onsite for specific conductance and temperature. Samples from 71 of the 138 wells were sent to the USGS National Water Quality Laboratory for dissolved chloride analysis (appendix 3). Specific-conductance values ranged from 205 µS/cm at a well in Lonoke County to 1,440 µS/cm at a well in Monroe County (appendix 2). Areas with relatively high values of specific conductance (greater than 1,200 µS/cm) occur in Arkansas, Monroe, southern Desha, and northern Chicot Counties. Other values in Chicot County are as low as 379 µS/cm. Values of specific conductance less than 300 µS/cm are found in Clay, Greene, Lonoke, and Prairie Counties.

Dissolved chloride ranged from 3.8 milligrams per liter (mg/L) at a well in St. Francis County to 200 mg/L at a well in Arkansas County. The mean dissolved chloride concentration was 33.8 mg/L. The well in Arkansas County with a dissolved chloride concentration of 200 mg/L had a specific conductance of 1,220 µS/cm.

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

The distributions of specific conductance and dissolved chloride concentration in samples from the alluvial aquifer do not indicate a substantial change in water quality from 2000 to 2004 (figs. 5 and 6). In 2000, the specific conductance ranged from 190 µS/cm to 1,690 µS/cm for 151 measurements and the dissolved chloride concentration ranged from 2.2 mg/L to 550 mg/L from 101 samples (Schrader, 2001). The range of specific conductance in 2004, from 205 µS/cm to 1,440 µS/cm from 138 measurements, is similar to the range in 2000 (fig. 5). The range of dissolved chloride concentration in 2004, from 3.8 mg/L to 200 mg/L, is similar to the range in 2000 with the exception of three values that are greater than 200 mg/L in 2000 (fig. 6).

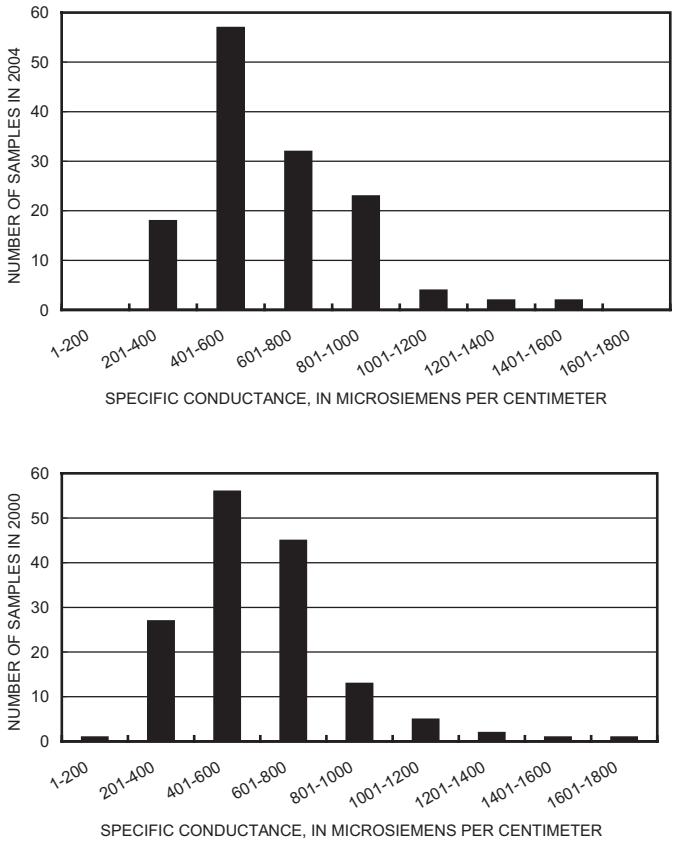


Figure 5. Distribution of specific conductance in samples from the Mississippi River Valley alluvial aquifer from 2000 (Schrader, 2001) and 2004.

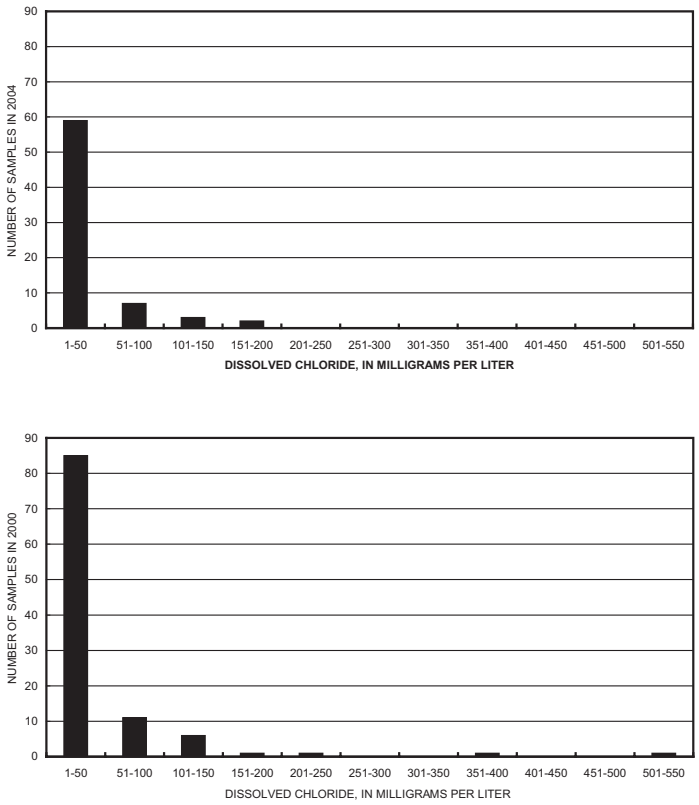


Figure 6. Distribution of dissolved chloride in samples from the Mississippi River Valley alluvial aquifer in 2000 (Schrader, 2001) and 2004.

Summary

The Mississippi River Valley alluvial aquifer is increasingly relied upon for agriculture and aquaculture in eastern Arkansas. In 1995, estimated withdrawals from the alluvial aquifer in Arkansas totaled about 5,062 Mgal/d; in 2000, withdrawals had increased about 39 percent to about 7,050 Mgal/d.

Ground-water levels are affected by intense ground-water withdrawals resulting in extensive depressions in the potentiometric surface. In spring of 2004, the highest water-level altitude measured was 293 feet above NGVD of 1929 in northeastern Clay County. The lowest water-level altitude measured was 76 feet above NGVD of 1929 in the center of Arkansas County. A large depression in the potentiometric surface is located in Arkansas, Lonoke, and Prairie Counties. In 2004, the area enclosed by the 100-foot contour in Arkansas County is about the same area as in 2002. The area enclosed by the 100-foot contour in 1998 in Prairie and Lonoke Counties expanded further into Lonoke County in 2000 and 2002 but contracted in Prairie County by 2002. The area in Lonoke County covers substantially less area than in 2002.

Along the west side of Crowleys Ridge, the two previously documented areas of depression expanded and coalesced into a single depression by 2002. The 2004 potentiometric-surface map shows that the areas enclosed by the 140-foot contour lines have continued to expand. The depression in Lee, Monroe, St. Francis, and Woodruff Counties has a minimum altitude of 125 ft above NGVD of 1929. East of Crowleys Ridge, a depression in St. Francis, Crittenden, and Cross Counties was present in 1998, 2000, and 2002. This depression is not evident in 2004.

A map showing the difference in water level between 2000 and 2004 was constructed using the difference between water-level measurements from 625 wells. The change in water level between 2000 and 2004 ranged from -31.1 ft to 16.3 ft, with a mean of -0.7 ft. The largest rise of 16.3 ft is in Arkansas County and the largest decline of -31.1 ft is in Prairie County. The area just west of Crowleys Ridge is dominated by declines in water level. East of Crowleys Ridge in Clay, Craighead, Greene, Mississippi, and Poinsett Counties, water levels mostly have risen. Water levels along the west in Clay, Randolph, Lawrence, Independence, Jackson, White, and Woodruff Counties have increased. In Jefferson, Lonoke, and Prairie Counties water levels mostly have declined. In Arkansas County rises in water level occur mostly in the southern and western parts of Arkansas County near the Arkansas River. The declines in water level occur mostly in the northern part of Arkansas County.

Water-level trends were evaluated for 134 wells in the alluvial aquifer for the period from 1980 to 2004. The mean annual decline in water level for the entire study area was -0.31 ft/yr and with a range of -1.35 to 0.84 ft/yr. Only in Independence County did water levels show mean annual increase from 1980-2004. Mean values for the annual declines were between -0.50 ft/yr and 0.00 ft/yr in Arkansas, Ashley, Chicot, Clay, Craighead, Crittenden, Drew, Greene, Jefferson, Lincoln, Mississippi, Monroe, Phillips, Prairie, Randolph, White, and Woodruff Counties. Mean values for the annual declines were between -1.00 ft/yr and -0.50 ft/yr in Cross, Desha, Jackson, Lee, Lonoke, and St. Francis Counties.

The analysis of long-term water-level changes (1980-2004) in the depression in Arkansas and Prairie Counties shows the elongation of this depression. Both Arkansas and Prairie Counties have two different annual rates of decline for the two hydrographs shown for each county. In Arkansas and Prairie Counties the two wells near the Arkansas and White Rivers have risen or are declining at a slower rate than the two wells in the center and northern part of the cone of depression and supports the potentiometric-surface evidence that this cone of depression is expanding.

Water samples were collected from 138 wells screened in the alluvial aquifer and measured onsite for specific conductance and temperature. Samples were collected at 71 wells for dissolved chloride analysis. Specific conductance ranged from 205µS/cm at a well in Lonoke County to 1,440 µS/cm at a well in Monroe County. Areas with relatively high values of specific conductance occur in Arkansas, Monroe, southern Desha, and northern Chicot Counties. Dissolved chloride ranged from 3.8 mg/L at a well in St. Francis County to 200 mg/L at a well in Arkansas County. The mean dissolved chloride concentration was 33.8 mg/L.

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Appendixes

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
Arkansas County								
02S04W11DBB1	343233	912415	USGS	152	213.04	99.78	113	3/09/2004
02S05W15AAB1	343213	913127	USGS	180	213	107.66	105	3/09/2004
03S02W27ABB1	342448	911251	USGS	87	197	65.58	131	3/09/2004
03S03W05CCD1	342737	912132	USGS	150	201	97.85	103	3/09/2004
03S03W27BBC1	342455	911944	USGS	120	195	90.83	104	3/04/2004
03S04W02BBB1	342831	912454	USGS	116	197.63	91.92	106	3/04/2004
03S04W03DCA16	342753	912515	USGS	126	205	100.02	105	3/04/2004
03S05W03CCC1	342752	913227	USGS	110	215	104.87	110	3/08/2004
03S06W35ADD1	342411	913652	USGS	--	190	51.98	138	3/08/2004
04S01W04ACD2	342233	910733	USGS	52.4	155	5.62	149	3/09/2004
04S01W31DCB1	341753	910949	USGS	130	179	52.04	127	3/09/2004
04S02W11AAA1	342209	911123	USGS	--	195.08	66.40	129	3/09/2004
04S02W29CCC1	341846	911539	USGS	140	191	81.80	109	3/09/2004
04S03W17ADD1	342102	912058	USGS	--	200	107.08	93	3/04/2004
04S03W32BCB1	341820	912202	USGS	--	192	116.43	76	3/04/2004
04S04W02ABB1	342313	912424	USGS	155	200	108.54	91	3/04/2004
04S04W35ABC1	341835	912437	NRCS	--	193	103.5	90	4/09/2004
04S05W16CDC1	342045	913321	USGS	120	201	70.58	130	3/08/2004
04S05W24DAA1	342001	912930	USGS	150	198	90.49	108	3/08/2004
04S06W15DBB1	342122	913827	USGS	100	190	32.84	157	3/08/2004
05S01W16BAB1	341552	910729	USGS	--	183	49.61	133	3/09/2004
05S02W16ABD1	341552	911358	USGS	154	190	79.36	111	3/04/2004
05S04W07CCC1	341555	912932	USGS	120	194	75.20	119	3/08/2004
05S04W32BBA1	341316	912822	USGS	--	191	58.03	133	3/08/2004
05S06W02DDD1	341724	913651	USGS	60	182.93	20.48	162	3/08/2004
05S06W07DDC1	341642	914130	USGS	32	180.48	2.78	178	3/08/2004
06S02W23DCD1	340853	911206	USGS	--	188	68.17	120	3/04/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
06S03W10BBA1	341136	911954	USGS	155	184	82.42	102	3/04/2004
06S03W27AAA1	340858	911913	USGS	132	183.14	66.72	116	3/04/2004
06S04W18CBB1	341019	912949	USGS	150	190.43	37.84	153	3/08/2004
07S02W04BBB1	340707	911452	USGS	--	176	35.38	141	3/04/2004
07S02W17BBA1	340530	911539	USGS	95	184	52.23	132	3/04/2004
07S03W18CCD1	340435	912316	USGS	--	186.18	43.08	143	3/04/2004
07S03W32BBC1	340240	912216	USGS	128	176.92	25.50	151	3/04/2004
07S04W01DDD1	340625	912327	USGS	155	186	44.52	141	3/04/2004
08S02W08ACA1	340041	911506	USGS	--	179	42.23	137	3/04/2004
08S03WT2299	340147	912203	USGS	158	178	21.62	156	3/04/2004
			Ashley County					
15S04W23DBD1	332247	912852	USGS		128	32.29	96	2/26/2004
15S04W26DCC1	332232	912902	USGS	64.1	127	30.97	96	2/26/2004
15S07W21CBA1	332316	915001	USGS	27.4	210	3.74	206	2/25/2004
16S06W08CAA1	331941	914438	USGS	105	185	77.22	108	2/25/2004
16S06W27BAB1	331729	914240	USGS	115	182	83.20	99	2/25/2004
17S04W03ABB1	331528	913010	USGS	105	124	28.97	95	2/26/2004
17S04W15DDC1	331252	912954	USGS	57	116	26.45	90	2/26/2004
17S04W21ABA1	331252	913108	USGS	--	117	21.37	96	2/26/2004
17S06W01ADD1	331518	913956	USGS	144	182	82.57	99	2/25/2004
17S06W35CAC1	331049	914136	USGS	140	179	78.29	101	2/25/2004
18S04W23DDD1	330658	912856	NRCS	100	103	22	81	4/30/2004
18S05W11CCD1	330841	913538	NRCS	75	118	16	102	4/30/2004
18S05W22DDA1	330712	913555	NRCS	100	125	12	113	4/30/2004
18S08W01AAB1	331015	915225	USGS	128	181	86.33	95	2/25/2004
18S08W28DDD2	330625	915528	USGS	156	163.26	85.16	78	2/26/2004
19S04W06BAB2	330504	913329	USGS	98	110	24.07	86	2/26/2004
19S04W14BBB1	330310	912913	NRCS	100	107	20	87	4/30/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
19S05W08ACA1	330405	913815	NRCS	--	111	11	100	4/30/2004
19S05W16ABB1	330323	913718	NRCS	100	116	19	97	4/30/2004
19S05W22DCD1	330139	913615	NRCS	--	107	20	87	4/30/2004
19S06W07BCC1	330404	914608	USGS	--	134.7	31.43	103	2/25/2004
Chicot County								
13S03W27AAA1	333253	912310	NRCS	--	138	43	95	4/28/2004
13S03W34BAA1	333110	912539	USGS	100	133	39.77	93	2/26/2004
13S03W34CAA1	333136	912336	USGS	75	132	36.52	95	2/26/2004
13S03W35BAC1	333154	912246	USGS	90	134	38.87	95	2/26/2004
14S02W09BDD1	332859	911729	NRCS	--	133	29	104	5/07/2004
14S03W32CDB2	332613	912551	USGS	90	134	34.93	99	2/26/2004
15S02W20DDC1	332227	911920	NRCS	70	126	30	96	4/28/2004
15S04W13DAD1	332338	912730	NRCS	--	131	35	96	4/28/2004
16S03W11ADC1	331920	912234	USGS	--	118	28.51	89	2/27/2004
17S01E17CDA1	331259	910716	USGS	110	118	21.77	96	2/26/2004
17S01E18ADA1	331326	910758	USGS	--	121	11.24	110	2/26/2004
17S01W06BCC1	331501	911505	USGS	100	115	22.17	93	2/27/2004
17S02W10AAA1	331429	911712	USGS	90	114	27.04	87	2/27/2004
17S03W18CBC1	331257	912736	NRCS	--	117	33	84	4/28/2004
17S03W28DBA1	331127	912441	USGS	95	110	24.61	85	2/27/2004
18S01W19DAB1	330709	911423	USGS	--	110	12.18	98	2/26/2004
18S01W33BAD1	330543	911245	NRCS	--	116	13	103	4/28/2004
18S03W22ABA2	330728	912341	USGS	85.5	103	12.53	90	2/26/2004
19S01W17BCC1	330250	911406	USGS	120	106	19.19	87	2/26/2004
19S03W14ABB1	330304	912251	USGS	95	111	22.92	88	2/26/2004
Clay County								
18N08E03DAB1	361323	901153	USGS	105	257	6.84	250	3/30/2004
18N08E11BAA1	361253	901117	NRCS	100	259	6.8	252	4/14/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
19N03E24AAA1	361655	904157	USGS	--	278	18.18	260	3/30/2004
19N04E11DAA1	361805	903621	NRCS	--	280	22.6	257	4/14/2004
19N04E19AAA1	361654	904050	USGS	--	282	29.03	253	3/30/2004
19N04E19BAA1	361649	904125	NRCS	100	279	21.5	258	4/14/2004
19N05E15BBD1	361716	903152	NRCS	110	289	32.5	257	4/14/2004
19N06E18DBC1	361642	902815	NRCS	--	297	32.5	265	4/14/2004
19N07E25BCB1	361519	901700	NRCS	--	268	16.6	251	4/14/2004
19N08E02ABB1	361859	901104	USGS	--	269	4.12	265	3/30/2004
19N08E08DCA1	361729	901402	NRCS	--	270	8.0	262	4/14/2004
19N09E19CDC1	361539	900908	NRCS	--	265	7.5	258	4/14/2004
20N03E25BAA1	362112	904225	NRCS	100	288	21.8	266	4/14/2004
20N04E03ADA1	362425	903725	NRCS	--	290	16.9	273	4/14/2004
20N04E06BB1	362444	904131	USGS	110	290	18.2	272	3/30/2004
20N05E22CAD1	362118	903132	NRCS	--	290	27.0	263	4/14/2004
20N05E30CAC1	362003	903454	NRCS	--	283	16.9	266	4/14/2004
20N05E34DBA1	361939	903117	USGS	110	285	27.63	257	3/30/2004
20N06E09BBA1	362327	902620	NRCS	--	290	19.8	270	4/14/2004
20N06E28CCD1	362005	902630	NRCS	--	290	27.0	263	4/14/2004
20N08E22BDC1	362111	901220	NRCS	--	275	8.5	267	4/14/2004
20N09E09ABC1	362306	900642	NRCS	--	279	8.0	271	4/14/2004
20N09E33DDC1	361904	900628	NRCS	--	270	6.9	263	4/14/2004
21N03E15CBC1	362738	904453	NRCS	90	292	12.1	280	4/14/2004
21N03E36CDD1	362450	904214	NRCS	--	290	18.1	272	4/14/2004
21N04E09DBC1	362828	903853	NRCS	--	291	11.0	280	4/14/2004
21N05E17ABB1	362755	903329	USGS	105	298	20.32	278	3/30/2004
21N05E22BAB1	362704	903132	NRCS	105	288	6.5	282	4/14/2004
21N06E11BBB1	362839	902421	NRCS	100	296	11.9	284	4/14/2004
21N06E28BB1	362605	902608	USGS	130	292.5	17.03	275	3/30/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
21N07E01DDC1	362835	901607	NRCS	90	303	18.5	285	4/14/2004
21N07E19BDA1	362640	902148	NRCS	--	295	18.0	277	4/14/2004
21N08E04DDC1	362835	901252	NRCS	120	310	19.0	291	4/14/2004
21N08E18CCC1	362651	901550	USGS	110	324	30.87	293	3/30/2004
21N08E36ABB1	362502	900958	USGS	90	283	1.63	281	3/30/2004
21N09E31BDA1	362447	900851	NRCS	100	284	5.4	279	4/14/2004
Craighead County								
13N01E03AAA1	354739	905753	NRCS	135	240	52.2	188	3/16/2004
13N01E21CAB	354434	905945	NRCS	120	240	59.0	181	3/16/2004
13N01E23CAB1	354430	905736	NRCS	118	245	64.5	181	3/17/2004
13N01E23DAA1	354435	905652	USGS	118	242	69.39	173	3/25/2004
13N02E02AAB1	354731	905032	NRCS	130	251	85.0	166	3/16/2004
13N02E03AAA1	354733	905129	NRCS	105	250	83.8	166	3/16/2004
13N03E10BDB1	354625	904546	NRCS	150	265	82.5	183	3/16/2004
13N03E23CDA1	354419	904434	NRCS	135	249	78.8	170	3/16/2004
13N03E28CDB1	354322	904652	NRCS	121	250	105.5	145	3/16/2004
13N03E29AAA1	354403	904713	USGS	122	251	102.05	149	3/25/2004
13N03E35AAA1	354308	904401	NRCS	150	249	93.5	156	3/16/2004
13N04E12ABB1	354635	903656	USGS	110	231	23.46	208	3/25/2004
13N04E15DBA1	354521	903857	NRCS	130	230	25.2	205	3/09/2004
13N04E26BCC1	354340	903829	NRCS	100	225	27.4	198	3/09/2004
13N05E02CCC1	354648	903202	NRCS	120	230	9.0	221	3/09/2004
13N05E06DCC1	354637	903547	NRCS	110	229	20.0	209	3/09/2004
13N05E22BAD1	354449	903243	USGS	--	226	13.11	213	3/25/2004
13N05E24BAC1	354451	903045	NRCS	120	225	5.5	220	3/09/2004
13N06E21AAA1	354450	902701	NRCS	150	222	7.0	215	3/09/2004
13N07E02CAB1	354642	901901	NRCS	120	226	5.0	221	3/16/2004
13N07E05ABB1	354716	902158	NRCS	100	225	5.5	220	3/16/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
13N07E20BBA1	354440	902216	USGS	22.3	223.2	3.9	219	3/25/2004
13N07E35BCD1	354233	901837	NRCS	120	221	8.0	213	3/16/2004
14N01E03ACB1	355246	905816	NRCS	96	249	48.1	201	3/17/2004
14N01E10BAB1	355204	905828	NRCS	96	246	50.1	196	3/17/2004
14N01E31DCA1	354817	910121	NRCS	126	251	56.7	194	3/17/2004
14N02E18BDD1	355041	905419	USGS	120	242	50.25	192	3/25/2004
14N02E22AAA1	355007	905129	NRCS	132	255	71.0	184	3/17/2004
14N05E25ABB1	354921	903025	USGS	--	238	18.14	220	3/25/2004
14N06E06BAA1	355234	902934	NRCS	120	240	21.0	219	3/16/2004
14N06E20CCD1	354922	902850	USGS	150	226	6.13	220	3/25/2004
14N06E27AAB1	354911	902559	USGS	30.3	225.93	2.45	223	3/25/2004
14N07E07BCB1	355124	902323	NRCS	98	230	5.0	225	3/08/2004
14N07E14DDC1	354956	901831	NRCS	120	230	4.5	226	3/08/2004
14N07E26DBB1	354834	901843	USGS	100	228	5.35	223	3/25/2004
15N02E12DCB1	355626	904930	NRCS	120	250	31.7	218	3/17/2004
15N03E19ADA1	355502	904802	USGS	116	262	47.93	214	3/25/2004
15N05E22BAB1	355513	903241	NRCS	197	260	38.0	222	3/16/2004
15N06E04BAD1	355744	902706	NRCS	104	239	11.0	228	3/12/2004
15N06E20DDD1	355426	902739	USGS	--	234	8.62	225	3/25/2004
15N07E10DAB1	355622	901934	NRCS	106	235	7.5	228	3/08/2004
15N07E10DBA1	355628	901944	USGS	120	236	7.58	228	3/25/2004
15N07E21DAB1	355444	902043	NRCS	110	236	6.5	230	3/08/2004
15N07E35DCB1	355241	901831	NRCS	120	231	6.5	225	3/08/2004
			Crittenden County					
04N07E21AAD1	345644	902121	USGS	82.1	202	9.98	192	3/24/2004
05N07E08BDC1	350407	902234	NRCS	110	204	22	182	4/13/2004
05N07E28CBA1	350121	902140	USGS	--	201	16.98	184	3/24/2004
05N07E34BAB1	350059	902030	USGS	100	203	14.89	188	3/24/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
05N07E34CDD1	350010	902028	NRCS	110	205	19	186	4/13/2004
05N08E11CCD2	350345	901308	USGS	63	211	26.06	185	3/24/2004
06N07E13BAA1	350850	901808	USGS	130	205	19.03	186	3/24/2004
06N07E14ABA1	350848	901858	NRCS	110	211	25	186	4/13/2004
07N06E29CBC1	351152	902914	NRCS	120	210	37	173	4/13/2004
07N07E01ACC1	351514	902447	USGS	132	215	28.10	187	3/24/2004
07N07E31CCC1	351042	902359	USGS	110	207	31.56	175	3/24/2004
07N08E04BBD1	351538	901505	NRCS	120	224	19	205	4/15/2004
07N09E05CDD1	351453	900934	USGS	120	214	14.34	200	3/24/2004
08N06E01DCC1	352021	902408	NRCS	120	215	32	183	4/13/2004
08N06E06DDB1	352030	902920	NRCS	120	214	31	183	4/15/2004
08N07E13CCC2	351828	901812	USGS	100	221	28.25	193	3/24/2004
08N07E14DAA2	351854	901833	USGS	--	219	29.20	190	3/24/2004
08N07E32DAA1	351618	902146	NRCS	110	215	26	189	4/13/2004
08N08E06ABB1	352103	901644	NRCS	110	223	27.5	196	4/13/2004
09N07E02CDB1	352537	901905	NRCS	130	225	33	192	4/13/2004
09N07E10DDA1	352448	901925	USGS	60	221	27.26	194	3/24/2004
09N07E31BAB1*	352160	902327	USGS	110	221	32.31	189	3/24/2004
09N07E31BAB1*	352160	902327	NRCS	110	221	31	190	4/13/2004
09N08E04CDC1	352527	901444	NRCS	120	225	24	201	4/13/2004
Cross County								
06N02E11BDB1	350934	905132	NRCS	--	220	61	159	4/15/2004
06N02E12AAA1	350934	904952	NRCS	--	235	79	156	4/15/2004
07N01E05CDA1	351518	910049	USGS	140	217	71.75	145	3/23/2004
07N01E05DCA1	351514	910033	NRCS	160	215	72	143	4/15/2004
07N01E06CAA1	351530	910154	NRCS	--	220	71	149	4/08/2004
07N01E11AAA1	351501	905705	USGS	120	217	74.77	142	3/23/2004
07N01E33BBA1	351134	910010	NRCS	--	215	70	145	4/15/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
07N02E29DDC1	351138	905409	USGS	100	220	70.48	150	3/23/2004
07N03E05ADA1	351549	904739	USGS	160	254	120.85	133	3/23/2004
07N03E32DCC1	351045	904810	USGS	--	251	95.88	155	3/23/2004
07N05E19CCC1	351238	903645	USGS	--	207	34.91	172	3/23/2004
07N05E24CCC1	351232	903121	NRCS	110	205	35	170	4/15/2004
07N05E25ABA1*	351229	903045	USGS	140	205	35.81	169	3/23/2004
07N05E25ABA1*	351229	903045	NRCS	140	205	38	167	4/15/2004
08N01E16DBB1	351855	905933	NRCS	140	225	84	141	4/08/2004
08N02E12DCC1	351938	905002	NRCS	--	230	88	142	4/15/2004
08N02E17AAA1	351923	905354	NRCS	--	225	82	143	4/08/2004
08N05E32ADD1	351632	903440	USGS	--	204	28.47	176	3/23/2004
09N01E04ACD1	352608	905914	NRCS	140	225	85	140	4/08/2004
09N01E33BBA2	352203	910001	USGS	--	225	78.4	147	3/23/2004
09N01E36AAB1	352155	905605	NRCS	160	225	83	142	4/15/2004
09N02E20AAA1	352402	905342	NRCS	120	230	91	139	4/08/2004
09N02E30CBB1	352243	905551	NRCS	--	225	87	138	4/08/2004
09N03E17CDD1	352422	904753	NRCS	--	245	102	143	4/08/2004
09N03E17DDC1	352409	904726	USGS	160	251	103.96	147	3/23/2004
09N04E03DBB1	352614	903918	NRCS	120	215	31	184	4/15/2004
09N05E32BCB1	352151	903525	NRCS	--	206	35	171	4/15/2004
09N05E32BDB1	352151	903512	USGS	--	210	29.12	181	3/23/2004
Desha County								
07S01E19ABA1	340428	910303	NRCS	120	154	14	140	4/13/2004
08S03W33ABD1	335803	912338	USGS	60	165.04	5.32	160	3/02/2004
09S01W08BDA1	335608	911234	NRCS	--	156	25	131	4/30/2004
09S01W15CBB1	335501	911055	NRCS	--	152	35	117	4/30/2004
09S02W26DDC1	335257	911530	USGS	94	149.27	30.47	119	3/02/2004
09S03W05BAC1	335704	912506	NRCS	--	161	38	123	4/30/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
09S03W13BAB1	335500	911922	NRCS	--	156	31	125	4/30/2004
09S03W17DCB1	335448	912457	USGS	126	155.08	33.82	121	3/02/2004
09S04W06BCA1	335756	913243	USGS	--	161	33.75	127	3/02/2004
10S01W23CDA1	335305	911032	NRCS	--	151	22	129	4/30/2004
10S02W11ADD1	335045	911517	NRCS	--	146	28	118	4/30/2004
10S02W23ABC1	334913	911534	NRCS	--	147	35	112	4/30/2004
10S02W24DBC1	334850	911453	USGS	70	143	25.88	117	3/02/2004
10S03W26CAA1	334806	912145	USGS	96	155	45.12	110	3/02/2004
11S02W15ADD1	334446	911635	NRCS	--	144	33	111	4/30/2004
11S03W16CBA1	334439	912433	NRCS	--	155	32	123	4/30/2004
11S03W31BBA1	334228	912651	USGS	--	148	34.18	114	3/02/2004
12S01W33BAA1	333718	911205	USGS	95	135	24.55	110	3/02/2004
13S02W17ADA1	333421	911858	NRCS	--	138	44	94	4/30/2004
13S02W27CAC1	333224	911735	USGS	120	133	31.92	101	3/02/2004
13S02W32DBD1	333126	911917	NRCS	--	135	38	97	4/30/2004
13S03W10DAA1	333506	912302	USGS	86	140	45.95	94	3/02/2004
13S03W11CAB1	333503	912241	NRCS	--	142	51	91	4/30/2004
				Drew County				
11S04W08DBA1	334532	913136	USGS	70	160	23.13	137	3/01/2004
11S05W08CCC1	334546	913837	USGS	153	185	35.79	149	3/01/2004
11S06W34DAC2	334239	914226	USGS	175	209	66.92	142	3/01/2004
12S04W03ABB1	334134	912946	USGS	--	155	24.11	131	3/01/2004
12S04W25DBB1	333739	912738	NRCS	90	149	34.0	115	5/04/2004
13S04W09ACD1	333512	913034	NRCS	90	145	16.4	129	5/04/2004
13S04W33BAA1	333206	913100	USGS	130	138	19.03	119	3/01/2004
13S05W29ADA1	333248	913747	USGS	--	185	30.5	155	3/01/2004
13S06W03DDC1	333545	914202	USGS	110	191	61.06	130	3/01/2004
13S06W21DAA1	333324	914258	NRCS	142	207	89.0	118	5/05/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
14S04W03ADD1	333050	912929	NRCS	92	141	25.0	116	5/04/2004
14S04W05CBA1	333047	913218	NRCS	90	131	12.0	119	5/04/2004
14S04W05CBC1	333042	913226	NRCS	90	131	13.0	118	5/04/2004
14S04W22CAA1	332805	912957	NRCS	100	135	19.0	116	5/04/2004
14S05W23DCB1	332802	913512	USGS	42	161	29.88	131	3/01/2004
Greene County								
16N03E03BA1	360316	904516	USGS	100	260	29.04	231	3/30/2004
16N03E05BBB1	360316	904750	NRCS	105	257	28.4	229	4/16/2004
16N03E16DDD1	360049	904547	NRCS	100	258	34.8	223	4/16/2004
16N03E29ACC1	355926	904722	NRCS	100	257	29.2	228	4/16/2004
16N05E25DCB1	355857	903013	NRCS	185	260	31.7	228	4/15/2004
16N06E03CCC1	360224	902626	USGS	194	258	40.39	218	3/29/2004
16N06E09ABB1	360215	902651	NRCS	90	261	40.4	221	4/15/2004
16N06E21BAA1	360031	902705	NRCS	130	249	25.0	224	4/15/2004
16N06E28ABB1	355938	902657	USGS	--	251	23.89	227	3/29/2004
17N03E02DCC1	360806	904352	NRCS	100	267	31.0	236	4/16/2004
17N04E07AD1	360718	904122	NRCS	100	273	36.1	237	4/16/2004
17N04E30CDC1	360409	904218	USGS	100	265	35.38	230	3/30/2004
17N06E15ABC1	360631	902546	NRCS	168	268	38.2	230	4/15/2004
17N06E22CBB1	360520	902521	NRCS	200	268	35.6	232	4/15/2004
17N07E03CCC1	360744	901951	NRCS	87	246	6.8	239	4/15/2004
17N07E18ABB1	360638	902235	USGS	--	245	6.97	238	3/29/2004
17N07E29CBC1	360419	902201	NRCS	80	245	4.2	241	4/15/2004
18N03E24ACA1	361119	904216	NRCS	120	271	29.8	241	4/16/2004
18N04E04AAC1	361356	903854	NRCS	127	273	28.2	245	4/16/2004
18N04E21CBD1	361052	903725	USGS	--	294	53.90	240	3/30/2004
18N04E28DAD1	361003	903845	NRCS	100	277	38.8	238	4/16/2004
18N06E23ABB1	361109	902402	NRCS	145	280	10.3	270	4/15/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
18N07E17BAB1	361203	902105	NRCS	100	262	8.3	254	4/15/2004
18N07E20BBA1	361110	902113	USGS	--	257	6.88	250	3/29/2004
19N03E26AD1	361601	904258	USGS	100	281	27.59	253	3/30/2004
19N03E33DDD1	361418	904516	NRCS	100	276	33.8	242	4/16/2004
19N04E30DBB1	361532	904119	NRCS	100	281	33.0	248	4/16/2004
19N05E34AAD1	361437	903102	NRCS	130	282	30.5	252	4/15/2004
Independence County								
11N04W02ABB1	353650	912416	NRCS	--	227	9.4	218	4/13/2004
12N04W14DD1	353929	912236	USGS	60	231	24.71	206	3/31/2004
12N04W34CBB1	353720	912513	USGS	--	231	21.91	209	3/31/2004
12N05W36AAA1*	353738	912827	USGS	--	236	23.75	212	3/31/2004
12N05W36AAA1*	353738	912827	NRCS	--	236	12.1	224	4/13/2004
14N03W12CAB1	355152	911541	NRCS	--	230	1.9	228	4/13/2004
14N03W14CBB1	355101	911703	NRCS	--	235	1.8	233	4/13/2004
14N03W14DAA2	355107	911602	USGS	--	230	4.08	226	3/31/2004
14N03W14DBB1	355106	911640	USGS	65	230	4.02	226	3/31/2004
Jackson County								
09N01W15DDD1	352357	910433	NRCS	90	220	58.7	161	4/07/2004
09N01W22ADD1	352332	910433	USGS	125	215	59.66	155	3/31/2004
09N01W30BAC1	352258	910813	NRCS	120	218	42.0	176	4/01/2004
09N02W32BBB1	352215	911344	NRCS	100	220	29.2	191	4/01/2004
09N02W32CBB1	352152	911348	USGS	117	220	28.35	192	3/31/2004
10N01W05ADD1	353132	910702	NRCS	--	227	45.3	182	4/01/2004
10N01W10ABA1	353055	910445	NRCS	135	223	57.4	166	4/06/2004
10N02W29ABB1	352829	911312	USGS	--	227	25.83	201	3/31/2004
11N01W26AAD1*	353330	910323	NRCS	95	227	65.1	162	3/26/2004
11N01W26AAD1*	353330	910323	USGS	95	227	65.25	162	3/31/2004
11N01W29AAD1	353339	910635	USGS	97	225	39.01	186	3/31/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
11N02W25BBD1	353322	910855	NRCS	100	221	25.5	196	3/26/2004
11N03W05CAB1	353655	912008	NRCS	95	225	18.0	207	4/08/2004
11N03W06DAB1	353655	912009	USGS	100	223	22.03	201	3/31/2004
12N01W11BCB1	354127	910416	NRCS	110	233	36.6	196	4/06/2004
12N01W30CCC2	353812	910821	NRCS	140	227	31.8	195	3/26/2004
12N01W36CBC1	353724	910317	NRCS	120	236	50.4	186	3/26/2004
12N02W25ABB2	353910	910852	USGS	--	234	31.73	202	3/31/2004
12N03W35BCA1	353800	911706	USGS	95	220	11.88	208	3/31/2004
13N01W20AAA1	354514	910627	USGS	147	242	37.64	204	3/31/2004
13N01W23BCC1	354444	910413	NRCS	100	246	44.1	202	4/06/2004
13N02W34CBB1	354306	911151	NRCS	100	240	19.5	221	4/06/2004
13N03W15CDD1	354526	911749	USGS	--	232	15.18	217	3/31/2004
13N03W15DCB1	354540	911718	NRCS	80	238	16.5	222	4/07/2004
13N03W36ABB1	354337	911532	NRCS	110	241	14.2	227	4/06/2004
14N01W08AAA1	355216	910623	NRCS	80	252	33.7	218	4/05/2004
14N01W09AAA1	355220	910515	USGS	--	251	40.32	211	3/31/2004
14N01W19BBB1	355032	910823	NRCS	100	246	26.7	219	4/05/2004
14N01W33CCD1	354759	910610	NRCS	100	245	38.7	206	4/05/2004
14N02W22BBC1	355026	911145	NRCS	100	250	26.0	224	4/05/2004
Jefferson County								
03S07W36ACC1	342410	914253	NRCS	--	185	41.3	144	5/20/2004
03S08W24BBC1	342620	914953	USGS	135	202	49.58	152	3/03/2004
03S09W06DDA1	342840	920037	USGS	--	225	35.61	189	3/03/2004
03S09W14BCD1	342712	915713	NRCS	--	220	46.6	173	5/11/2004
03S09W22AAA1	342640	915728	NRCS	100	218	43.0	175	5/11/2004
03S09W29CBD1	342517	920023	USGS	--	216	27.04	189	3/03/2004
03S09W36ACC1	342428	915555	NRCS	--	214	46.3	168	5/20/2004
03S10W25BCA2	342537	920242	NRCS	--	216	19.3	197	5/11/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
03S10W26BBB2	342427	920250	NRCS	--	215	16.0	199	5/11/2004
04S07W35DDB1	341836	914347	NRCS	--	185	26.2	159	5/20/2004
04S08W13DCB1	342123	914926	USGS	110	204	46.12	158	3/03/2004
04S08W33CDA1	341848	915244	NRCS	--	209	39.8	169	5/20/2004
04S09W02CBD1	342325	915717	NRCS	110	212	44.7	167	5/11/2004
04S09W32DDA1	341859	920009	NRCS	--	212	19.7	192	5/11/2004
05S06W31CAA1	341330	914206	USGS	--	189.22	16.17	173	3/03/2004
05S07W29DDD1	341411	914654	NRCS	110	194	18.0	176	5/20/2004
05S08W12DAA1	341712	914907	USGS	101	194.25	17.47	177	3/03/2004
06S05W15BCA1	341023	913245	USGS	120	177.14	19.44	158	3/03/2004
06S06W23AAD1	341007	913712	USGS	107	189.01	21.46	168	3/03/2004
06S07W14BAA1	341125	914426	USGS	110	199	16.23	183	3/03/2004
07S07W16BAA1	340722	914828	NRCS	--	190	24.4	166	4/27/2004
07S07W18CAC1	340647	915037	USGS	65	186	28.33	158	3/03/2004
07S08W06BAA1	340859	915647	USGS	160	202.31	19.27	183	3/03/2004
Lawrence County								
15N01E11ADD1	355657	905638	NRCS	100	255	42.0	213	4/70/2004
15N01W03BAB1	355831	910441	NRCS	105	259	35.2	224	4/08/2004
15N01W35CBB1	355336	910356	USGS	--	250	43.39	207	3/31/2004
16N01E11DAC2	360203	905639	USGS	--	262	43.66	218	3/31/2004
16N01E35AAA1	355908	905632	NRCS	105	256	46.2	210	4/07/2004
16N01W30DDC1	355937	910723	NRCS	105	255	22.0	233	4/07/2004
16N02E09AAD1	360219	905212	NRCS	110	261	37.6	223	4/07/2004
16N02E19ACA1	360031	905442	NRCS	110	260	38.8	221	4/08/2004
16N02E34CBB1	355831	905208	NRCS	100	255	43.0	212	4/07/2004
17N01E02BBA1	360901	905707	NRCS	90	260	12.2	248	4/08/2004
17N01E21CBC1	360543	905931	NRCS	110	265	19.6	245	4/06/2004
17N01E27AAA1	360519	905732	NRCS	110	270	33.8	236	4/06/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
17N01W26BBC1	360520	910348	USGS	82	260	38.23	222	3/31/2004
17N01W36AAB1	360435	910158	NRCS	85	257	11.5	246	4/06/2004
17N02E04DCA1	360758	905224	NRCS	110	270	38.0	232	4/06/2004
17N02E19CDC1*	360516	905449	USGS	105	265	38.23	227	3/31/2004
17N02E19CDC1*	360516	905449	NRCS	105	265	36.6	228	4/06/2004
17N02E21ABD1	360554	905225	NRCS	105	268	41.0	227	4/06/2004
17N02E25CBD1	360423	904948	NRCS	100	265	35.0	230	4/06/2004
Lee County								
01N01E04AAB1	344358	910015	NRCS	140	175	38.3	137	4/15/2004
01N01E09CCC1	344215	910054	NRCS	140	182	30.5	152	4/17/2004
01N01E24CBD1	344033	905729	NRCS	140	185	16.3	169	4/12/2004
01N02E01ADD1	344330	905016	NRCS	140	207	25.0	182	4/07/2004
01N02E11BAB1	344255	905208	NRCS	140	202	26.0	176	4/07/2004
01N02E12ABB1	344254	905040	NRCS	140	206	26.0	180	4/07/2004
01N02E22CBA1	344056	905318	NRCS	140	200	28.5	172	4/12/2004
01N02E33CBB1	343858	905434	NRCS	140	186	14.0	172	4/12/2004
01N02E33CCB1	343851	905433	NRCS	140	185	13.0	172	4/12/2004
01N03E02BBC1	344339	904601	USGS	168	236.43	47.04	189	3/22/2004
01N03E27ADD1	343952	904605	NRCS	120	204	7.0	197	4/07/2004
01N03E35BBA1	343923	904549	USGS	120	202	9.18	193	3/22/2004
02N01E21BAA1	344633	910005	NRCS	140	185	33.3	152	4/07/2004
02N01E23BAA2	344632	905820	USGS	137	202	49.22	153	3/22/2004
02N01W12BAA1	344828	910330	USGS	95	185	42.07	143	3/22/2004
02N01W34DDC1	344410	910520	NRCS	140	180	47.0	133	4/12/2004
02N02E08ADC1	344807	905339	USGS	120	201	43.93	157	3/22/2004
02N02E21ABC1	344622	905358	USGS	120	200	38.73	161	3/22/2004
02N02E22BBB1	344628	905327	NRCS	140	200	34.0	166	4/12/2004
02N02E36DDC1	344355	905020	NRCS	140	205	24.5	181	4/07/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
02N03E08AAD1	344811	904838	USGS	100	211	43.43	168	3/22/2004
02N03E09DDD1	344723	904707	NRCS	120	220	50.0	170	4/15/2004
02N03E29CAD1	344500	904846	NRCS	140	220	38.5	182	4/15/2004
02N04E03ABD1	344855	903954	NRCS	140	192	28.5	164	4/15/2004
02N04E15DAC1	344637	903950	USGS	60	192	18.15	174	3/22/2004
03N01E03CBC1	345355	905941	NRCS	140	205	63.0	142	4/07/2004
03N01E16CBA1	345222	910040	USGS	110	202	63.20	139	3/22/2004
03N01E32BCC1	344951	910150	NRCS	140	200	60.0	140	4/07/2004
03N02E13BBA1	345237	905107	USGS	65	212	48.55	163	3/22/2004
03N02E21CBC1	345111	905428	NRCS	140	209	55.0	154	4/12/2004
03N02E29DAD1	345014	905430	USGS	135	205	42.66	162	3/22/2004
03N03E05CDD1	345327	904837	NRCS	110	204	32.5	172	4/15/2004
03N03E18DAB1	345206	904919	NRCS	140	196	27.0	169	4/15/2004
03N03E32CAB1	344933	904926	USGS	116	204	48.35	156	3/22/2004
03N04E07CBB1	345245	904312	NRCS	140	200	32.0	168	4/15/2004
03N05E14DDA1	345148	903203	USGS	120	193	13.55	179	3/22/2004
03N05E26ADC1	345020	903215	NRCS	140	185	5.0	180	4/15/2004
			Lincoln County					
07S06W03CCA2	340828	914114	NRCS	110	190	16	174	5/11/2004
07S07W36CBD1	340411	914529	NRCS	123	183	38	145	5/11/2004
08S04W06ABD1	340341	913116	NRCS	95	171	17	154	5/11/2004
08S04W08BBB2	340254	913101	USGS	65.2	171	21.23	150	3/02/2004
08S04W29ABC1	340021	913044	NRCS	100	176	45	131	5/11/2004
08S04W31CBA1	335901	913150	USGS	99	161.9	32.80	129	3/02/2004
08S05W12AAD1	340246	913214	NRCS	83	165	21	144	5/11/2004
08S05W21DCD1	340027	913533	NRCS	120	169	35	134	5/11/2004
08S05W32DCC1	335840	913644	NRCS	100	172	33	139	5/11/2004
08S06W02ACB1	340339	913958	USGS	68	181.03	42.64	138	3/02/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
09S04W06CBB1	335721	913252	NRCS	110	163	45	118	5/11/2004
09S05W14ABC1	335553	913439	USGS	98	172.5	37.58	135	3/02/2004
09S05W17BCB1	335552	913820	USGS	97	171	41.77	129	3/03/2004
09S05W19CCC1	335428	913941	NRCS	110	171	32	139	5/11/2004
09S06W04BCD1	335821	914346	USGS	62.6	181	38.38	143	3/02/2004
09S06W04BDD1	335759	914335	NRCS	100	178	41	137	5/11/2004
09S06W23CDB1	335440	914136	USGS	70	175	30.17	145	3/02/2004
10S05W06DCC1	335155	913908	USGS	65	175	30.38	145	3/03/2004
Lonoke County								
01N08W03DDA1	344411	915050	NRCS	--	229	140.4	89	4/08/2004
01N09W07DAA1	344337	920030	NRCS	--	240	48.8	191	4/08/2004
01N09W13DAB1	344235	915517	USGS	150	226	87.12	139	3/12/2004
01N10W15CDA1	344236	920415	NRCS	100	240	26.8	213	4/08/2004
01S06W31ABB1	343459	914131	USGS	120	200	78.7	121	3/11/2004
01S06W32BBB1	343501	914056	NRCS	--	201	86.9	114	4/08/2004
01S07W12ABA1	343834	914230	USGS	140	207	68.77	138	3/11/2004
01S08W24CDD1	343606	914912	USGS	127	210	83.93	126	3/11/2004
01S09W02DDD1	343857	915624	NRCS	--	230	89.6	140	4/08/2004
01S09W36CCC1*	343435	915619	USGS	95	220	62.27	158	3/12/2004
01S09W36CCC1*	343435	915619	NRCS	95	220	61.6	158	4/08/2004
01S10W01ACB1	343927	920215	USGS	--	236	47.24	189	3/12/2004
02N07W07DAA1	344845	914707	NRCS	--	232	131.5	101	4/08/2004
02N07W16BAB1	344815	914540	USGS	184	240	136.19	104	3/11/2004
02N08W16ABC1	344806	915114	USGS	128	230	119.89	110	3/11/2004
02N08W23CAB1	344659	915118	NRCS	--	229	138.0	91	4/08/2004
02N09W02BDB1	344955	915841	USGS	140	251	123.87	127	3/11/2004
02N10W15ACC1	344807	920353	NRCS	135	241	31.0	210	4/08/2004
02S07W05CDC1	343326	914715	NRCS	--	205	73.5	132	4/08/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
02S07W10CCB1	343246	914525	USGS	--	201	62.48	139	3/11/2004
02S07W20ACD1	343112	914655	NRCS	--	201	59.9	141	4/08/2004
02S08W13BBB1	343232	914935	USGS	--	200	58.45	142	3/11/2004
02S08W34DBB1	343003	915150	USGS	--	214	62.68	151	3/12/2004
02S09W30CDD1	343014	920116	USGS	80	226	37.88	188	3/12/2004
02S09W35AB1	343008	915653	NRCS	100	217	49.4	168	4/08/2004
03N07W08BDB1	345407	914638	USGS	125	250	93.72	156	4/16/2004
03N07W15DBC2	345253	914417	USGS	144.5	227	80.50	147	3/11/2004
03N07W29ADA1	345129	914558	USGS	120	234	89.27	145	4/16/2004
03N07W29CDD1	345057	914632	NRCS	157	232	99.8	132	4/08/2004
03N07W35CDC2	344957	914332	USGS	--	232	114.63	117	3/11/2004
03N08W03BAA1	345519	915054	USGS	162	260	90.60	169	4/15/2004
03N08W03CCC1	345430	915123	USGS	162	260	98.87	161	4/15/2004
03N08W05CCC1	345429	915323	USGS	130	257	78.96	178	4/15/2004
03N08W08ABA1	345427	915248	USGS	150	258	91.45	167	4/15/2004
03N08W10ACB1	345415	915053	USGS	150	250	88.43	162	4/15/2004
03N08W10ADD1	345401	915023	USGS	165	250	88.99	161	4/15/2004
03N08W11ABD1	345419	914936	USGS	160	260	100.54	159	4/15/2004
03N08W11ACA1	345413	914934	USGS	144	256	98.50	158	4/14/2004
03N08W21BCC1	345220	915220	USGS	155	247	80.27	167	3/11/2004
03N08W29BBB1	345147	915333	USGS	152.2	249	110.26	139	4/15/2004
03N08W29BCC1	345125	915333	USGS	150	250	121.06	129	4/15/2004
03N08W32ABB1	345057	915257	USGS	154	250	116.75	133	4/14/2004
03N08W32ABB2	345057	915259	USGS	154	250	117.24	133	3/11/2004
03N08W34ADD1	345035	915028	USGS	130	240	121.55	118	4/15/2004
04N08W05ACA1	350020	915247	USGS	138	238	44.12	194	4/16/2004
04N08W10BDD1	345917	915055	USGS	130	218	27.14	191	4/16/2004
04N08W15BCB2	345833	915121	USGS	104	225	33.54	191	3/11/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
04N08W16DCC1	345757	915154	USGS	155	225	45.12	180	4/16/2004
04N08W20ADD1	345735	915229	USGS	90	248	67.55	180	4/16/2004
04N08W26AAD1	345652	914917	USGS	130	246	70.16	176	4/15/2004
04N08W28CAC1	345620	915216	USGS	140.5	235	53.27	182	4/16/2004
04N08W28CAD1	345626	915204	USGS	115	249	68.57	180	4/16/2004
04N08W28CCC1	345615	915225	USGS	137	240	59.09	181	4/15/2004
04N08W36DBB1	345541	914914	USGS	130	259	90.68	168	4/15/2004
Mississippi County								
10N08E21ABA1	352852	901415	NRCS	110	224	25.0	199	4/15/2004
10N08E21BDC1	352830	901407	NRCS	100	224	25.0	199	4/15/2004
10N08E22ABA2	352851	901312	USGS	100	224	22.34	202	3/24/2004
10N09E08ACC1	352949	900926	USGS	110	230	13.79	216	3/24/2004
11N09E34BBB1	353218	900715	USGS	94	235	14.78	220	3/24/2004
11N10E09BCB1	353530	900202	NRCS	110	236	17.0	219	4/15/2004
12N08E08BCB1	354047	901559	USGS	120	225	8.32	217	3/24/2004
12N08E28DDB1	353707	901406	NRCS	120	225	14.4	211	4/15/2004
12N09E12ABC1	354054	900449	NRCS	120	232	7.3	225	4/15/2004
12N10E04CAA1	354124	900136	NRCS	120	235	8.0	227	4/15/2004
12N10E07BCD1	354036	900404	NRCS	110	234	11.0	223	4/15/2004
12N10E21DBA1	353842	900122	NRCS	110	236	11.7	224	4/15/2004
13N08E24ABB1	354428	901112	NRCS	120	230	16.8	213	4/14/2004
13N09E30CCD1	354248	901029	USGS	--	230	8.95	221	3/24/2004
13N10E34DBB1	354218	900024	USGS	98	235	6.84	228	3/24/2004
14N08E12DAB1	355104	901052	USGS	--	235	5.33	230	3/24/2004
14N08E20DAA1	354921	901458	NRCS	110	225	10.0	215	4/14/2004
14N08E26CC1	354803	901235	NRCS	100	230	4.0	226	4/14/2004
14N10E18ABC1	355022	900345	USGS	101	236	10.90	225	3/24/2004
14N11E03BCB1	355158	895433	USGS	128	247	3.36	244	3/25/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
14N11E17CCB1	354955	895639	NRCS	120	240	10.0	230	4/14/2004
14N11E33CAA1	354727	895508	NRCS	120	240	12.0	228	4/14/2004
14N12E05DCB1	355134	894935	USGS	--	250	9.6	240	3/25/2004
15N08E08DBC2	355605	901526	USGS	120	236	10.5	226	3/24/2004
15N10E21ABC1	355447	900135	NRCS	120	240	12.0	228	4/14/2004
15N12E01BCD1	355704	894601	NRCS	100	258	7.0	251	4/14/2004
16N10E28BBD1*	355906	900156	USGS	120	238	7.56	230	3/25/2004
16N10E28BBD1*	355906	900156	NRCS	120	238	12.5	226	4/14/2004
16N11E23ADA1	355947	895231	USGS		255	12.31	243	3/25/2004
Monroe County								
01N01W21CDC2	344037	910707	USGS	150	181	34.47	147	3/15/2004
01N02W12CBC1	344242	911032	USGS	110	182	37.39	145	3/15/2004
01N03W23BAC1	344124	911743	NRCS	100	170	14	156	4/14/2004
01N03W24BBB1	344135	911651	USGS	125	185	27.34	158	3/15/2004
01N04W33BBB2	343960	912649	USGS	--	218	94.28	124	3/15/2004
01S01W13CDD1	343611	910341	USGS	135	178	20.44	158	3/17/2004
01S01W16DB	343615	910632	NRCS	100	175	17	158	4/15/2004
01S01W18DCD1	343618	910849	USGS	110	178	22.64	155	3/17/2004
01S02W20BBB1*	343613	911456	USGS	100	170	11.74	158	3/17/2004
01S02W20BBB1*	343613	911456	NRCS	100	170	12	158	4/14/2004
01S03W20BBA1*	343538	912118	USGS	140	210	72.46	138	3/15/2004
01S03W20BBA1*	343538	912118	NRCS	140	210	78	132	4/15/2004
01S04W01BAB1	343906	912317	USGS	160	210	76.34	134	3/15/2004
02N01W19ADD1	344624	910814	NRCS	80	188	51	137	4/15/2004
02N01W19BBA1	344645	910912	USGS	75	191	52.56	138	3/15/2004
02N03W35BCA1	344455	911745	NRCS	100	188	31	157	4/15/2004
02S01W01BCD1	343305	910408	NRCS	100	176	19	157	4/14/2004
02S02W11DAC1	343209	911101	USGS	110	164	9.93	154	3/17/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
03N01W20ABA1	345201	910723	USGS	--	189	47.35	142	3/15/2004
03N02W31ADC1	344958	911447	USGS	95	190	39.53	150	3/15/2004
03N03W36AAA1	345027	911547	USGS	120	176	20.30	156	3/15/2004
04N02W01BCC1	345929	911004	NRCS	100	175	38	137	4/15/2004
04N02W05BBB1	345957	911311	NRCS	100	188	15	173	4/15/2004
04N02W27CDD3	345540	911150	USGS	181	200	45.43	155	3/15/2004
04N02W28DDD3	345535	911221	USGS	137	192	33.04	159	3/15/2004
04N02W30BBB1	345628	911525	USGS	119	185.16	13.41	172	3/15/2004
Phillips County								
01S01E20DDB1	343529	910058	NRCS	114	185	25.0	160	4/12/2004
01S02E09CBB1*	343719	905434	USGS	110	185	11.46	174	3/17/2004
01S02E09CBB1*	343719	905434	NRCS	110	185	9.0	176	4/12/2004
01S02E32BCC1	343350	905526	NRCS	120	200	31.6	168	4/12/2004
01S03E02ADD1	343814	904511	NRCS	120	200	13.0	187	4/12/2004
01S03E10ABB1	343741	904634	NRCS	120	205	14.0	191	4/12/2004
01S03E20BDD1	343533	904846	NRCS	120	210	30.0	180	4/12/2004
01S04E05DCD1*	343802	904151	USGS	120	230	45.18	185	3/17/2004
01S04E05DCD1*	343802	904151	NRCS	120	230	45.0	185	4/12/2004
02S01E28CCB1	342916	910058	USGS	108	174	17.56	156	3/17/2004
02S02E29DDD1	342901	905444	NRCS	125	180	25.6	154	4/12/2004
02S02E33ACC1	342824	905412	NRCS	120	177	25.0	152	4/12/2004
02S03E15ACD1	343110	904621	USGS	112	174	10.60	163	3/17/2004
02S03E34BCD1	342828	904653	NRCS	120	165	17.8	147	4/13/2004
02S04E27AAC1*	342932	904001	USGS	175	179	3.93	175	3/17/2004
02S04E27AAC1*	342932	904001	NRCS	175	179	6.2	173	4/13/2004
03S02E35DDA1	342256	905130	USGS	50	163	19.90	143	3/17/2004
03S03E04DAA1	342735	904710	USGS	36	171	18.27	153	3/17/2004
03S04E02CAA1*	342732	903918	USGS	120	176	8.23	168	3/17/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

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Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
03S04E02CAA1*	342732	903918	NRCS	120	176	11.8	164	4/13/2004
04S01E01AAD1	342238	905700	NRCS	120	156	14.4	142	4/13/2004
04S01E14CDD1	342014	905837	NRCS	120	155	12.0	143	4/13/2004
04S01E23CCA1	341931	905853	USGS	--	156	11.96	144	3/17/2004
04S01E29CDC1	341844	910148	NRCS	120	150	7.9	142	4/13/2004
04S02E01DBB1	342220	905053	NRCS	--	163	9.6	153	4/13/2004
05S02E18BDA1	341535	905628	USGS	130	156	16.14	140	3/17/2004
Poinsett County								
10N01E02AAA	353205	905654	NRCS	100	235	97	138	3/19/2004
10N01E14CC1	352910	905814	USGS	150	231	89.72	141	3/29/2004
10N01E16CCB1	352922	910005	USGS	120	225	72.39	153	3/29/2004
10N01E32CBB1	352657	910053	NRCS	120	222	70	152	3/19/2004
10N01E33ACB1	352746	905931	NRCS	153	220	76	144	3/19/2004
10N02E13BCC1	352949	905026	USGS	167	237	99.90	137	3/29/2004
10N02E20BAB1	352906	905418	NRCS	155	237	104	133	3/19/2004
10N03E14DAB1	352947	904405	USGS	--	263	116.95	146	3/29/2004
10N03E35CDD1	352656	904436	USGS	--	275	123.86	151	3/29/2004
10N04E35BBA1	352745	903831	NRCS	100	212	20	192	3/17/2004
10N05E15BDD1	352937	903253	USGS	--	207	12.17	195	3/29/2004
10N07E22AAC1	352847	901935	USGS	--	215	27.56	187	3/29/2004
11N01E17DDC1	353437	910015	NRCS	100	232	77	155	3/19/2004
11N01E17DDD1	353437	910013	USGS	100	230	76.12	154	3/26/2004
11N01E26AA1	353340	905653	USGS	140	236	91.95	144	3/26/2004
11N01E34AAA	353256	905759	NRCS	100	229	85	144	3/19/2004
11N02E05BDA1	353704	905408	USGS	175	245	93.28	152	3/26/2004
11N02E26AAB1	353350	905034	USGS	158	241	105.42	136	3/29/2004
11N02E30BBB1	353352	905540	NRCS	100	239	100	139	3/19/2004
11N02E34CBA1	353238	905222	NRCS	130	240	105	135	3/19/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
11N03E10DDA1	353546	904457	USGS	145	243	102.99	140	3/29/2004
11N03E18BAB1	353538	904852	USGS	157	243	103.23	140	3/29/2004
11N04E36ABA1	353251	903654	NRCS	100	211	16	195	3/17/2004
11N07E18CAB1	353435	902320	USGS	100	217	13.89	203	3/29/2004
12N01E07CDA1	354054	910141	USGS	120	236	51.89	184	3/26/2004
12N01E22DAB1	353922	905809	NRCS	115	235	73	162	3/19/2004
12N02E25DCC1	353820	904944	NRCS	145	245	112	133	3/19/2004
12N02E34CCC1	353724	905230	NRCS	180	245	110	135	3/19/2004
12N03E01CBD1	354154	904329	NRCS	190	250	92	158	3/19/2004
12N03E04DAD1*	354158	904600	NRCS	120	247	102	145	3/19/2004
12N03E04DAD1*	354158	904600	USGS	120	247	102.61	144	3/26/2004
12N04E08CDA	354053	904112	NRCS	100	250	87	163	3/17/2004
12N05E16ABA1	354039	903333	NRCS	140	221	9	212	3/17/2004
12N05E34ABA1	353805	903230	USGS	100	215	7.47	208	3/29/2004
12N07E04BAA1	354202	902060	USGS	60	223	8.15	215	3/29/2004
12N07E10CBB1	354042	902022	NRCS	100	220	10	210	3/17/2004
Prairie County								
01N06W05CCB1	344353	914049	USGS	155	220	117.10	103	3/10/2004
01N06W29DDD1	344018	913951	USGS	155	235	115.91	119	3/10/2004
01S04W28BDB1	343523	912630	USGS	112	205	97.25	108	3/09/2004
01S05W14BBC1	343722	913109	USGS	118	211	107.74	103	3/09/2004
01S05W31DDA1	343417	913432	USGS	120	206	110.70	95	3/09/2004
02N04W02BCB1	344916	912419	USGS	140	188	19.13	169	3/10/2004
02N04W32CCB1	344436	912738	USGS	--	221	83.73	137	3/10/2004
02N05W06BAB1	344958	913421	USGS	145	221	88.79	132	3/10/2004
02N05W13AAB1	344805	912854	USGS	130	223	77.77	145	3/10/2004
02N05W29DDB2	344545	913309	USGS	135	228	118.24	110	3/10/2004
02N06W17ABB1	344809	913959	USGS	180	235	123.16	112	3/10/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
02S06W14BBB1	343213	913729	USGS	105	201	62.25	139	3/09/2004
03N04W03AAC1	345439	912424	USGS	106	187	26.83	160	3/10/2004
03N05W03BDD2	345444	913115	USGS	110	207	66.27	141	3/10/2004
03N06W01BCB1	345455	913601	USGS	115	216	80.64	135	3/10/2004
03N06W19BDD1	345207	914110	USGS	105	221	85.24	136	3/10/2004
04N04W07ADC1	345850	912733	USGS	110	195	25.53	169	3/10/2004
04N05W07CDC1	345742	913441	USGS	--	212	74.42	138	3/10/2004
04N05W31DDC1	345514	913406	USGS	104	206	76.23	130	3/10/2004
04N06W05CCC1	345934	914018	USGS	100	206	59.96	146	3/10/2004
04N07W03DCB1	345942	914412	USGS	100	255	86.61	168	3/10/2004
04N07W28BBA1	345701	914545	USGS	110	258	94.75	163	3/10/2004
05N05W14DCD1	350252	913034	USGS	--	205	37.96	167	3/10/2004
05N05W25BAA1	350153	912949	NRCS	100	187	17.5	170	4/19/2004
05N05W28DDA1	350119	913228	NRCS	85	191	33.1	158	4/19/2004
Pulaski County								
01S10W29CC1	343538	920708	USGS	100	239	16.65	222	3/19/2004
02S10W14DC1	343205	920334	USGS	60	225	25.57	199	3/19/2004
02S10W16CCA1	343217	920549	USGS	--	230.76	24.92	206	3/19/2004
Randolph County								
18N01E13BAB1	361230	905551	NRCS	100	266	15.7	250	4/23/2004
18N01E28AAD1	361040	905820	NRCS	120	265	15.3	250	4/22/2004
18N01E34AAC1	360943	905729	USGS	--	266	15.93	250	3/30/2004
18N02E03DAD1	361336	905043	NRCS	120	280	34.9	245	4/23/2004
18N02E17CBB1	361204	905356	NRCS	--	265	16.0	249	4/22/2004
18N02E20BDA1	361125	905332	NRCS	110	274	35.2	239	4/23/2004
18N02E22DCD1	361046	905105	USGS	110	273	36.27	237	3/30/2004
19N02E09ABD1	361826	905157	NRCS	80	266	3.6	262	4/22/2004
19N02E09DCA1	361757	905157	USGS	--	267	10.12	257	3/30/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
19N02E22DAB1	361622	905049	NRCS	90	266	7.0	259	4/23/2004
20N02E01ADD1	362424	904811	USGS	65	280	11.22	269	3/30/2004
20N02E01ADD2	362424	904811	NRCS	65	281	13.0	268	4/23/2004
20N02E12BAA1	362352	904848	NRCS	60	281	7.0	274	4/23/2004
20N02E14DAB1	362232	904930	NRCS	100	274	8.6	265	4/23/2004
20N03E28BA1	362114	904538	USGS	--	276	10.93	265	3/30/2004
20N03E33CCA1	361941	904552	NRCS	--	287	21.3	266	4/22/2004
St. Francis County								
04N01E13ADA1	345755	905638	USGS	--	206	57.87	148	3/23/2004
04N01W20BBB1	345716	910759	NRCS	140	200	57.5	143	4/16/2004
04N01W25DBD1	345549	910303	NRCS	140	199	74	125	4/16/2004
04N01W28CDD1	345535	910634	USGS	--	208	68.28	140	3/23/2004
04N02E03DDD3	345848	905219	USGS	151	210	41.78	168	3/23/2004
04N02E16ACD1	345733	905341	NRCS	140	209	51	158	4/16/2004
04N02E19BBB1	345701	905633	USGS	72.2	209	58.36	151	3/23/2004
04N02E27AAA1	345604	905220	NRCS	140	211	47	164	4/16/2004
04N03E21DAD1	345623	904655	USGS	--	236	56.96	179	3/23/2004
04N04E15ABA1	345752	903948	NRCS	120	201	33	168	4/16/2004
04N05E22BBB1	345651	903357	USGS	--	200	26.59	173	3/22/2004
05N01E06CDA1	350437	910218	NRCS	--	211	68	143	4/16/2004
05N01E15BCB1	350303	905942	USGS	94.1	209	63.48	146	3/23/2004
05N01E27BBA1	350136	905929	USGS	--	209	65.43	144	3/23/2004
05N02E20ADC1	350157	905437	USGS	79	211	53.08	158	3/23/2004
05N03E20AAA2	350214	904801	USGS	153.45	250	102.73	147	3/23/2004
05N05E19DCD1	350145	903650	USGS	--	200	32.68	167	3/22/2004
05N05E33BCC1	350004	903506	NRCS	120	196	29	167	4/16/2004
05N06E05BBB1	350508	902922	NRCS	120	195	34	161	4/16/2004
05N06E34CAB1	350026	902657	USGS	110	200	26.46	174	3/22/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
06N01E33ACA2	350552	905942	USGS	--	211	65.34	146	3/23/2004
06N02E13DCA1	350813	905003	USGS	--	231	73.61	157	3/23/2004
06N02E15BDD1	350842	905247	USGS	75	214.64	58.57	156	3/23/2004
06N02E16CCC1	350804	905403	NRCS	120	216	64	152	4/16/2004
06N02E24AAA1	350755	905002	USGS	147	232	71.49	161	3/23/2004
06N03E17CAA1	350822	904810	NRCS	--	258	100	158	4/16/2004
06N05E22ACC1	350723	903252	USGS	--	200	39.44	161	3/22/2004
06N06E17DDC1	350749	902830	NRCS	--	202	36	166	4/16/2004
06N06E20ABB2	350747	902841	USGS	150	200	35.25	165	3/22/2004
				White County				
05N07W09AAA1	350447	914441	USGS	29.5	205	14.82	190	3/18/2004
05N07W10CCC1	350400	914436	USGS	80	203	8.78	194	3/18/2004
06N06W04BAA1	351047	913910	USGS	70	220	36.45	184	3/18/2004
06N06W04BAD1	351037	913903	NRCS	--	215	41.5	174	4/16/2004
06N06W13DBB1	350918	913552	NRCS	--	213	46.9	166	4/16/2004
06N06W18BBC1	350851	914152	USGS	--	210	14.67	195	3/18/2004
06N06W18BCA1	350835	914150	NRCS	--	210	24.2	186	4/16/2004
06N06W34AAB1	350624	913754	USGS	--	213	59.70	153	3/18/2004
06N07W17DCC1	350822	914635	USGS	90	217	12.21	205	3/18/2004
06N08W13ABA1	350908	914824	USGS	60	228	7.40	221	3/18/2004
06N08W26DDB1	350640	914931	USGS	89	230	12.25	218	3/18/2004
07N05W01AAA1	351553	912858	USGS	--	205	15.35	190	3/18/2004
07N05W32BAB1	351137	913406	USGS	80	213.7	29.00	185	3/18/2004
07N06W19CAB1	351259	914142	USGS	38	224	4.70	219	3/18/2004
08N04W06CCB1	352028	912847	USGS	74	214	16.16	198	3/18/2004
08N05W32CBC1	351616	913417	USGS	--	199	1.50	198	3/18/2004

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, spring 2004.—Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data; NGVD of 1929, National Geodetic Vertical Datum of 1929; Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83); *, control wells for duplicate measurements by USGS and NRCS for quality assurance]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Depth of well (feet)	Land-surface datum altitude (feet above NGVD of 1929)	Depth to water (feet below land-surface datum)	Water-level altitude (feet above NGVD of 1929)	Date of measure-ment
Woodruff County								
04N03W03AB1	350021	911820	USGS	100	185	13.48	172	4/01/2004
05N01W13CDC1	350244	910331	NRCS	135	210	74.1	136	4/13/2004
05N01W31CCC1	350106	910900	NRCS	140	210	59.1	151	4/13/2004
05N02W20DCB1	350208	911356	USGS	--	192	13.94	178	4/01/2004
05N03W25DDB1	350133	911531	NRCS	120	190	12.7	177	4/13/2004
05N03W31BAC1	350110	912127	NRCS	120	178	5.8	172	4/14/2004
05N04W12DBA1	350427	912211	USGS	92	186	4.67	181	4/01/2004
06N01W06BAB1	351048	910835	USGS	--	202	32.47	170	4/01/2004
06N02W19AAA1	350802	911419	NRCS	130	225	44.7	180	4/14/2004
06N03W15BAB1	350903	911807	USGS	111	188.79	5.72	183	4/01/2004
06N03W31BCB1	350623	912144	USGS	--	185	2.26	183	4/01/2004
06N04W22BDA1	350807	912428	NRCS	120	186	4.9	181	4/13/2004
07N01W04ACB1	351541	910626	NRCS	125	225	60.3	165	4/13/2004
07N02W16DBB1	351353	911225	NRCS	110	206	24.1	182	4/13/2004
07N03W06BAC1	351607	912109	NRCS	100	211	21.0	190	3/24/2004
07N03W19AAA1	351335	912025	USGS	100	202.59	11.70	191	4/01/2004
07N03W31BBA1	351152	912103	NRCS	120	190	14.7	175	4/13/2004
08N01W06DDD1	352028	910747	USGS	--	218	42.23	176	4/01/2004
08N01W10AAA1	352018	910431	NRCS	160	211	51.8	159	4/13/2004
08N02W27DDB1	351711	911107	NRCS	60	213	25.5	188	4/13/2004
08N02W31DDD1	351611	911411	USGS	40	194.55	5.36	189	4/01/2004
08N03W31AAD1	351655	912028	USGS	110	212	21.77	190	4/01/2004
08N04W27AAA1	351757	912341	USGS	--	200	10.33	190	4/01/2004
09N03W28ABB1	352310	911845	NRCS	120	220	16.9	203	4/13/2004
09N03W29AAD1	352258	911921	USGS	--	220	20.60	199	4/01/2004
09N03W32ACA1	352205	911936	NRCS	120	217	19.3	198	4/14/2004

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
Arkansas County							
02S04W11DBB1	343233	912415	3/01/2000	99.48	3/09/2004	99.78	-0.3
02S05W15AAB1	343213	913127	5/02/2000	116.11	3/09/2004	107.66	8.5
03S02W27ABB1	342448	911251	3/01/2000	65.02	3/09/2004	65.58	-0.6
03S03W05CCD1	342737	912132	5/02/2000	93.87	3/09/2004	97.85	-4.0
03S03W27BBC1	342455	911944	5/02/2000	87.55	3/04/2004	90.83	-3.3
03S04W03DCA16	342753	912515	3/01/2000	98.89	3/04/2004	100.02	-1.1
03S05W03CCC1	342752	913227	5/02/2000	103.37	3/08/2004	104.87	-1.5
03S06W35ADD1	342411	913652	2/29/2000	56.91	3/08/2004	51.98	4.9
04S01W04ACD2	342233	910733	2/29/2000	16.07	3/09/2004	5.62	10.5
04S01W31DCB1	341753	910949	2/29/2000	68.29	3/09/2004	52.04	16.3
04S02W11AAA1	342209	911123	2/29/2000	65.02	3/09/2004	66.4	-1.4
04S02W29CCC1	341846	911539	2/24/2000	84.27	3/09/2004	81.8	2.5
04S03W17ADD1	342102	912058	3/01/2000	107.13	3/04/2004	107.08	0.0
04S03W32BCB1	341820	912202	2/24/2000	104.75	3/04/2004	116.43	-11.7
04S04W02ABB1	342313	912424	3/01/2000	112.93	3/04/2004	108.54	4.4
04S04W35ABC1	341835	912437	4/20/2000	103	4/09/2004	103.5	-0.5
04S05W16CDC1	342045	913321	2/28/2000	71.08	3/08/2004	70.58	0.5
04S05W24DAA1	342001	912930	2/28/2000	90.22	3/08/2004	90.49	-0.3
04S06W15DBB1	342122	913827	3/01/2000	32.64	3/08/2004	32.84	-0.2
05S01W16BAB1	341552	910729	2/29/2000	32.39	3/09/2004	49.61	-17.2
05S02W16ABD1	341552	911358	2/29/2000	77.23	3/04/2004	79.36	-2.1
05S04W07CCC1	341555	912932	2/28/2000	81.47	3/08/2004	75.2	6.3
05S04W32BBA1	341316	912822	2/24/2000	60.48	3/08/2004	58.03	2.5
05S06W02DDD1	341724	913651	2/29/2000	20.69	3/08/2004	20.48	0.2
05S06W07DDC1	341642	914130	3/03/2000	9.69	3/08/2004	2.78	6.9
06S02W23DCD1	340853	911206	2/24/2000	65.45	3/04/2004	68.17	-2.7

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
06S03W10BBA1	341136	911954	2/29/2000	82.77	3/04/2004	82.42	0.3
06S03W27AAA1	340858	911913	2/29/2000	65.98	3/04/2004	66.72	-0.7
06S04W18CBB1	341019	912949	2/28/2000	39.11	3/08/2004	37.84	1.3
07S02W04BBB1	340707	911452	2/29/2000	32.99	3/04/2004	35.38	-2.4
07S02W17BBA1	340530	911539	2/29/2000	53.39	3/04/2004	52.23	1.2
07S03W18CCD1	340435	912316	2/29/2000	43.96	3/04/2004	43.08	0.9
07S04W01DDD1	340625	912327	2/29/2000	47.84	3/04/2004	44.52	3.3
08S02W08ACA1	340041	911506	2/29/2000	44.85	3/04/2004	42.23	2.6
08S03WT2299	340147	912203	2/29/2000	22.22	3/04/2004	21.62	0.6
Ashley County							
15S04W26DCC1	332232	912902	2/23/2000	31.37	2/26/2004	30.97	0.4
16S06W08CAA1	331941	914438	2/23/2000	74.31	2/25/2004	77.22	-2.9
17S04W15DDC1	331252	912954	2/23/2000	26.53	2/26/2004	26.45	0.1
17S06W01ADD1	331518	913956	2/23/2000	80.72	2/25/2004	82.57	-1.8
18S04W23DDD1	330658	912856	4/21/2000	24	4/30/2004	22	2.0
18S05W11CCD1	330841	913538	4/21/2000	25	4/30/2004	16	9.0
18S05W22DDA1	330712	913555	4/21/2000	21	4/30/2004	12	9.0
18S08W01AAB1	331015	915225	2/23/2000	86.94	2/25/2004	86.33	0.6
18S08W28DDD2	330625	915528	2/23/2000	85.29	2/26/2004	85.16	0.1
19S04W06BAB2	330504	913329	2/23/2000	24.99	2/26/2004	24.07	0.9
19S04W14BBB1	330310	912913	4/21/2000	20	4/30/2004	20	0.0
19S05W08ACA1	330405	913815	4/21/2000	25	4/30/2004	11	14.0
19S05W16ABB1	330323	913718	4/21/2000	17	4/30/2004	19	-2.0
19S05W22DCD1	330139	913615	4/21/2000	23	4/30/2004	20	3.0
19S06W07BCC1	330404	914608	2/23/2000	31.48	2/25/2004	31.43	0.1
Chicot County							
13S03W27AAA1	333253	912310	4/19/2000	38	4/28/2004	43	-5.0
13S03W34BAA1	333110	912539	2/22/2000	36.49	2/26/2004	39.77	-3.3
13S03W35BAC1	333154	912246	2/22/2000	34.74	2/26/2004	38.87	-4.1

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
14S02W09BDD1	332859	911729	4/19/2000	29	5/07/2004	29	0.0
14S03W32CDB2	332613	912551	2/22/2000	34.06	2/26/2004	34.93	-0.9
15S02W20DDC1	332227	911920	2/22/2000	27.97	4/28/2004	30	-2.0
16S03W11ADC1	331920	912234	2/22/2000	26.02	2/27/2004	28.51	-2.5
17S01E17CDA1	331259	910716	2/22/2000	25.13	2/26/2004	21.77	3.4
17S01E18ADA1	331326	910758	2/22/2000	16.72	2/26/2004	11.24	5.5
17S01W06BCC1	331501	911505	2/22/2000	23.44	2/27/2004	22.17	1.3
17S03W18CBC1	331257	912736	4/19/2000	38	4/28/2004	33	5.0
17S03W28DBA1	331127	912441	2/23/2000	23.84	2/27/2004	24.61	-0.8
18S01W19DAB1	330709	911423	2/22/2000	18.48	2/26/2004	12.18	6.3
18S01W33BAD1	330543	911245	4/19/2000	22	4/28/2004	13	9.0
19S01W17BCC1	330250	911406	2/22/2000	22.16	2/26/2004	19.19	3.0
19S03W14ABB1	330304	912251	2/23/2000	25.38	2/26/2004	22.92	2.5
			Clay County				
18N08E03DAB1	361323	901153	3/14/2000	7.71	3/30/2004	6.84	0.9
18N08E11BAA1	361253	901117	4/26/2000	8	4/14/2004	6.8	1.2
19N03E24AAA1	361655	904157	3/13/2000	19.57	3/30/2004	18.18	1.4
19N04E11DAA1	361805	903621	4/27/2000	21.5	4/14/2004	22.6	-1.1
19N04E19AAA1	361654	904050	3/13/2000	28.51	3/30/2004	29.03	-0.5
19N04E19BAA1	361649	904125	4/27/2000	21.5	4/14/2004	21.5	0.0
19N05E15BBD1	361716	903152	4/26/2000	28.5	4/14/2004	32.5	-4.0
19N06E18DBC1	361642	902815	4/26/2000	30.9	4/14/2004	32.5	-1.6
19N07E25BCB1	361519	901700	4/26/2000	18.1	4/14/2004	16.6	1.5
19N08E02ABB1	361859	901104	3/13/2000	7.32	3/30/2004	4.12	3.2
19N08E08DCA1	361729	901402	4/26/2000	7.1	4/14/2004	8	-0.9
19N09E19CDC1	361539	900908	4/26/2000	7	4/14/2004	7.5	-0.5
20N03E25BAA1	362112	904225	4/27/2000	22.8	4/14/2004	21.8	1.0
20N04E03ADA1	362425	903725	4/27/2000	17.4	4/14/2004	16.9	0.5
20N04E06BB1	362444	904131	3/13/2000	19.2	3/30/2004	18.2	1.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
20N05E22CAD1	362118	903132	4/26/2000	23.5	4/14/2004	27	-3.5
20N05E30CAC1	362003	903454	4/27/2000	15.6	4/14/2004	16.9	-1.3
20N05E34DBA1	361939	903117	3/13/2000	24.33	3/30/2004	27.63	-3.3
20N06E09BBA1	362327	902620	4/26/2000	16.7	4/14/2004	19.8	-3.1
20N06E28CCD1	362005	902630	4/26/2000	23	4/14/2004	27	-4.0
20N08E22BDC1	362111	901220	4/26/2000	9	4/14/2004	8.5	0.5
20N09E09ABC1	362306	900642	4/26/2000	9.7	4/14/2004	8	1.7
20N09E33DDC1	361904	900628	4/26/2000	7.3	4/14/2004	6.9	0.4
21N03E15CBC1	362738	904453	4/27/2000	12.5	4/14/2004	12.1	0.4
21N03E36CDD1	362450	904214	4/27/2000	18.9	4/14/2004	18.1	0.8
21N04E09DBC1	362828	903853	4/27/2000	10.6	4/14/2004	11	-0.4
21N05E17ABB1	362755	903329	3/13/2000	21.38	3/30/2004	20.32	1.1
21N05E22BAB1	362704	903132	4/27/2000	6.9	4/14/2004	6.5	0.4
21N06E11BBB1	362839	902421	4/26/2000	12.9	4/14/2004	11.9	1.0
21N06E28BB1	362605	902608	3/13/2000	16.48	3/30/2004	17.03	-0.6
21N07E01DDC1	362835	901607	4/26/2000	21.6	4/14/2004	18.5	3.1
21N07E19BDA1	362640	902148	4/26/2000	17.9	4/14/2004	18	-0.1
21N08E04DDC1	362835	901252	4/26/2000	20.8	4/14/2004	19	1.8
21N08E18CCC1	362651	901550	3/13/2000	36.9	3/30/2004	30.87	6.0
21N09E31BDA1	362447	900851	4/26/2000	7.9	4/14/2004	5.4	2.5
Craighead County							
13N01E03AAA1	354739	905753	3/06/2000	51.1	3/16/2004	52.2	-1.1
13N01E21CAB	354434	905945	3/06/2000	58.6	3/16/2004	59	-0.4
13N01E23CAB1	354430	905736	3/06/2000	64.3	3/17/2004	64.5	-0.2
13N01E23DAA1	354435	905652	3/09/2000	66.24	3/25/2004	69.39	-3.2
13N02E02AAB1	354731	905032	3/06/2000	82.1	3/16/2004	85	-2.9
13N02E03AAA1	354733	905129	3/06/2000	81.3	3/16/2004	83.8	-2.5
13N03E10BDB1	354625	904546	3/06/2000	82	3/16/2004	82.5	-0.5
13N03E23CDA1	354419	904434	3/06/2000	79.6	3/16/2004	78.8	0.8

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
13N03E28CDB1	354322	904652	3/06/2000	98.8	3/16/2004	105.5	-6.7
13N03E29AAA1	354403	904713	3/09/2000	103.68	3/25/2004	102.05	1.6
13N04E12ABB1	354635	903656	3/09/2000	23.34	3/25/2004	23.46	-0.1
13N04E15DBA1	354521	903857	3/02/2000	25.1	3/09/2004	25.2	-0.1
13N04E26BCC1	354340	903829	3/02/2000	27	3/09/2004	27.4	-0.4
13N05E02CCC1	354648	903202	3/02/2000	14.3	3/09/2004	9	5.3
13N05E06DCC1	354637	903547	3/02/2000	21.8	3/09/2004	20	1.8
13N05E22BAD1	354449	903243	3/09/2000	15.6	3/25/2004	13.11	2.5
13N05E24BAC1	354451	903045	3/02/2000	11.9	3/09/2004	5.5	6.4
13N07E02CAB1	354642	901901	3/02/2000	5.6	3/16/2004	5	0.6
13N07E05ABB1	354716	902158	3/02/2000	10.7	3/16/2004	5.5	5.2
13N07E20BBA1	354440	902216	3/29/2000	5.14	3/25/2004	3.9	1.2
13N07E35BCD1	354233	901837	3/02/2000	11.1	3/16/2004	8	3.1
14N01E03ACB1	355246	905816	3/06/2000	45.6	3/17/2004	48.1	-2.5
14N01E10BAB1	355204	905828	3/06/2000	47.7	3/17/2004	50.1	-2.4
14N01E31DCA1	354817	910121	3/06/2000	54.4	3/17/2004	56.7	-2.3
14N02E18BDD1	355041	905419	3/09/2000	51.65	3/25/2004	50.25	1.4
14N02E22AAA1	355007	905129	3/06/2000	67.8	3/17/2004	71	-3.2
14N05E25ABB1	354921	903025	3/08/2000	19.52	3/25/2004	18.14	1.4
14N06E06BAA1	355234	902934	3/02/2000	21.4	3/16/2004	21	0.4
14N06E20CCD1	354922	902850	3/08/2000	7.18	3/25/2004	6.13	1.1
14N07E07BCB1	355124	902323	3/02/2000	11.6	3/08/2004	5	6.6
14N07E14DDC1	354956	901831	3/02/2000	12.7	3/08/2004	4.5	8.2
14N07E26DBB1	354834	901843	3/29/2000	9.34	3/25/2004	5.35	4.0
15N02E12DCB1	355626	904930	3/06/2000	28.5	3/17/2004	31.7	-3.2
15N03E19ADA1	355502	904802	3/09/2000	41.76	3/25/2004	47.93	-6.2
15N05E22BAB1	355513	903241	3/02/2000	35.8	3/16/2004	38	-2.2
15N06E04BAD1	355744	902706	3/02/2000	16.7	3/12/2004	11	5.7
15N06E20DDD1	355426	902739	3/10/2000	9.09	3/25/2004	8.62	0.5

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
15N07E10DAB1	355622	901934	3/02/2000	8	3/08/2004	7.5	0.5
15N07E10DBA1	355628	901944	3/08/2000	9.97	3/25/2004	7.58	2.4
15N07E21DAB1	355444	902043	3/02/2000	14.7	3/08/2004	6.5	8.2
15N07E35DCB1	355241	901831	3/02/2000	14.9	3/08/2004	6.5	8.4
Crittenden County							
04N07E21AAD1	345644	902121	3/07/2000	12.84	3/24/2004	9.98	2.9
05N07E08BDC1	350407	902234	4/10/2000	21.5	4/13/2004	22	-0.5
05N07E28CBA1	350121	902140	3/07/2000	19.38	3/24/2004	16.98	2.4
05N07E34BAB1	350059	902030	3/07/2000	20.18	3/24/2004	14.89	5.3
05N07E34CDD1	350010	902028	4/10/2000	19	4/13/2004	19	0.0
05N08E11CCD2	350345	901308	3/07/2000	28.77	3/24/2004	26.06	2.7
06N07E13BAA1	350850	901808	3/29/2000	19.09	3/24/2004	19.03	0.1
06N07E14ABA1	350848	901858	4/10/2000	20.4	4/13/2004	25	-4.6
07N06E29CBC1	351152	902914	4/10/2000	36	4/13/2004	37	-1.0
07N07E01ACC1	351514	902447	3/07/2000	25.75	3/24/2004	28.1	-2.4
07N07E31CCC1	351042	902359	3/07/2000	30.19	3/24/2004	31.56	-1.4
07N08E04BBD1	351538	901505	4/18/2000	21.8	4/15/2004	19	2.8
07N09E05CDD1	351453	900934	3/07/2000	14.02	3/24/2004	14.34	-0.3
08N06E01DCC1	352021	902408	4/18/2000	31.1	4/13/2004	32	-0.9
08N06E06DDB1	352030	902920	4/18/2000	31.6	4/15/2004	31	0.6
08N07E13CCC2	351828	901812	3/07/2000	26.13	3/24/2004	28.25	-2.1
08N07E14DAA2	351854	901833	3/07/2000	27.03	3/24/2004	29.2	-2.2
08N07E32DAA1	351618	902146	4/10/2000	27.6	4/13/2004	26	1.6
08N08E06ABB1	352103	901644	4/18/2000	27.1	4/13/2004	27.5	-0.4
09N07E02CDB1	352537	901905	4/18/2000	30.5	4/13/2004	33	-2.5
09N07E10DDA1	352448	901925	3/07/2000	23.13	3/24/2004	27.26	-4.1
09N07E31BAB1	352160	902327	3/07/2000	30.12	3/24/2004	32.31	-2.2
09N08E04CDC1	352527	901444	4/11/2000	22.6	4/13/2004	24	-1.4

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
Cross County							
06N02E11BDB1	350934	905132	4/10/2000	58	4/15/2004	61	-3.0
06N02E12AAA1	350934	904952	4/10/2000	74	4/15/2004	79	-5.0
07N01E05CDA1	351518	910049	3/06/2000	66.1	3/23/2004	71.75	-5.7
07N01E05DCA1	351514	910033	4/10/2000	66	4/15/2004	72	-6.0
07N01E06CAA1	351530	910154	4/10/2000	65	4/08/2004	71	-6.0
07N01E11AAA1	351501	905705	3/06/2000	69.86	3/23/2004	74.77	-4.9
07N01E33BBA1	351134	910010	4/10/2000	64	4/15/2004	70	-6.0
07N02E29DDC1	351138	905409	3/06/2000	68.57	3/23/2004	70.48	-1.9
07N03E05ADA1	351549	904739	3/06/2000	107.24	3/23/2004	120.85	-13.6
07N03E32DCC1	351045	904810	3/06/2000	92.39	3/23/2004	95.88	-3.5
07N05E19CCC1	351238	903645	3/06/2000	34.7	3/23/2004	34.91	-0.2
07N05E24CCC1	351232	903121	4/10/2000	31	4/15/2004	35	-4.0
07N05E25ABA1	351229	903045	3/06/2000	32.6	3/23/2004	35.81	-3.2
08N01E16DBB1	351855	905933	4/10/2000	77	4/08/2004	84	-7.0
08N02E12DCC1	351938	905002	4/10/2000	81	4/15/2004	88	-7.0
08N02E17AAA1	351923	905354	4/10/2000	78	4/08/2004	82	-4.0
08N05E32ADD1	351632	903440	3/06/2000	29.99	3/23/2004	28.47	1.5
09N01E04ACD1	352608	905914	4/06/2000	78	4/08/2004	85	-7.0
09N01E33BBA2	352203	910001	3/06/2000	79.77	3/23/2004	78.4	1.4
09N01E36AAB1	352155	905605	4/06/2000	77	4/15/2004	83	-6.0
09N02E20AAA1	352402	905342	4/06/2000	83	4/08/2004	91	-8.0
09N02E30CBB1	352243	905551	4/06/2000	82	4/08/2004	87	-5.0
09N03E17CDD1	352422	904753	4/06/2000	95	4/08/2004	102	-7.0
09N03E17DDC1	352409	904726	3/06/2000	103.46	3/23/2004	103.96	-0.5
09N04E03DBB1	352614	903918	3/06/2000	25	4/15/2004	31	-6.0
09N05E32BCB1	352151	903525	3/06/2000	29	4/15/2004	35	-6.0
09N05E32BDB1	352151	903512	3/06/2000	31.05	3/23/2004	29.12	1.9

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
Desha County							
07S01E19ABA1	340428	910303	3/14/2000	13.2	4/13/2004	14	-0.8
08S03W33ABD1	335803	912338	2/24/2000	7.96	3/02/2004	5.32	2.6
09S01W15CBB1	335501	911055	3/17/2000	33	4/30/2004	35	-2.0
09S02W26DDC1	335257	911530	2/24/2000	28.61	3/02/2004	30.47	-1.9
09S03W05BAC1	335704	912506	3/17/2000	36	4/30/2004	38	-2.0
09S03W13BAB1	335500	911922	3/17/2000	29	4/30/2004	31	-2.0
09S03W17DCB1	335448	912457	2/24/2000	32.65	3/02/2004	33.82	-1.2
09S04W06BCA1	335756	913243	2/24/2000	31.18	3/02/2004	33.75	-2.6
10S01W23CDA1	335305	911032	3/17/2000	30	4/30/2004	22	8.0
10S02W11ADD1	335045	911517	3/17/2000	24	4/30/2004	28	-4.0
10S02W24DBC1	334850	911453	2/24/2000	26.24	3/02/2004	25.88	0.4
10S03W26CAA1	334806	912145	2/24/2000	41.87	3/02/2004	45.12	-3.3
11S02W15ADD1	334446	911635	3/17/2000	35	4/30/2004	33	2.0
11S03W16CBA1	334439	912433	3/17/2000	31	4/30/2004	32	-1.0
11S03W31BBA1	334228	912651	2/24/2000	23.24	3/02/2004	34.18	-10.9
12S01W33BAA1	333718	911205	2/24/2000	15.76	3/02/2004	24.55	-8.8
13S02W17ADA1	333421	911858	3/17/2000	48	4/30/2004	44	4.0
13S02W27CAC1	333224	911735	2/24/2000	32.09	3/02/2004	31.92	0.2
13S02W32DBD1	333126	911917	3/17/2000	37	4/30/2004	38	-1.0
13S03W10DAA1	333506	912302	2/24/2000	41.88	3/02/2004	45.95	-4.1
13S03W11CAB1	333503	912241	3/17/2000	43	4/30/2004	51	-8.0
Drew County							
11S04W08DBA1	334532	913136	2/25/2000	25.69	3/01/2004	23.13	2.6
11S05W08CCC1	334546	913837	2/25/2000	35.12	3/01/2004	35.79	-0.7
11S06W34DAC2	334239	914226	2/25/2000	67.59	3/01/2004	66.92	0.7
12S04W03ABB1	334134	912946	2/25/2000	23.48	3/01/2004	24.11	-0.6
12S04W25DBB1	333739	912738	3/31/2000	29.5	5/04/2004	34	-4.5
13S04W09ACD1	333512	913034	3/31/2000	23.4	5/04/2004	16.4	7.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
13S06W03DDC1	333545	914202	2/25/2000	58.06	3/01/2004	61.06	-3.0
13S06W21DAA1	333324	914258	3/31/2000	87	5/05/2004	89	-2.0
14S04W03ADD1	333050	912929	3/31/2000	24	5/04/2004	25	-1.0
14S04W05CBA1	333047	913218	4/19/2000	14	5/04/2004	12	2.0
14S04W05CBC1	333042	913226	4/19/2000	15	5/04/2004	13	2.0
14S04W22CAA1	332805	912957	3/31/2000	24	5/04/2004	19	5.0
14S05W23DCB1	332802	913512	2/25/2000	31.11	3/01/2004	29.88	1.2
Greene County							
16N03E03BA1	360316	904516	3/10/2000	26.07	3/30/2004	29.04	-3.0
16N03E05BBB1	360316	904750	4/07/2000	24.4	4/16/2004	28.4	-4.0
16N03E16DDD1	360049	904547	4/07/2000	23.8	4/16/2004	34.8	-11.0
16N03E29ACC1	355926	904722	4/07/2000	26.3	4/16/2004	29.2	-2.9
16N06E03CCC1	360224	902626	3/10/2000	47.84	3/29/2004	40.39	7.5
16N06E09ABB1	360215	902651	4/07/2000	37.7	4/15/2004	40.4	-2.7
16N06E21BAA1	360031	902705	4/07/2000	29.2	4/15/2004	25	4.2
16N06E28ABB1	355938	902657	3/10/2000	27.23	3/29/2004	23.89	3.3
17N03E02DCC1	360806	904352	4/05/2000	27.7	4/16/2004	31	-3.3
17N04E07AD1	360718	904122	4/05/2000	38.4	4/16/2004	36.1	2.3
17N04E30CDC1	360409	904218	3/10/2000	32.18	3/30/2004	35.38	-3.2
17N06E15ABC1	360631	902546	4/07/2000	30.4	4/15/2004	38.2	-7.8
17N06E22CBB1	360520	902521	4/07/2000	37.6	4/15/2004	35.6	2.0
17N07E03CCC1	360744	901951	5/05/2000	6.7	4/15/2004	6.8	-0.1
17N07E18ABB1	360638	902235	3/14/2000	10.68	3/29/2004	6.97	3.7
17N07E29CBC1	360419	902201	4/07/2000	5.9	4/15/2004	4.2	1.7
18N03E24ACA1	361119	904216	4/05/2000	27.6	4/16/2004	29.8	-2.2
18N04E04AAC1	361356	903854	4/05/2000	28.5	4/16/2004	28.2	0.3
18N04E21CBD1	361052	903725	3/14/2000	50.44	3/30/2004	53.9	-3.5
18N04E28DAD1	361003	903845	4/05/2000	38	4/16/2004	38.8	-0.8
18N07E17BAB1	361203	902105	4/05/2000	11.8	4/15/2004	8.3	3.5

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
18N07E20BBA1	361110	902113	3/14/2000	12.5	3/29/2004	6.88	5.6
19N03E26AD1	361601	904258	3/14/2000	27.05	3/30/2004	27.59	-0.5
19N03E33DDD1	361418	904516	4/13/2000	30.8	4/16/2004	33.8	-3.0
19N04E30DBB1	361532	904119	4/05/2000	33.7	4/16/2004	33	0.7
19N05E34AAD1	361437	903102	4/05/2000	28.5	4/15/2004	30.5	-2.0
Independence County							
12N04W14DD1	353929	912236	3/15/2000	27.5	3/31/2004	24.71	2.8
12N04W34CBB1	353720	912513	3/15/2000	25.24	3/31/2004	21.91	3.3
12N05W36AAA1	353738	912827	3/15/2000	26.23	3/31/2004	23.75	2.5
14N03W12CAB1	355152	911541	4/18/2000	2.8	4/13/2004	1.9	0.9
14N03W14CBB1	355101	911703	4/18/2000	0.8	4/13/2004	1.8	-1.0
14N03W14DAA2	355107	911602	3/15/2000	6.11	3/31/2004	4.08	2.0
14N03W14DBB1	355106	911640	3/15/2000	4.85	3/31/2004	4.02	0.8
Jackson County							
09N01W15DDD1	352357	910433	3/30/2000	54.4	4/07/2004	58.7	-4.3
09N01W22ADD1	352332	910433	3/15/2000	55.83	3/31/2004	59.66	-3.8
09N01W30BAC1	352258	910813	3/30/2000	39.8	4/01/2004	42	-2.2
09N02W32BBB1	352215	911344	3/30/2000	30.3	4/01/2004	29.2	1.1
09N02W32CBB1	352152	911348	3/15/2000	28.78	3/31/2004	28.35	0.4
10N01W05ADD1	353132	910702	3/30/2000	42.1	4/01/2004	45.3	-3.2
10N01W10ABA1	353055	910445	4/07/2000	53	4/06/2004	57.4	-4.4
10N02W29ABB1	352829	911312	3/15/2000	26.09	3/31/2004	25.83	0.3
11N01W26AAD1	353330	910323	3/15/2000	61.73	3/31/2004	65.25	-3.5
11N01W29AAD1	353339	910635	3/02/2000	37.72	3/31/2004	39.01	-1.3
11N02W25BBD1	353322	910855	3/30/2000	25.2	3/26/2004	25.5	-0.3
11N03W06DAB1	353655	912009	3/15/2000	23.87	3/31/2004	22.03	1.8
12N01W11BCB1	354127	910416	4/07/2000	36.1	4/06/2004	36.6	-0.5
12N01W30CCC2	353812	910821	3/24/2000	30.3	3/26/2004	31.8	-1.5
12N01W36CBC1	353724	910317	3/30/2000	49.1	3/26/2004	50.4	-1.3

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
12N02W25ABB2	353910	910852	3/14/2000	32.44	3/31/2004	31.73	0.7
12N03W35BCA1	353800	911706	3/30/2000	12.54	3/31/2004	11.88	0.7
13N01W20AAA1	354514	910627	3/14/2000	35.83	3/31/2004	37.64	-1.8
13N01W23BCC1	354444	910413	3/27/2000	41.5	4/06/2004	44.1	-2.6
13N02W34CBB1	354306	911151	4/24/2000	19	4/06/2004	19.5	-0.5
13N03W15CDD1	354526	911749	3/14/2000	19.98	3/31/2004	15.18	4.8
13N03W15DCB1	354540	911718	5/01/2000	19.9	4/07/2004	16.5	3.4
13N03W36ABB1	354337	911532	5/01/2000	16.7	4/06/2004	14.2	2.5
14N01W08AAA1	355216	910623	3/27/2000	32.3	4/05/2004	33.7	-1.4
14N01W09AAA1	355220	910515	3/14/2000	38.18	3/31/2004	40.32	-2.1
14N01W19BBB1	355032	910823	3/27/2000	28.6	4/05/2004	26.7	1.9
14N01W33CCD1	354759	910610	3/27/2000	35.5	4/05/2004	38.7	-3.2
14N02W22BBC1	355026	911145	3/27/2000	27	4/05/2004	26	1.0
Jefferson County							
03S07W36ACC1	342410	914253	4/19/2000	17.5	5/20/2004	41.3	-23.8
03S08W24BBC1	342620	914953	2/28/2000	45.77	3/03/2004	49.58	-3.8
03S09W06DDA1	342840	920037	2/28/2000	37.76	3/03/2004	35.61	2.2
03S09W14BCD1	342712	915713	4/18/2000	43	5/11/2004	46.6	-3.6
03S09W29CBD1	342517	920023	2/28/2000	25.16	3/03/2004	27.04	-1.9
03S09W36ACC1	342428	915555	4/18/2000	34.5	5/20/2004	46.3	-11.8
03S10W26BBB2	342427	920250	4/18/2000	15	5/11/2004	16	-1.0
04S07W35DDB1	341836	914347	4/19/2000	28	5/20/2004	26.2	1.8
04S08W13DCB1	342123	914926	2/28/2000	39.68	3/03/2004	46.12	-6.4
04S08W33CDA1	341848	915244	4/19/2000	31.5	5/20/2004	39.8	-8.3
04S09W32DDA1	341859	920009	4/18/2000	18	5/11/2004	19.7	-1.7
05S06W31CAA1	341330	914206	2/28/2000	17.53	3/03/2004	16.17	1.4
06S05W15BCA1	341023	913245	2/28/2000	19.21	3/03/2004	19.44	-0.2
06S06W23AAD1	341007	913712	2/28/2000	22.06	3/03/2004	21.46	0.6
06S07W14BAA1	341125	914426	2/28/2000	19.68	3/03/2004	16.23	3.5

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
07S07W16BAA1	340722	914828	4/18/2000	27	4/27/2004	24.4	2.6
07S07W18CAC1	340647	915037	2/25/2000	25.77	3/03/2004	28.33	-2.6
07S08W06BAA1	340859	915647	2/25/2000	21.09	3/03/2004	19.27	1.8
Lawrence County							
15N01E11ADD1	355657	905638	4/21/2000	39.4	4/07/2004	42	-2.6
15N01W03BAB1	355831	910441	4/25/2000	36.3	4/08/2004	35.2	1.1
15N01W35CBB1	355336	910356	3/14/2000	40.53	3/31/2004	43.39	-2.9
16N01E11DAC2	360203	905639	3/14/2000	41.77	3/31/2004	43.66	-1.9
16N01E35AAA1	355908	905632	4/21/2000	41.2	4/07/2004	46.2	-5.0
16N01W30DDC1	355937	910723	4/25/2000	25.5	4/07/2004	22	3.5
16N02E09AAD1	360219	905212	4/24/2000	35	4/07/2004	37.6	-2.6
16N02E19ACA1	360031	905442	4/26/2000	38.4	4/08/2004	38.8	-0.4
16N02E34CBB1	355831	905208	4/21/2000	40	4/07/2004	43	-3.0
17N01E02BBA1	360901	905707	4/25/2000	12	4/08/2004	12.2	-0.2
17N01E21CBC1	360543	905931	4/24/2000	20.3	4/06/2004	19.6	0.7
17N01E27AAA1	360519	905732	4/21/2000	32	4/06/2004	33.8	-1.8
17N01W36AAB1	360435	910158	4/24/2000	11.4	4/06/2004	11.5	-0.1
17N02E04DCA1	360758	905224	4/21/2000	36	4/06/2004	38	-2.0
17N02E19CDC1	360516	905449	3/14/2000	35.47	3/31/2004	38.23	-2.8
17N02E21ABD1	360554	905225	4/21/2000	38.5	4/06/2004	41	-2.5
17N02E25CBD1	360423	904948	4/25/2000	31	4/06/2004	35	-4.0
Lee County							
01N01E04AAB1	344358	910015	5/03/2000	21.5	4/15/2004	38.3	-16.8
01N01E09CCC1	344215	910054	4/14/2000	24.5	4/17/2004	30.5	-6.0
01N01E24CBD1	344033	905729	4/14/2000	14.8	4/12/2004	16.3	-1.5
01N02E01ADD1	344330	905016	4/14/2000	29.5	4/07/2004	25	4.5
01N02E11BAB1	344255	905208	5/04/2000	18	4/07/2004	26	-8.0
01N02E12ABB1	344254	905040	4/14/2000	34	4/07/2004	26	8.0
01N02E22CBA1	344056	905318	4/14/2000	29.5	4/12/2004	28.5	1.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
01N02E33CBB1	343858	905434	4/14/2000	14.5	4/12/2004	14	0.5
01N02E33CCB1	343851	905433	4/14/2000	13	4/12/2004	13	0.0
01N03E02BBC1	344339	904601	3/02/2000	61.62	3/22/2004	47.04	14.6
01N03E27ADD1	343952	904605	4/14/2000	21	4/07/2004	7	14.0
01N03E35BBA1	343923	904549	3/02/2000	18.74	3/22/2004	9.18	9.6
02N01E21BAA1	344633	910005	4/14/2000	28.3	4/07/2004	33.3	-5.0
02N01E23BAA2	344632	905820	3/02/2000	44.04	3/22/2004	49.22	-5.2
02N01W12BAA1	344828	910330	5/04/2000	37.64	3/22/2004	42.07	-4.4
02N01W34DDC1	344410	910520	4/14/2000	40.5	4/12/2004	47	-6.5
02N02E08ADC1	344807	905339	3/02/2000	37.29	3/22/2004	43.93	-6.6
02N02E21ABC1	344622	905358	3/02/2000	32.63	3/22/2004	38.73	-6.1
02N02E22BBB1	344628	905327	4/14/2000	31.7	4/12/2004	34	-2.3
02N02E36DDC1	344355	905020	4/14/2000	30.5	4/07/2004	24.5	6.0
02N03E08AAD1	344811	904838	5/04/2000	42.67	3/22/2004	43.43	-0.8
02N03E09DDD1	344723	904707	5/03/2000	51	4/15/2004	50	1.0
02N03E29CAD1	344500	904846	5/04/2000	42	4/15/2004	38.5	3.5
02N04E03ABD1	344855	903954	5/03/2000	25	4/15/2004	28.5	-3.5
02N04E15DAC1	344637	903950	3/02/2000	21.34	3/22/2004	18.15	3.2
03N01E03CBC1	345355	905941	5/03/2000	55	4/07/2004	63	-8.0
03N01E16CBA1	345222	910040	3/02/2000	62.29	3/22/2004	63.2	-0.9
03N01E32BCC1	344951	910150	4/14/2000	55.5	4/07/2004	60	-4.5
03N02E13BBA1	345237	905107	3/02/2000	46.17	3/22/2004	48.55	-2.4
03N02E21CBC1	345111	905428	5/03/2000	49.5	4/12/2004	55	-5.5
03N02E29DAD1	345014	905430	3/02/2000	39.83	3/22/2004	42.66	-2.8
03N03E05CDD1	345327	904837	4/27/2000	45	4/15/2004	32.5	12.5
03N03E18DAB1	345206	904919	5/03/2000	22	4/15/2004	27	-5.0
03N03E32CAB1	344933	904926	5/04/2000	46	3/22/2004	48.35	-2.4
03N04E07CBB1	345245	904312	4/27/2000	29	4/15/2004	32	-3.0
03N05E14DDA1	345148	903203	3/02/2000	14.55	3/22/2004	13.55	1.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
03N05E26ADC1	345020	903215	5/03/2000	7	4/15/2004	5	2.0
Lincoln County							
07S06W03CCA2	340828	914114	5/01/2000	11	5/11/2004	16	-5.0
07S07W36CBD1	340411	914529	5/01/2000	35	5/11/2004	38	-3.0
08S04W06ABD1	340341	913116	5/01/2000	16	5/11/2004	17	-1.0
08S04W08BBB2	340254	913101	2/24/2000	19.87	3/02/2004	21.23	-1.4
08S04W29ABC1	340021	913044	5/01/2000	37	5/11/2004	45	-8.0
08S04W31CBA1	335901	913150	2/24/2000	28.83	3/02/2004	32.8	-4.0
08S05W12AAD1	340246	913214	5/01/2000	20	5/11/2004	21	-1.0
08S05W21DCD1	340027	913533	5/01/2000	45	5/11/2004	35	10.0
08S05W32DCC1	335840	913644	5/01/2000	43	5/11/2004	33	10.0
08S06W02ACB1	340339	913958	2/24/2000	38.15	3/02/2004	42.64	-4.5
09S04W06CBB1	335721	913252	5/01/2000	33	5/11/2004	45	-12.0
09S05W14ABC1	335553	913439	2/24/2000	34.51	3/02/2004	37.58	-3.1
09S05W17BCB1	335552	913820	2/24/2000	37.77	3/03/2004	41.77	-4.0
09S05W19CCC1	335428	913941	5/01/2000	21	5/11/2004	32	-11.0
09S06W04BCD1	335821	914346	2/24/2000	37.49	3/02/2004	38.38	-0.9
09S06W04BDD1	335759	914335	5/01/2000	37	5/11/2004	41	-4.0
09S06W23CDB1	335440	914136	2/24/2000	31.78	3/02/2004	30.17	1.6
10S05W06DCC1	335155	913908	2/24/2000	27.59	3/03/2004	30.38	-2.8
Lonoke County							
01N08W03DDA1	344411	915050	4/14/2000	126	4/08/2004	140.4	-14.4
01N09W07DAA1	344337	920030	4/27/2000	47.3	4/08/2004	48.8	-1.5
01N09W13DAB1	344235	915517	3/27/2000	84.52	3/12/2004	87.12	-2.6
01N10W15CDA1	344236	920415	4/27/2000	25.8	4/08/2004	26.8	-1.0
01S06W31ABB1	343459	914131	5/03/2000	76.57	3/11/2004	78.7	-2.1
01S06W32BBB1	343501	914056	4/27/2000	76.8	4/08/2004	86.9	-10.1
01S08W24CDD1	343606	914912	5/01/2000	75.6	3/11/2004	83.93	-8.3
01S09W02DDD1	343857	915624	4/27/2000	85.8	4/08/2004	89.6	-3.8

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
01S09W36CCC1	343435	915619	3/27/2000	57.77	3/12/2004	62.27	-4.5
01S10W01ACB1	343927	920215	3/27/2000	43.81	3/12/2004	47.24	-3.4
02N07W07DAA1	344845	914707	4/14/2000	122.2	4/08/2004	131.5	-9.3
02N07W16BAB1	344815	914540	5/01/2000	130.85	3/11/2004	136.19	-5.3
02N08W16ABC1	344806	915114	3/27/2000	114.06	3/11/2004	119.89	-5.8
02N08W23CAB1	344659	915118	4/14/2000	128	4/08/2004	138	-10.0
02N09W02BDB1	344955	915841	3/27/2000	108.84	3/11/2004	123.87	-15.0
02N10W15ACC1	344807	920353	4/27/2000	31.5	4/08/2004	31	0.5
02S07W05CDC1	343326	914715	4/27/2000	64.2	4/08/2004	73.5	-9.3
02S07W10CCB1	343246	914525	3/01/2000	57.65	3/11/2004	62.48	-4.8
02S07W20ACD1	343112	914655	4/27/2000	56.3	4/08/2004	59.9	-3.6
02S08W13BBB1	343232	914935	3/01/2000	60.07	3/11/2004	58.45	1.6
02S08W34DBB1	343003	915150	3/01/2000	70.4	3/12/2004	62.68	7.7
02S09W30CDD1	343014	920116	3/27/2000	35.43	3/12/2004	37.88	-2.5
02S09W35AB1	343008	915653	4/27/2000	45.8	4/08/2004	49.4	-3.6
03N07W15DBC2	345253	914417	3/01/2000	76.49	3/11/2004	80.5	-4.0
03N07W29CDD1	345057	914632	4/27/2000	90	4/08/2004	99.8	-9.8
03N08W11ABD1	345419	914936	3/27/2000	93.83	4/15/2004	100.54	-6.7
03N08W11ACA1	345413	914934	3/01/2000	90.91	4/14/2004	98.5	-7.6
03N08W21BCC1	345220	915220	3/27/2000	77.4	3/11/2004	80.27	-2.9
04N08W15BCB2	345833	915121	3/28/2000	32.18	3/11/2004	33.54	-1.4
Mississippi County							
10N08E21ABA1	352852	901415	3/03/2000	25	4/15/2004	25	0.0
10N08E21BDC1	352830	901407	3/03/2000	25	4/15/2004	25	0.0
10N08E22ABA2	352851	901312	3/08/2000	21.5	3/24/2004	22.34	-0.8
10N09E08ACC1	352949	900926	3/08/2000	15.06	3/24/2004	13.79	1.3
11N09E34BBB1	353218	900715	3/08/2000	16.92	3/24/2004	14.78	2.1
11N10E09BCB1	353530	900202	3/06/2000	15	4/15/2004	17	-2.0
12N08E08BCB1	354047	901559	3/07/2000	9.86	3/24/2004	8.32	1.5

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
12N08E28DDB1	353707	901406	3/06/2000	20.3	4/15/2004	14.4	5.9
12N09E12ABC1	354054	900449	3/06/2000	23	4/15/2004	7.3	15.7
12N10E04CAA1	354124	900136	3/02/2000	13.5	4/15/2004	8	5.5
12N10E07BCD1	354036	900404	3/06/2000	20	4/15/2004	11	9.0
12N10E21DBA1	353842	900122	3/06/2000	16.2	4/15/2004	11.7	4.5
13N08E24ABB1	354428	901112	3/02/2000	11	4/14/2004	16.8	-5.8
13N09E30CCD1	354248	901029	3/07/2000	13.48	3/24/2004	8.95	4.5
13N10E34DBB1	354218	900024	3/08/2000	13.55	3/24/2004	6.84	6.7
14N08E12DAB1	355104	901052	3/29/2000	7.87	3/24/2004	5.33	2.5
14N08E20DAA1	354921	901458	3/02/2000	8.2	4/14/2004	10	-1.8
14N08E26CC1	354803	901235	3/02/2000	7.5	4/14/2004	4	3.5
14N10E18ABC1	355022	900345	3/08/2000	13.83	3/24/2004	10.9	2.9
14N11E03BCB1	355158	895433	3/08/2000	9.82	3/25/2004	3.36	6.5
14N11E17CCB1	354955	895639	3/06/2000	10.3	4/14/2004	10	0.3
14N11E33CAA1	354727	895508	3/02/2000	16	4/14/2004	12	4.0
14N12E05DCB1	355134	894935	3/08/2000	15.22	3/25/2004	9.6	5.6
15N08E08DBC2	355605	901526	3/08/2000	12.1	3/24/2004	10.5	1.6
15N10E21ABC1	355447	900135	3/06/2000	15.5	4/14/2004	12	3.5
15N12E01BCD1	355704	894601	3/02/2000	14	4/14/2004	7	7.0
16N10E28BBD1	355906	900156	3/08/2000	10.05	3/25/2004	7.56	2.5
16N10E28BBD1	355906	900156	3/02/2000	14	4/14/2004	12.5	1.5
16N11E23ADA1	355947	895231	3/08/2000	14.68	3/25/2004	12.31	2.4
			Monroe County				
01N01W21CDC2	344037	910707	3/02/2000	31.56	3/15/2004	34.47	-2.9
01N03W23BAC1	344124	911743	4/17/2000	14	4/14/2004	14	0.0
01N03W24BBB1	344135	911651	3/02/2000	32.68	3/15/2004	27.34	5.3
01N04W33BBB2	343960	912649	3/02/2000	92.64	3/15/2004	94.28	-1.6
01S01W13CDD1	343611	910341	3/02/2000	17.48	3/17/2004	20.44	-3.0
01S01W16DB	343615	910632	4/17/2000	15	4/15/2004	17	-2.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
01S01W18DCD1	343618	910849	3/02/2000	21.36	3/17/2004	22.64	-1.3
01S02W20BBB1	343613	911456	4/17/2000	14	4/14/2004	12	2.0
01S03W20BBA1	343538	912118	3/02/2000	72.72	3/15/2004	72.46	0.3
01S04W01BAB1	343906	912317	3/02/2000	80.03	3/15/2004	76.34	3.7
02N01W19ADD1	344624	910814	4/17/2000	47	4/15/2004	51	-4.0
02N01W19BBA1	344645	910912	3/03/2000	48.93	3/15/2004	52.56	-3.6
02N03W35BCA1	344455	911745	4/17/2000	31	4/15/2004	31	0.0
02S01W01BCD1	343305	910408	4/17/2000	18	4/14/2004	19	-1.0
03N01W20ABA1	345201	910723	3/03/2000	43.94	3/15/2004	47.35	-3.4
03N02W31ADC1	344958	911447	3/03/2000	37.13	3/15/2004	39.53	-2.4
03N03W36AAA1	345027	911547	3/03/2000	22.59	3/15/2004	20.3	2.3
04N02W01BCC1	345929	911004	4/19/2000	36	4/15/2004	38	-2.0
04N02W05BBB1	345957	911311	4/19/2000	15	4/15/2004	15	0.0
04N02W27CDD3	345540	911150	3/03/2000	44.11	3/15/2004	45.43	-1.3
04N02W28DDD3	345535	911221	3/03/2000	31.96	3/15/2004	33.04	-1.1
04N02W30BBB1	345628	911525	3/03/2000	17.46	3/15/2004	13.41	4.1
Phillips County							
01S01E20DDB1	343529	910058	3/14/2000	17.8	4/12/2004	25	-7.2
01S02E09CBB1	343719	905434	3/01/2000	17.09	3/17/2004	11.46	5.6
01S02E09CBB1	343719	905434	3/14/2000	11.8	4/12/2004	9	2.8
01S02E32BCC1	343350	905526	3/14/2000	34	4/12/2004	31.6	2.4
01S03E02ADD1	343814	904511	3/14/2000	16.4	4/12/2004	13	3.4
01S03E10ABB1	343741	904634	3/14/2000	15.2	4/12/2004	14	1.2
01S03E20BDD1	343533	904846	3/14/2000	33.6	4/12/2004	30	3.6
01S04E05DCD1	343802	904151	3/14/2000	44.2	4/12/2004	45	-0.8
02S01E28CCB1	342916	910058	3/01/2000	17.99	3/17/2004	17.56	0.4
02S02E29DDD1	342901	905444	3/14/2000	23.5	4/12/2004	25.6	-2.1
02S02E33ACC1	342824	905412	3/14/2000	22.8	4/12/2004	25	-2.2
02S03E15ACD1	343110	904621	3/01/2000	16.31	3/17/2004	10.6	5.7

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
02S03E34BCD1	342828	904653	3/14/2000	17.2	4/13/2004	17.8	-0.6
02S04E27AAC1	342932	904001	3/01/2000	12.31	3/17/2004	3.93	8.4
03S02E35DDA1	342256	905130	3/01/2000	18.29	3/17/2004	19.9	-1.6
03S04E02CAA1	342732	903918	3/14/2000	15.3	4/13/2004	11.8	3.5
04S01E01AAD1	342238	905700	3/14/2000	11.3	4/13/2004	14.4	-3.1
04S01E14CDD1	342014	905837	3/14/2000	12.8	4/13/2004	12	0.8
04S01E23CCA1	341931	905853	3/01/2000	13.54	3/17/2004	11.96	1.6
04S01E29CDC1	341844	910148	3/14/2000	8	4/13/2004	7.9	0.1
04S02E01DBB1	342220	905053	3/14/2000	7.4	4/13/2004	9.6	-2.2
05S02E18BDA1	341535	905628	3/01/2000	19.52	3/17/2004	16.14	3.4
Poinsett County							
10N01E02AAA	353205	905654	3/31/2000	90	3/19/2004	97	-7.0
10N01E14CC1	352910	905814	3/03/2000	84.75	3/29/2004	89.72	-5.0
10N01E16CCB1	352922	910005	5/04/2000	67.95	3/29/2004	72.39	-4.4
10N01E32CBB1	352657	910053	3/31/2000	48	3/19/2004	70	-22.0
10N01E33ACB1	352746	905931	3/31/2000	71	3/19/2004	76	-5.0
10N02E13BCC1	352949	905026	3/09/2000	96.43	3/29/2004	99.9	-3.5
10N02E20BAB1	352906	905418	3/31/2000	96	3/19/2004	104	-8.0
10N03E14DAB1	352947	904405	3/09/2000	114.03	3/29/2004	116.95	-2.9
10N03E35CDD1	352656	904436	3/09/2000	118.87	3/29/2004	123.86	-5.0
10N04E35BBA1	352745	903831	3/14/2000	21	3/17/2004	20	1.0
10N05E15BDD1	352937	903253	3/09/2000	14.97	3/29/2004	12.17	2.8
10N07E22AAC1	352847	901935	3/07/2000	26.66	3/29/2004	27.56	-0.9
11N01E17DDC1	353437	910015	3/31/2000	73	3/19/2004	77	-4.0
11N01E17DDD1	353437	910013	3/09/2000	72.44	3/26/2004	76.12	-3.7
11N01E26AA1	353340	905653	3/09/2000	93.55	3/26/2004	91.95	1.6
11N01E34AAA	353256	905759	3/31/2000	81	3/19/2004	85	-4.0
11N02E05BDA1	353704	905408	3/09/2000	86.86	3/26/2004	93.28	-6.4
11N02E26AAB1	353350	905034	3/09/2000	100.8	3/29/2004	105.42	-4.6

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
11N02E30BBB1	353352	905540	3/31/2000	97	3/19/2004	100	-3.0
11N02E34CBA1	353238	905222	3/31/2000	93	3/19/2004	105	-12.0
11N03E10DDA1	353546	904457	5/04/2000	99.33	3/29/2004	102.99	-3.7
11N03E18BAB1	353538	904852	5/04/2000	98.91	3/29/2004	103.23	-4.3
11N04E36ABA1	353251	903654	3/08/2000	18	3/17/2004	16	2.0
11N07E18CAB1	353435	902320	3/07/2000	15.97	3/29/2004	13.89	2.1
12N01E07CDA1	354054	910141	3/03/2000	56.8	3/26/2004	51.89	4.9
12N01E22DAB1	353922	905809	3/31/2000	69	3/19/2004	73	-4.0
12N02E25DCC1	353820	904944	3/31/2000	103	3/19/2004	112	-9.0
12N02E34CCC1	353724	905230	3/31/2000	105	3/19/2004	110	-5.0
12N03E01CBD1	354154	904329	3/31/2000	89	3/19/2004	92	-3.0
12N03E04DAD1	354158	904600	3/03/2000	102.24	3/26/2004	102.61	-0.4
12N04E08CDA	354053	904112	3/31/2000	84	3/17/2004	87	-3.0
12N05E16ABA1	354039	903333	3/08/2000	13	3/17/2004	9	4.0
12N05E34ABA1	353805	903230	3/09/2000	12.25	3/29/2004	7.47	4.8
12N07E04BAA1	354202	902060	3/09/2000	7.42	3/29/2004	8.15	-0.7
12N07E10CBB1	354042	902022	3/08/2000	12	3/17/2004	10	2.0
Prairie County							
01N06W05CCB1	344353	914049	3/28/2000	113.44	3/10/2004	117.1	-3.7
01S04W28BDB1	343523	912630	3/28/2000	94.53	3/09/2004	97.25	-2.7
01S05W14BBC1	343722	913109	3/28/2000	106.28	3/09/2004	107.74	-1.5
01S05W31DDA1	343417	913432	5/03/2000	79.56	3/09/2004	110.7	-31.1
02N04W02BCB1	344916	912419	3/28/2000	29.36	3/10/2004	19.13	10.2
02N04W32CCB1	344436	912738	3/28/2000	82.81	3/10/2004	83.73	-0.9
02N05W06BAB1	344958	913421	3/28/2000	86.23	3/10/2004	88.79	-2.6
02N05W13AAB1	344805	912854	3/28/2000	62.73	3/10/2004	77.77	-15.0
02N05W29DDB2	344545	913309	3/28/2000	116.72	3/10/2004	118.24	-1.5
02N06W17ABB1	344809	913959	3/28/2000	117.99	3/10/2004	123.16	-5.2
02S06W14BBB1	343213	913729	3/28/2000	76.13	3/09/2004	62.25	13.9

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
03N04W03AAC1	345439	912424	3/28/2000	24.81	3/10/2004	26.83	-2.0
03N05W03BDD2	345444	913115	3/28/2000	63.06	3/10/2004	66.27	-3.2
03N06W01BCB1	345455	913601	3/28/2000	81.58	3/10/2004	80.64	0.9
03N06W19BDD1	345207	914110	3/28/2000	90.38	3/10/2004	85.24	5.1
04N04W07ADC1	345850	912733	3/28/2000	27.94	3/10/2004	25.53	2.4
04N05W31DDC1	345514	913406	3/28/2000	72.64	3/10/2004	76.23	-3.6
04N06W05CCC1	345934	914018	3/28/2000	57.11	3/10/2004	59.96	-2.9
04N07W03DCB1	345942	914412	5/03/2000	84.49	3/10/2004	86.61	-2.1
04N07W28BBA1	345701	914545	5/03/2000	91.43	3/10/2004	94.75	-3.3
05N05W14DCD1	350252	913034	3/28/2000	37.74	3/10/2004	37.96	-0.2
05N05W25BAA1	350153	912949	5/24/2000	23.3	4/19/2004	17.5	5.8
05N05W28DDA1	350119	913228	5/24/2000	30.6	4/19/2004	33.1	-2.5
Pulaski County							
01S10W29CC1	343538	920708	3/01/2000	18.98	3/19/2004	16.65	2.3
02S10W14DC1	343205	920334	3/01/2000	27.51	3/19/2004	25.57	1.9
02S10W16CCA1	343217	920549	3/01/2000	23.5	3/19/2004	24.92	-1.4
Randolph County							
18N01E13BAB1	361230	905551	5/18/2000	15.3	4/23/2004	15.7	-0.4
18N01E28AAD1	361040	905820	5/18/2000	16.8	4/22/2004	15.3	1.5
18N01E34AAC1	360943	905729	3/13/2000	16.44	3/30/2004	15.93	0.5
18N02E03DAD1	361336	905043	5/18/2000	33.8	4/23/2004	34.9	-1.1
18N02E17CBB1	361204	905356	5/18/2000	15.2	4/22/2004	16	-0.8
18N02E20BDA1	361125	905332	5/18/2000	30.5	4/23/2004	35.2	-4.7
18N02E22DCD1	361046	905105	3/13/2000	33.68	3/30/2004	36.27	-2.6
19N02E09ABD1	361826	905157	5/19/2000	12.7	4/22/2004	3.6	9.1
19N02E09DCA1	361757	905157	3/13/2000	11.01	3/30/2004	10.12	0.9
19N02E22DAB1	361622	905049	5/19/2000	8.7	4/23/2004	7	1.7
20N02E01ADD1	362424	904811	3/13/2000	13.48	3/30/2004	11.22	2.3
20N02E01ADD2	362424	904811	5/19/2000	16	4/23/2004	13	3.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
20N02E12BAA1	362352	904848	5/23/2000	7.7	4/23/2004	7	0.7
20N02E14DAB1	362232	904930	5/19/2000	9.9	4/23/2004	8.6	1.3
20N03E28BA1	362114	904538	3/13/2000	12.65	3/30/2004	10.93	1.7
20N03E33CCA1	361941	904552	5/19/2000	22.8	4/22/2004	21.3	1.5
St. Francis County							
04N01E13ADA1	345755	905638	3/01/2000	55.79	3/23/2004	57.87	-2.1
04N01W20BBB1	345716	910759	5/22/2000	58	4/16/2004	57.5	0.5
04N01W25DBD1	345549	910303	5/22/2000	55	4/16/2004	74	-19.0
04N01W28CDD1	345535	910634	3/01/2000	65.27	3/23/2004	68.28	-3.0
04N02E03DDD3	345848	905219	3/01/2000	57.11	3/23/2004	41.78	15.3
04N02E16ACD1	345733	905341	5/22/2000	43.5	4/16/2004	51	-7.5
04N02E19BBB1	345701	905633	3/29/2000	53.39	3/23/2004	58.36	-5.0
04N02E27AAA1	345604	905220	5/22/2000	40.5	4/16/2004	47	-6.5
04N03E21DAD1	345623	904655	3/01/2000	57.37	3/23/2004	56.96	0.4
04N04E15ABA1	345752	903948	5/23/2000	30	4/16/2004	33	-3.0
04N05E22BBB1	345651	903357	3/02/2000	28.92	3/22/2004	26.59	2.3
05N01E06CDA1	350437	910218	5/23/2000	54.5	4/16/2004	68	-13.5
05N01E15BCB1	350303	905942	3/02/2000	62.41	3/23/2004	63.48	-1.1
05N02E20ADC1	350157	905437	3/02/2000	50.54	3/23/2004	53.08	-2.5
05N03E20AAA2	350214	904801	3/02/2000	92.82	3/23/2004	102.73	-9.9
05N05E19DCD1	350145	903650	3/02/2000	36.4	3/22/2004	32.68	3.7
05N05E33BCC1	350004	903506	5/22/2000	29	4/16/2004	29	0.0
05N06E05BBB1	350508	902922	5/23/2000	30	4/16/2004	34	-4.0
05N06E34CAB1	350026	902657	3/02/2000	20.88	3/22/2004	26.46	-5.6
06N01E33ACA2	350552	905942	3/02/2000	59.85	3/23/2004	65.34	-5.5
06N02E13DCA1	350813	905003	3/02/2000	73.16	3/23/2004	73.61	-0.5
06N02E15BDD1	350842	905247	3/02/2000	54.45	3/23/2004	58.57	-4.1
06N02E16CCC1	350804	905403	5/22/2000	60.5	4/16/2004	64	-3.5
06N02E24AAA1	350755	905002	3/02/2000	67.33	3/23/2004	71.49	-4.2

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
06N03E17CAA1	350822	904810	5/23/2000	97.5	4/16/2004	100	-2.5
06N05E22ACC1	350723	903252	3/02/2000	44.84	3/22/2004	39.44	5.4
06N06E17DDC1	350749	902830	5/23/2000	31	4/16/2004	36	-5.0
06N06E20ABB2	350747	902841	3/02/2000	31.57	3/22/2004	35.25	-3.7
White County							
05N07W09AAA1	350447	914441	3/17/2000	13.97	3/18/2004	14.82	-0.9
05N07W10CCC1	350400	914436	3/17/2000	6.61	3/18/2004	8.78	-2.2
06N06W04BAA1	351047	913910	3/16/2000	37.87	3/18/2004	36.45	1.4
06N06W04BAD1	351037	913903	4/19/2000	43.5	4/16/2004	41.5	2.0
06N06W13DBB1	350918	913552	4/19/2000	47	4/16/2004	46.9	0.1
06N06W18BBC1	350851	914152	3/16/2000	23.05	3/18/2004	14.67	8.4
06N06W18BCA1	350835	914150	4/19/2000	25	4/16/2004	24.2	0.8
06N06W34AAB1	350624	913754	3/16/2000	58.1	3/18/2004	59.7	-1.6
06N07W17DCC1	350822	914635	3/17/2000	16.74	3/18/2004	12.21	4.5
06N08W13ABA1	350908	914824	3/17/2000	13.92	3/18/2004	7.4	6.5
06N08W26DDB1	350640	914931	3/17/2000	18.09	3/18/2004	12.25	5.8
07N05W01AAA1	351553	912858	3/16/2000	18.27	3/18/2004	15.35	2.9
07N05W32BAB1	351137	913406	3/16/2000	31.75	3/18/2004	29	2.8
07N06W19CAB1	351259	914142	3/30/2000	11.76	3/18/2004	4.7	7.1
08N04W06CCB1	352028	912847	3/16/2000	20.77	3/18/2004	16.16	4.6
08N05W32CBC1	351616	913417	3/16/2000	1.9	3/18/2004	1.5	0.4
Woodruff County							
04N03W03AB1	350021	911820	3/15/2000	15.94	4/01/2004	13.48	2.5
05N01W13CDC1	350244	910331	4/20/2000	67.8	4/13/2004	74.1	-6.3
05N01W31CCC1	350106	910900	4/20/2000	55.1	4/13/2004	59.1	-4.0
05N02W20DCB1	350208	911356	3/15/2000	15.48	4/01/2004	13.94	1.5
05N03W25DDB1	350133	911531	4/20/2000	14.2	4/13/2004	12.7	1.5
05N03W31BAC1	350110	912127	4/20/2000	4.9	4/14/2004	5.8	-0.9
05N04W12DBA1	350427	912211	3/15/2000	7.7	4/01/2004	4.67	3.0

Appendix 2. Information pertaining to water levels measured in 2000 and 2004 in the Mississippi River Valley alluvial aquifer in eastern Arkansas for the change in water level from 2000 to 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83)]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	2000 water-level date	2000 depth to water (feet below land-surface datum)	2004 water-level date	2004 depth to water (feet below land-surface datum)	Water-level change 2000 to 2004 (feet)
06N01W06BAB1	351048	910835	3/15/2000	29.9	4/01/2004	32.47	-2.6
06N02W19AAA1	350802	911419	4/20/2000	45.8	4/14/2004	44.7	1.1
06N03W15BAB1	350903	911807	3/29/2000	6.47	4/01/2004	5.72	0.8
06N04W22BDA1	350807	912428	4/02/2000	7	4/13/2004	4.9	2.1
07N01W04ACB1	351541	910626	4/20/2000	57.2	4/13/2004	60.3	-3.1
07N02W16DBB1	351353	911225	4/20/2000	24.4	4/13/2004	24.1	0.3
07N03W06BAC1	351607	912109	4/20/2000	22.3	3/24/2004	21	1.3
07N03W19AAA1	351335	912025	3/16/2000	14.34	4/01/2004	11.7	2.6
07N03W31BBA1	351152	912103	4/02/2000	14.2	4/13/2004	14.7	-0.5
08N01W06DDD1	352028	910747	3/03/2000	34.44	4/01/2004	42.23	-7.8
08N01W10AAA1	352018	910431	4/20/2000	49.8	4/13/2004	51.8	-2.0
08N02W27DDB1	351711	911107	4/20/2000	26.1	4/13/2004	25.5	0.6
08N02W31DDD1	351611	911411	3/03/2000	4.2	4/01/2004	5.36	-1.2
08N03W31AAD1	351655	912028	3/03/2000	22.35	4/01/2004	21.77	0.6
08N04W27AAA1	351757	912341	3/03/2000	13.87	4/01/2004	10.33	3.5
09N03W28ABB1	352310	911845	4/20/2000	21.2	4/13/2004	16.9	4.3
09N03W29AAD1	352258	911921	3/03/2000	22.96	4/01/2004	20.6	2.4
09N03W32ACA1	352205	911936	4/20/2000	19.8	4/14/2004	19.3	0.5

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
Arkansas County						
02S04W11DBB1	343233	912415	6/22/2004	736	19.5	16
02S04W14CD1	343100	912445	6/22/2004	906	19.4	40
03S02W27ABB1	342448	911251	6/22/2004	528	19.9	9.3
03S05W06ABA2	342847	913457	8/30/2004	961	18.7	76.8
03S05W08DD1	342713	913346	6/21/2004	770	19.2	39
04S01W08CCB1	342142	910916	6/22/2004	456	19.3	17
04S02W11AAA1	342209	911123	6/22/2004	568	19.4	5.1
04S02W29CCC1	341846	911539	6/22/2004	837	19.1	43
04S03W32BCB1	341820	912202	6/22/2004	724	19.8	26
04S04W02ABB1	342313	912424	6/21/2004	1,030	19.6	--
04S06W16BD1	342130	914000	6/21/2004	691	19.3	56
05S04W07CCC1	341555	912932	6/21/2004	1,220	19.8	200
06S03W23CC1	340621	911904	6/23/2004	478	19.2	--
06S03W27AAA1	340858	911913	6/23/2004	1,180	19.3	170
07S02W04BBB1	340707	911452	6/23/2004	894	19.3	74
07S04W01DDD1	340625	912327	6/23/2004	827	19.2	--
Ashley County						
15S04W23DBD1	332247	912852	6/16/2004	506	19.1	36
16S06W27BAB1	331729	914240	6/16/2004	682	20.5	24
17S07W05CDD1	331502	915050	6/15/2004	648	21.3	44
Chicot County						
14S03W32CDB2	332613	912551	6/16/2004	379	19.1	17
15S03W24AAA1	332311	912119	6/16/2004	1,430	19.4	--
17S01E17CDA1	331259	910716	6/16/2004	505	20.0	33
17S03W28DBA1	331127	912441	6/16/2004	856	20.1	28
18S02W01BAA1	331011	911540	6/16/2004	735	20.0	--
19S01W17BCC1	330250	911406	6/16/2004	411	23.1	8.4

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
Clay County						
19N04E19AAA1	361654	904050	7/13/2004	238	18.8	6.2
19N08E28BB1	361519	901318	7/13/2004	237	19.7	9.7
19N08E31DAB1	361412	901503	7/13/2004	336	18.0	10
20N05E34DBA1	361939	903117	7/13/2004	478	17.5	5.2
21N04E34DDC1	362445	903729	7/13/2004	434	18.9	8.6
Craighead County						
13N02E02AD1	354712	905038	7/8/2004	523	20.2	--
13N02E35DAC1	354236	905044	7/9/2004	934	18.8	--
13N03E29AAA1	354403	904713	7/8/2004	710	18.4	--
13N03E31BB1	354306	904919	7/8/2004	743	19.6	14
15N06E19AAB1	355517	902857	7/8/2004	748	19.6	--
Crittenden County						
06N07E11BB1	350943	901940	7/7/2004	460	18.9	--
06N07E13BAA1	350850	901808	7/7/2004	484	19.0	--
06N07E18BBA1	350853	902343	7/7/2004	473	19.4	--
07N07E01ACC1	351514	902447	7/7/2004	565	19.1	--
07N07E03ADD1	351525	901934	7/7/2004	425	19.1	--
07N07E31CCC1	351042	902359	7/7/2004	493	19.4	--
07N07E34AAD2	351116	901940	7/7/2004	431	19.3	--
Cross County						
07N01E05CDA1	351518	910049	7/8/2004	888	18.8	--
07N02E07CDC1	351415	905542	7/8/2004	805	19.4	--
07N02E29DDC1	351138	905409	7/8/2004	867	18.9	--
07N05E19CCC1	351238	903645	7/8/2004	580	18.7	--
07N05E22CCB1	351241	903333	7/8/2004	660	18.9	--
08N05E32ADD1	351632	903440	7/7/2004	575	19.7	--
09N05E32BDB1	352151	903512	7/7/2004	505	18.7	--

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
Desha County						
09S04W06BCA1	335756	913243	6/17/2004	943	21.0	--
10S03W26CAA1	334806	912145	6/17/2004	855	20.7	--
12S01W31AAB1	333709	911342	6/17/2004	905	19.4	--
13S02W27CAC1	333224	911735	6/17/2004	1,220	20.1	--
13S03W10DAA1	333506	912302	6/17/2004	872	19.3	--
Greene County						
16N06E03CCC1	360224	902626	7/12/2004	438	18.8	--
16N06E28ABB1	355938	902657	7/12/2004	680	18.5	--
17N04E30CDC1	360409	904218	7/12/2004	678	19.0	--
19N03E26AD1	361601	904258	7/13/2004	265	18.1	--
Jackson County						
09N01W20BDD1	352338	910805	7/9/2004	520	19.0	--
10N02W08CD1	353040	911257	7/9/2004	402	20.4	--
11N01W26AAD1	353330	910323	7/9/2004	446	18.4	--
12N02W25ABB2	353910	910852	7/9/2004	480	18.4	--
13N01W23BC1	354456	910418	7/9/2004	552	19.1	--
13N02W28DDC1	354341	911208	7/8/2004	397	21.3	--
Jefferson County						
03S07W03DB1	342832	914442	6/30/2004	651	19.7	--
03S07W16AAA1	342714	914538	6/21/2004	734	18.0	--
03S09W18CC2	342656	920139	6/30/2004	832	19.2	--
05S06W31CAA1	341330	914206	6/30/2004	436	18.0	--
06S06W23AAD1	341007	913712	6/22/2004	490	18.2	--
07S07W18CAC1	340647	915037	6/30/2004	446	18.9	--
07S08W06BAA1	340859	915647	6/22/2004	225	17.6	--
Lawrence County						
15N01E26DDA1	355402	905639	7/12/2004	891	19.1	--
15N01W35CBB1	355336	910356	7/12/2004	541	18.2	--

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
16N02E05BA1	360326	905352	7/12/2004	745	19.0	--
16N02E34BDA1	355839	905150	7/12/2004	540	18.9	--
Lee County						
01N03E23CCC1	344025	904604	7/6/2004	762	19.5	--
02N01W12BB1	344825	910355	7/1/2004	801	18.1	--
02N02E04AAA1	344905	905330	7/6/2004	565	19.5	--
02N02E21ABC1	344622	905358	7/6/2004	508	20.1	--
03N03E33CB1	344941	904804	7/6/2004	630	20.1	15
03N05E16AAD1	345218	903416	7/6/2004	437	20.0	--
Lincoln County						
07S06W28CBB1	340508	914232	6/29/2004	548	19.3	41
08S04W19CC1	340021	913205	6/30/2004	806	18.6	100
09S05W13CDB1	335505	913350	6/29/2004	463	19.4	23
09S06W04BCD1	335821	914346	6/29/2004	414	19.3	16
Lonoke County						
01N07W29BBB1	344114	914720	6/24/2004	555	19.6	44
01N09W13DAB1	344235	915517	6/25/2004	768	18.8	--
01S08W24CDD1	343606	914912	6/25/2004	836	19.1	15
02N07W02BBA1	344957	914338	6/24/2004	397	19.8	20
02N07W16BAB1	344815	914540	6/28/2004	378	18.9	--
02N08W16ABC1	344806	915114	6/28/2004	293	18.9	6.5
02N10W15AD1	344806	920336	6/28/2004	236	19.0	15
02N10W23BCA1	344725	920322	6/28/2004	254	19.1	14
02S07W04DA1	343339	914535	6/24/2004	500	19.1	25
02S08W13BBB1	343232	914935	6/25/2004	727	19.3	19
02S08W34DBB1	343003	915150	6/28/2004	340	19.0	--
02S09W30CDD1	343014	920116	6/25/2004	594	19.1	--
03N08W21BCC1	345220	915220	6/28/2004	205	19.0	6
03N08W32ABB3	345059	915255	6/28/2004	276	18.4	--

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
03N10W34ABB1	345101	920352	6/28/2004	353	19.3	--
Mississippi County						
12N08E01AAB1	354154	901051	7/8/2004	651	19.0	6.2
12N08E08BCB1	354047	901559	7/8/2004	490	20.1	5.4
12N08E20DAD1	353842	901458	7/8/2004	543	18.3	5
14N10E22BB1	354941	900101	7/8/2004	527	19.1	5.1
Monroe County						
02N02W07DD1	344749	911436	7/1/2004	1,440	19.1	--
02N02W18DD1	344651	911443	7/1/2004	1,070	18.5	130
02S02W11DAC1	343209	911101	7/1/2004	990	19.1	79
03N01W20BBB1	345158	910807	7/1/2004	735	18.2	34
03N01W32DDD1	344925	910707	7/1/2004	780	18.0	--
03N02W31ADC1	344958	911447	7/1/2004	500	18.5	32
03N02W31ADD2	345008	911439	7/1/2004	440	18.6	28
04N02W30BAD1	345617	911515	7/1/2004	759	18.8	110
Poinsett County						
10N03E20BCB1	352906	904922	7/9/2004	777	19.4	--
10N03E35CDD1	352656	904436	7/9/2004	412	19.0	48
10N06E16ADD1	352938	902656	7/8/2004	610	19.6	5.4
11N01E17DDD1	353437	910013	7/9/2004	466	19.8	6.8
11N03E19BB1	353436	904859	7/9/2004	599	18.8	11
Prairie County						
01N05W20DCB1	344118	913349	6/23/2004	602	18.9	12
01S04W28BD1	343521	912624	6/23/2004	1,100	18.7	130
01S05W14BBC1	343722	913109	6/23/2004	867	18.9	22
02N04W02BCB1	344916	912419	6/24/2004	277	19.3	5.1
02S06W14BBB1	343213	913729	6/23/2004	577	19.3	61
03N06W19BDD1	345207	914110	6/24/2004	658	19.0	--
04N05W31DDC1	345514	913406	6/24/2004	760	19.2	74

Appendix 3. Specific conductance, temperature, and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, summer 2004.—Continued

[Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD83); µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Station name	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date	Specific conductance (µS/cm)	Temperature (degrees Celsius)	Chloride dissolved (mg/L)
04N06W05CCC1	345934	914018	6/24/2004	613	19.6	36
Randolph County						
18N01E34AAC1	360943	905729	7/13/2004	440	17.8	--
18N02E11DB1	361254	905008	7/13/2004	447	18.5	12
St. Francis County						
04N01E13DDA1	345708	905638	7/7/2004	675	19.8	31
04N01W24DA1	345649	910247	7/7/2004	926	19.6	40
04N01W28CDD1	345535	910634	7/7/2004	822	19.6	33
04N02E02DC1	345855	905135	7/7/2004	577	19.2	--
04N02E22DAC1	345626	905229	7/7/2004	685	19.6	17
04N06E19DAA1	345628	902957	7/6/2004	516	19.7	3.8
05N05E24CBB1	350144	903154	7/6/2004	538	19.5	--
Woodruff County						
06N01W10AB1	350945	910513	7/9/2004	513	19.6	17
07N01W32CCD1	351046	910741	7/9/2004	567	18.7	10
07N02W04ADA1	351550	911201	7/8/2004	336	21.5	5.4
08N03W31AAD1	351655	912028	7/9/2004	412	18.8	9.4

Schrader, T.P.—STATUS OF WATER LEVELS AND SELECTED WATER-QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 2004—U.S. Geological Survey Scientific Investigations Report 2006-5128

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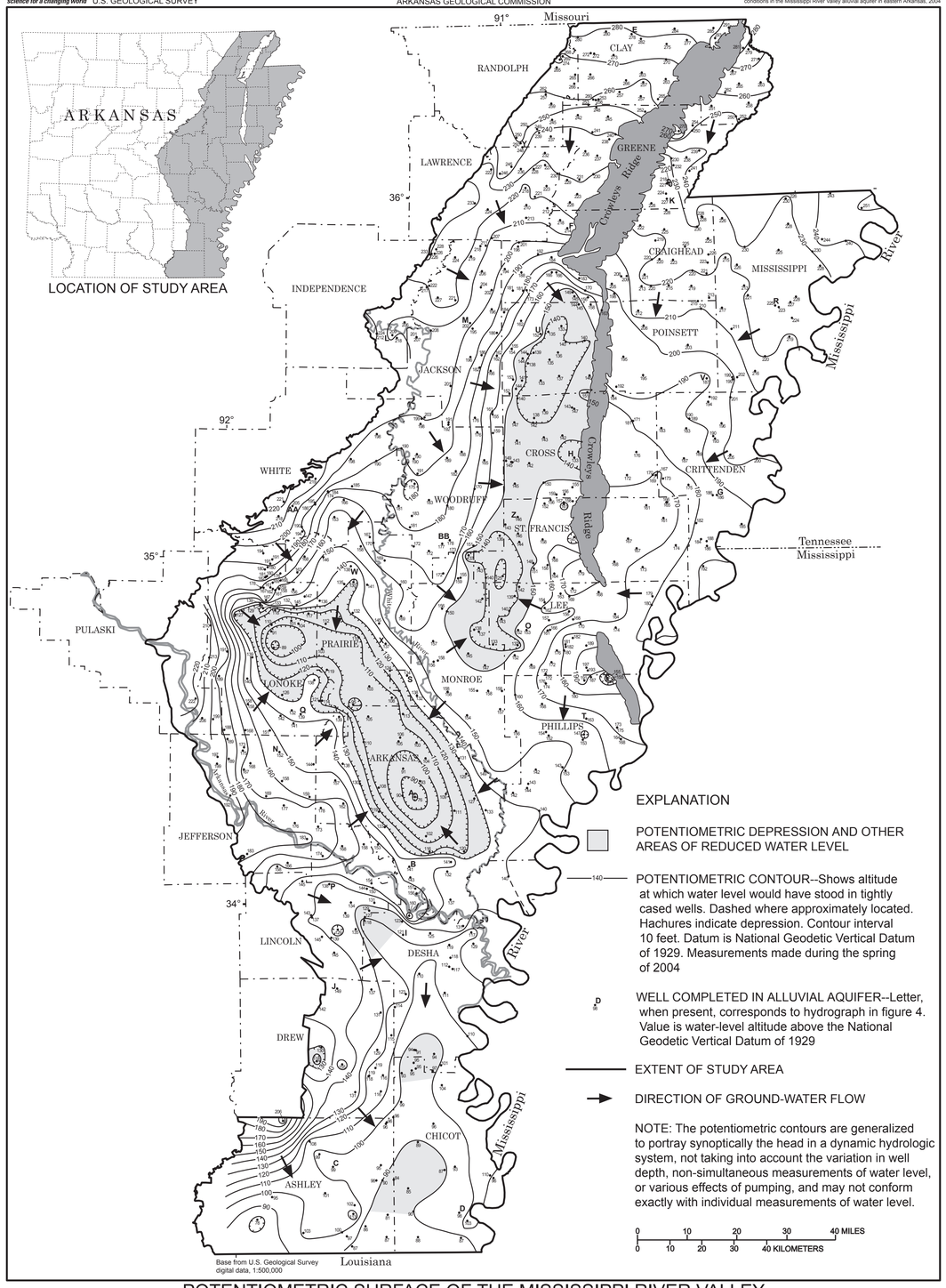
SCIENTIFIC INVESTIGATIONS REPORT 2006-5128
Potentiometric surface of the Mississippi River Valley alluvial aquifer--PLATE 1
Schrader T.P., 2006, Status of water levels and selected water-quality conditions in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2004



POTENTIOMETRIC SURFACE OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER, SPRING 2004

T.P. SCHRADER

2006

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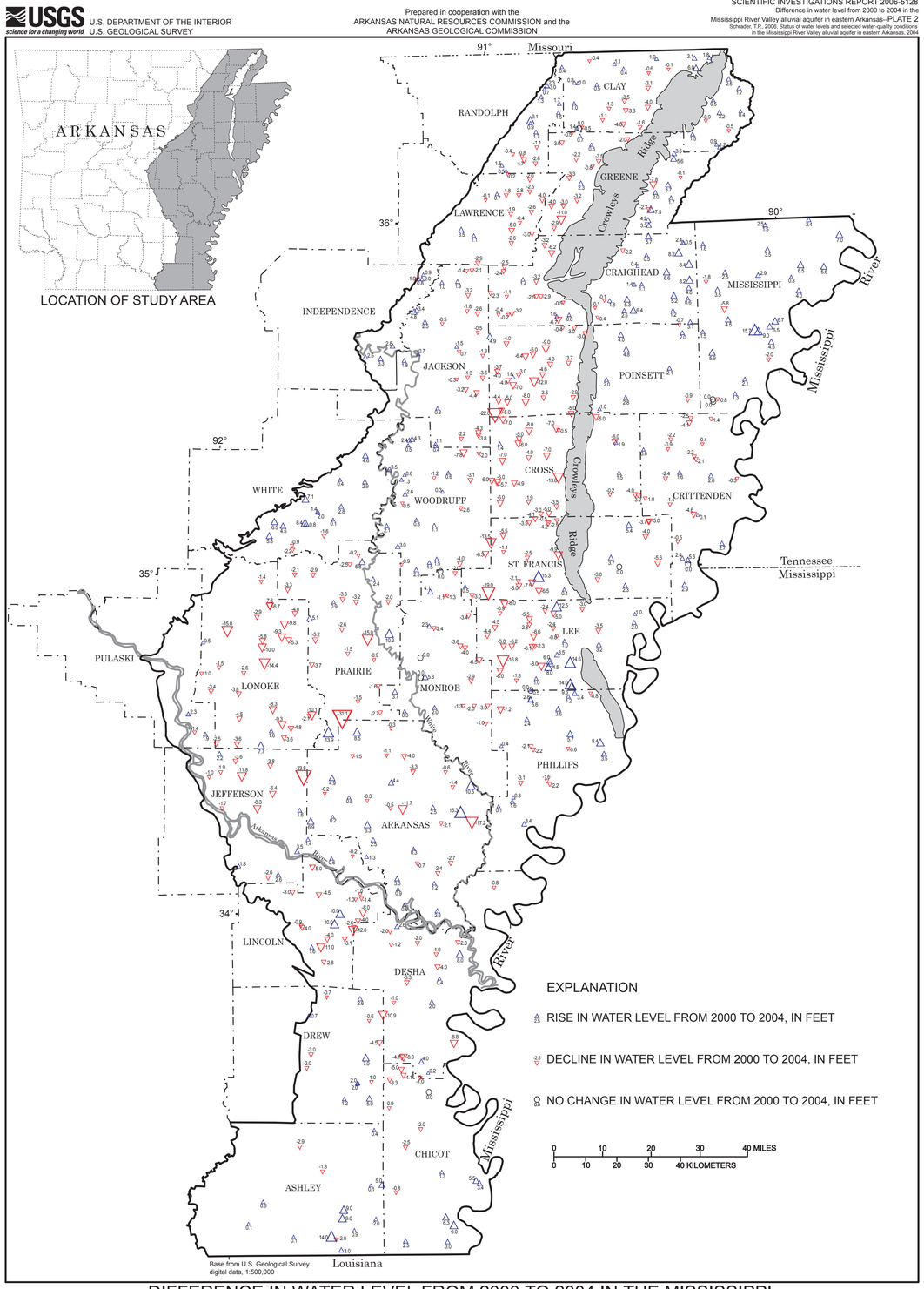
Difference in water level from 2000 to 2004 in the
Mississippi River Valley alluvial aquifer in eastern Arkansas--PLATE 2
Schrader, T.P., 2006, Status of water levels and selected water-quality conditions
in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2004



DIFFERENCE IN WATER LEVEL FROM 2000 TO 2004 IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS

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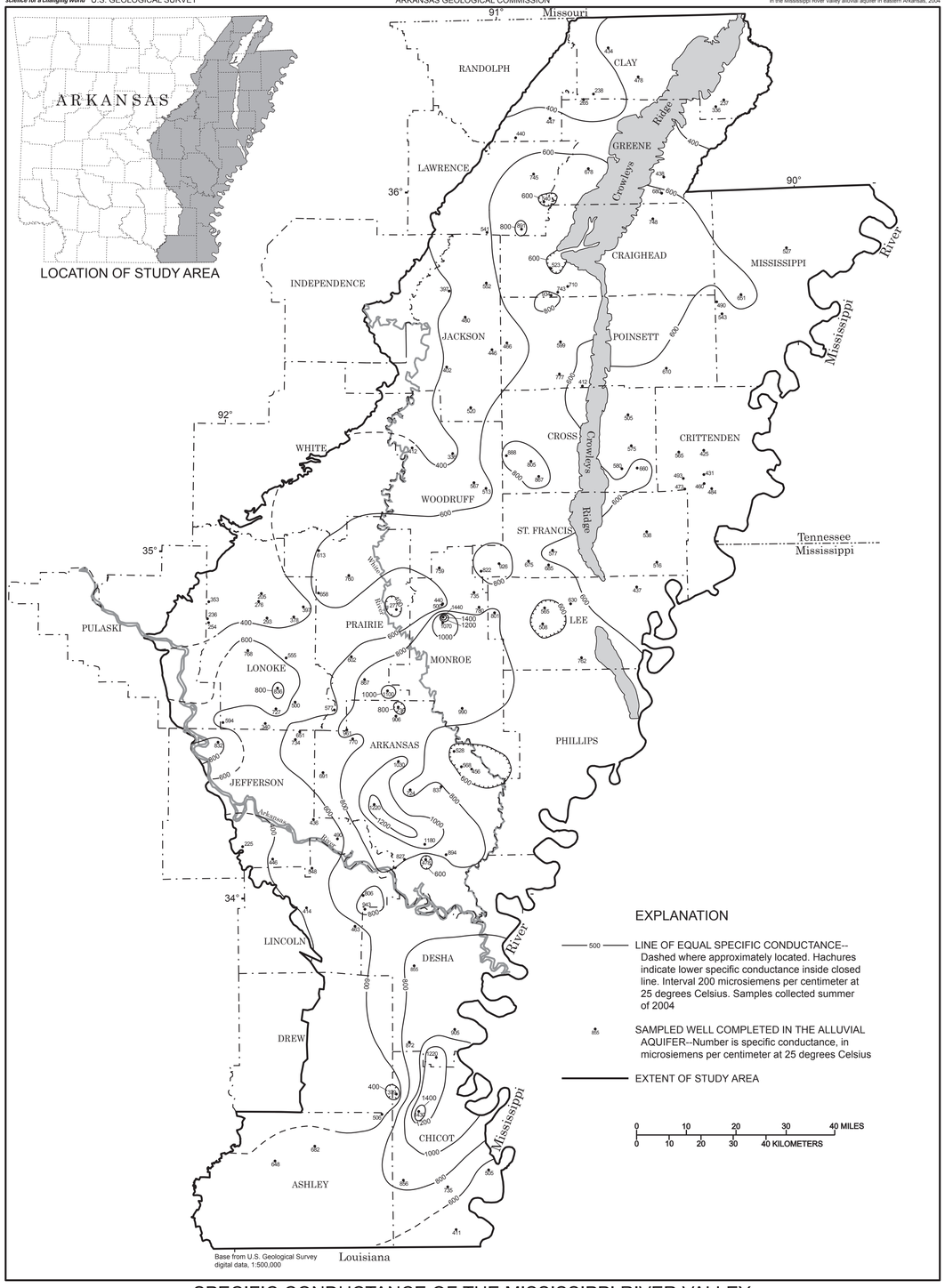
Specific conductance of the Mississippi River Valley alluvial aquifer--PLATE 3
Schrader, T.P., 2006, Status of water levels and selected water-quality conditions
in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2004



SPECIFIC CONDUCTANCE OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER, SUMMER 2004

T.P. SCHRADER

2006