



NATURAL RESOURCES  
DIVISION

# Arkansas Department of Agriculture Natural Resources Division

## Arkansas Groundwater Protection and Management Report 2020







# **Arkansas Department of Agriculture**

## **Natural Resources Division**

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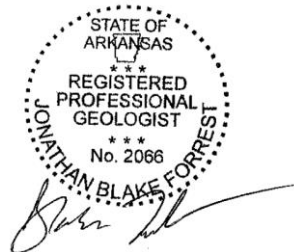
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## **ABSTRACT**

The Arkansas Groundwater Protection and Management Report is produced annually by the Arkansas Department of Agriculture Natural Resources Division (NRD) pursuant to the Arkansas Groundwater Protection and Management Act of 1991, Arkansas Code Annotated 15-22-906. This report provides a summary of groundwater protection and conservation programs administered by the NRD during the years 2019 and 2020, including water-level monitoring and studies of water use trends in the state.

This report focuses exclusively on two aquifers: the Mississippi River Valley Alluvial Aquifer (alluvial aquifer), the most important water resource for agricultural production in the state, and the Sparta/Memphis Aquifer (Sparta), one of the state's best sources of good quality groundwater for drinking and industrial uses. The report compares synoptic water-level data collected in the spring of 2020 to historical synoptic water level data in one, five, and ten-year intervals, as well as data collected continuously, monthly, and quarterly, to quantify the aquifers response to the stresses of the 2019 growing season. Climate and water use data are considered along with water level data to explain the water level change results.

Aquifer-wide water level data collected during the pre-irrigation period of spring 2020 had positive average change values for both the alluvial and Sparta aquifers when compared to spring data from 2019, 2015, and 2010; except for the alluvial aquifer in the spring 2010 comparison, which yielded a negative average water level change over the ten year period. This result continues the trend of mostly positive average change values in recent years. Average water level change maps are presented in the report for the five Groundwater Study areas that bring better attention to the changes in the various areas.

The general trend in Arkansas' long-term water-level change is that the groundwater levels are declining in response to continued withdrawals at rates which are not sustainable. Based on 2015 water use data, only approximately 44.2 percent of the current alluvial aquifer withdrawal of 7,636.08 million gallons per day, and approximately 55% percent of the Sparta/Memphis aquifer withdrawal of 160 million gallons per day is sustainable. At these pumping rates, water-level declines and the adverse impacts on the state's groundwater system will continue to be observed.



## **Introduction**

This report is prepared to provide the State of Arkansas with a comprehensive water-quantity and water-quality document to be utilized, in accordance with the Arkansas Water Plan, as a guide for water resources conservation and protection programs. It includes data, analysis, and recommendations for the groundwater protection and management program, as well as data from the Arkansas Water Well Construction Commission.

This report focuses on the two most used aquifers in the state, the Mississippi River Valley alluvial aquifer (alluvial aquifer) and the Sparta/Memphis aquifer. Data collection for the program is dependent upon a strong partnership with other state, federal, and local water resources agencies. A monitoring schedule has been established to obtain data from the alluvial aquifer and the Sparta aquifer on an annual basis. Historically, each spring approximately 200 to 300 wells are monitored in the alluvial aquifer, and approximately 100-200 wells are monitored each year for water levels in the Sparta/Memphis aquifer. In 2020, water level data was collected from approximately 555 wells in the alluvial aquifer during the spring, resulting in the most water level measurements ever collected during a season. In addition to the spring measurements, synoptic alluvial aquifer water level measurements are collected in the fall in order to estimate aquifer drawdown once irrigation has ended for the year. This fall water level collection is not as comprehensive as the spring effort, historically, but this year 373 wells were measured that shared data with wells measured in the spring. The number of wells monitored will vary from year to year depending on the resources available, well accessibility, and other factors.

There are areas of the state experiencing groundwater withdrawals of such magnitude that demand on the aquifer exceeds the sustainable yield, resulting in consistently falling groundwater levels, and the development of cones of depression. These areas occur in both the alluvial and Sparta aquifers. Water-level declines are consistently observed in areas where water use is highest, such as portions of the Grand Prairie study area and in the Cache study area for the alluvial, and in the South Arkansas study area for the Sparta.

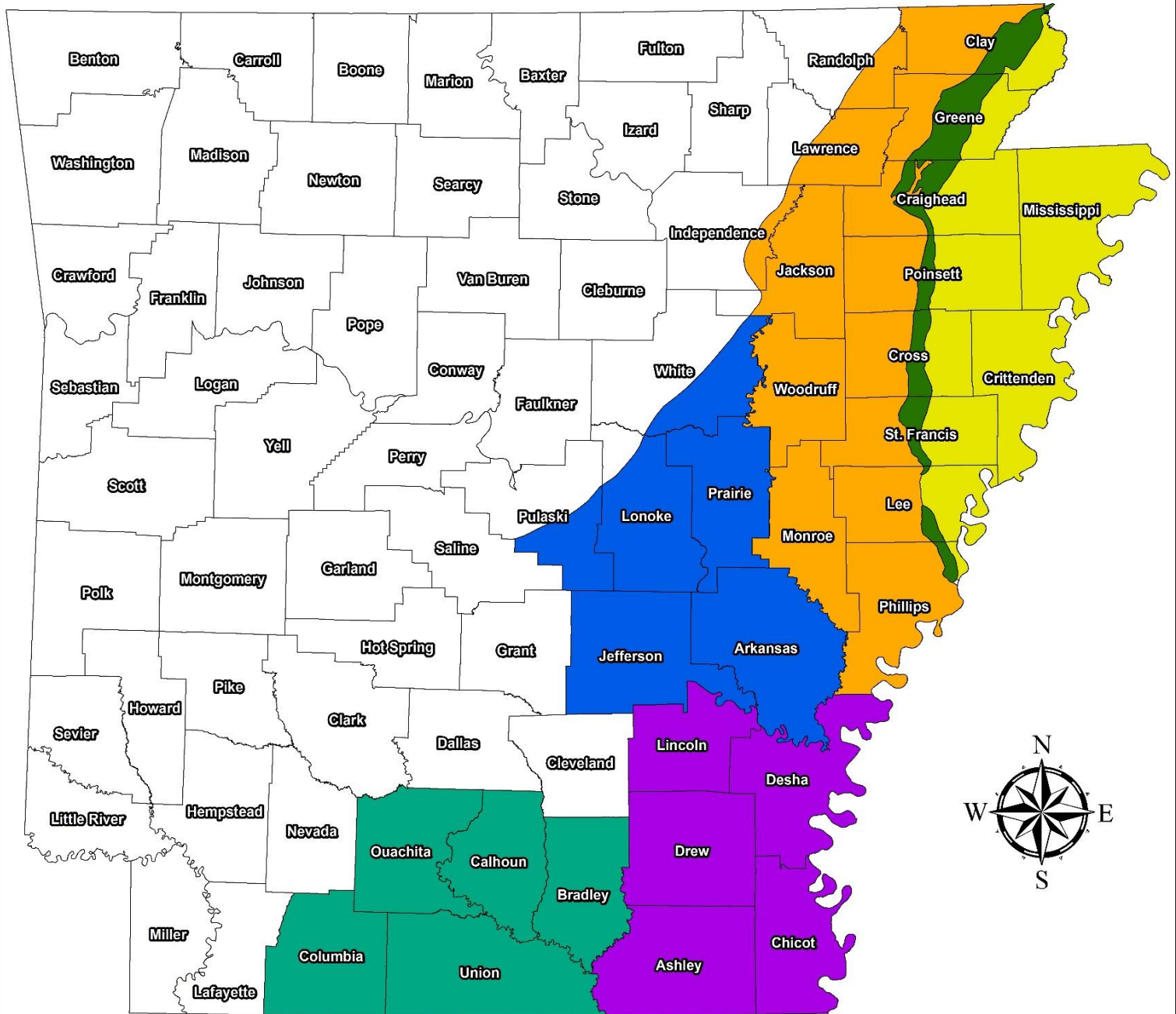
The USGS maintains the Arkansas Masterwell Program that supplies long term groundwater quality monitoring in 25 wells from 14 aquifers. These Masterwells are located throughout 21 counties and each year 5 sites are sampled for a variety of water-quality constituents. Hydrogeologic data is collected statewide; however, resources are focused on

study areas where water-level declines and water-quality degradation have been observed historically. Groundwater quality sampling targeting known water quality issues, such as high chlorides, throughout the Mississippi Alluvial Plain has been conducted by the USGS in 2018 and 2019. The results of this work will be included in this report when they are published.

## **Water Policy**

Water resources policy in Arkansas was established in the Arkansas Water Plan of 1991, in which the NRD advocates conservation, education, and the conjunctive use of ground and surface water, along with the development of excess surface water to meet future water use needs. It is hoped that protection of the State's groundwater resources can be achieved through these measures rather than management strategies that may require allocation of water. If conservation and the development of excess surface water are not successfully implemented in the impaired areas in the future, the State will have to consider regulatory alternatives to preserve the aquifers at a sustainable level. All water-use strategies must consider the wise use of our State's water resources while protecting the sustainable yield of the State's aquifers. Stream flow needs of the State's surface-water flow system must also be considered if our water resources are to be protected for future generations to utilize and enjoy. The NRD advocates that the State move toward a sustainable yield pumping strategy through conservation and utilization of Critical Groundwater Area designation where needed to focus resources. Designation as a Critical Groundwater Area fosters conservation by offering enhanced tax credit benefits for conservation practices through the State's Water Conservation Tax Credit Program, by increasing educational outreach, and by qualifying the area for federal programs and funding. This is a non-regulatory designation. Regulation cannot be initiated without a new process involving legal proceedings, additional notice, and public hearings. Figure 1 presents the Groundwater Study Areas while Figure 2 presents the Critical Groundwater Areas as designated.

# Arkansas Groundwater Study Areas



## Legend

- South Arkansas
- Grand Prairie
- Cache
- Boeuf - Tensas
- St. Francis
- Crowleys Ridge
- County Boundaries

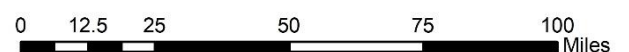


Figure 1



# Critical Groundwater Areas

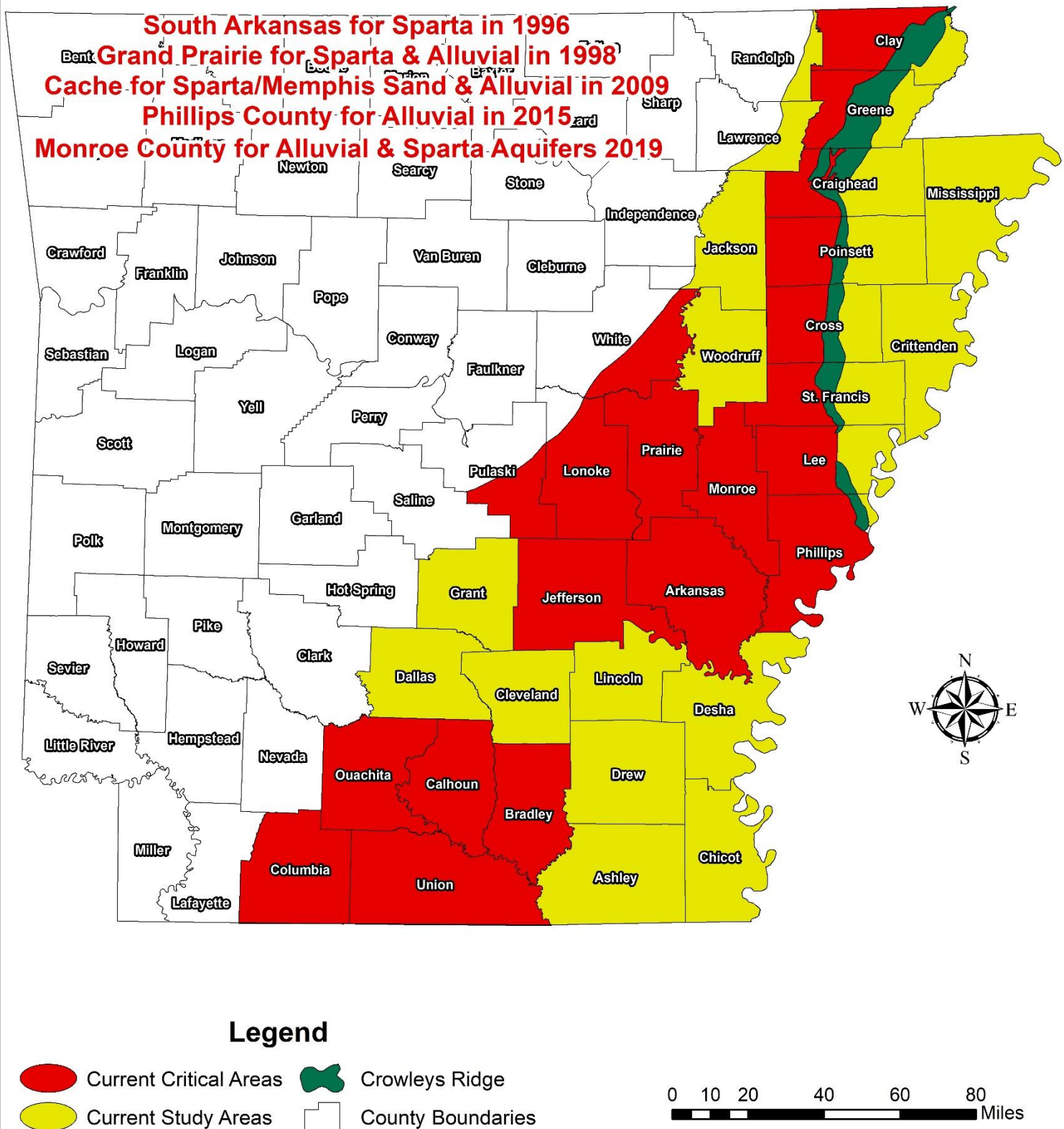


Figure 2

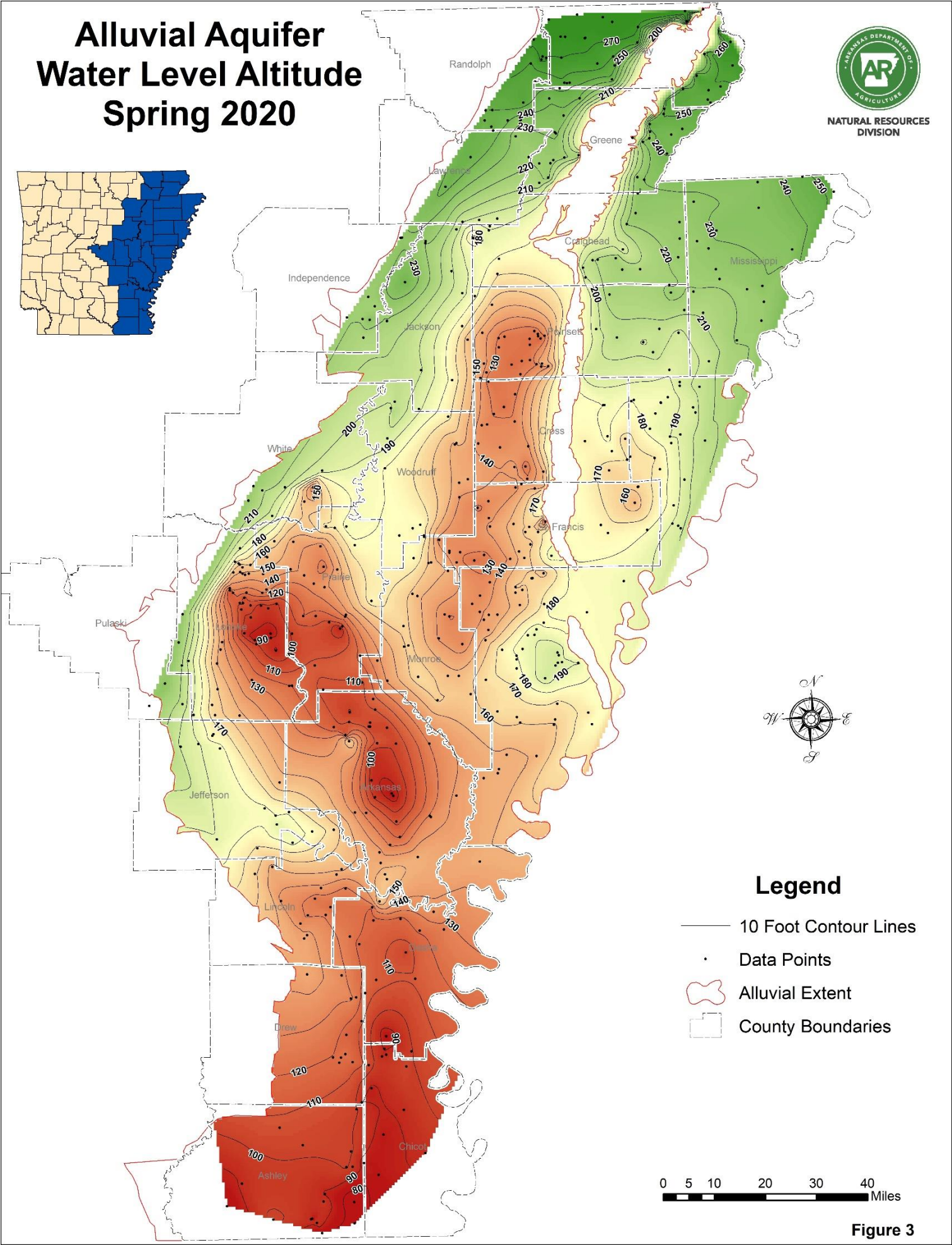
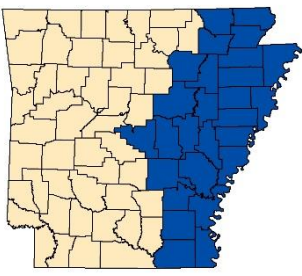
# Hydrogeology and Water-Level Trends

## Alluvial Aquifer

The Mississippi River Valley alluvial aquifer, hereby referred to as the “alluvial aquifer”, is the uppermost aquifer in the Mississippi Embayment. The alluvial aquifer is composed of 50 to 150 feet of sand and gravel, grading from coarse gravel at the bottom to fine sand at the top. It is generally overlain by the Mississippi River Confining Unit, which is composed of up to 50 feet of fine-grained sand, silt, and clay. For the purpose of this report, the term alluvial aquifer refers to the portion of the aquifer inside the state boundaries of Arkansas and the extent of the Mississippi River Alluvial Plain; generally the Fall-Line or contact with outcropping Tertiary formations to the west, the Mississippi River to the east, and the state lines to the north and south. The alluvial aquifer is connected hydraulically with several rivers and drainage areas (Ackerman, 1996).

Static water level measurements were collected from 555 wells across the alluvial aquifer prior to the irrigation season in 2020, with most of the measurements being collected in April. Figure 3 presents the potentiometric surface data as altitude relative to mean sea level. Figure 4 presents the depth to water in the alluvial aquifer as feet below ground surface. Figure 5 presents the saturated thickness of the alluvial aquifer as a percentage of the total aquifer thickness. Saturated thickness values were calculated by subtracting the depth to water by the total aquifer thickness on a well to well basis. Aquifer thickness values were obtained from the USGS MERAS model. The areas of greatest decline continue to be the historical cones of depression in the Grand Prairie and Cache river regions.

# Alluvial Aquifer Water Level Altitude Spring 2020



## Legend

- 10 Foot Contour Lines
- Data Points
- Alluvial Extent
- - - County Boundaries

Figure 3



# Alluvial Aquifer Depth to Water Spring 2020

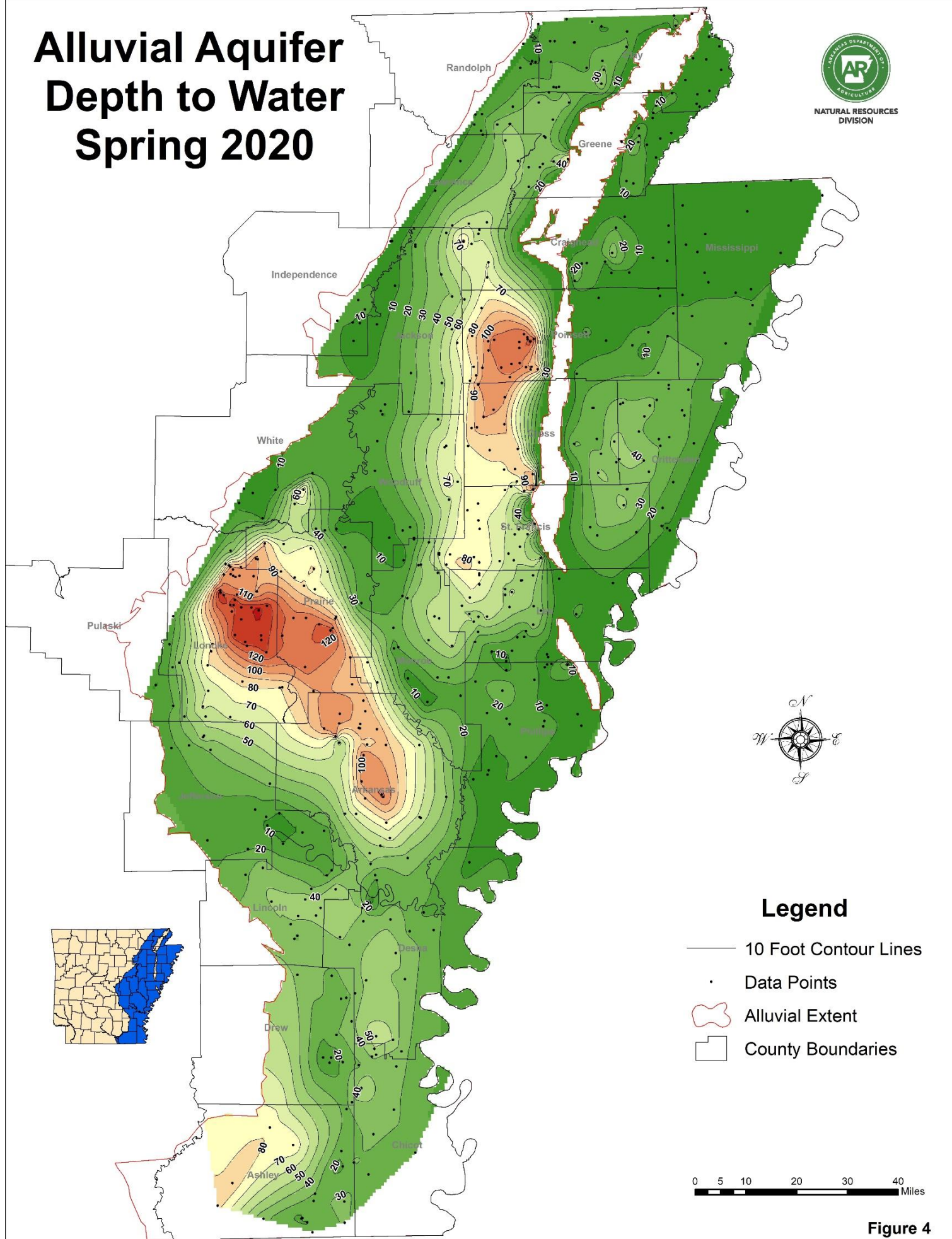


Figure 4

# Percent of the Mississippi River Alluvial Aquifer Saturated at Specific Data Collection Sites, Spring 2020



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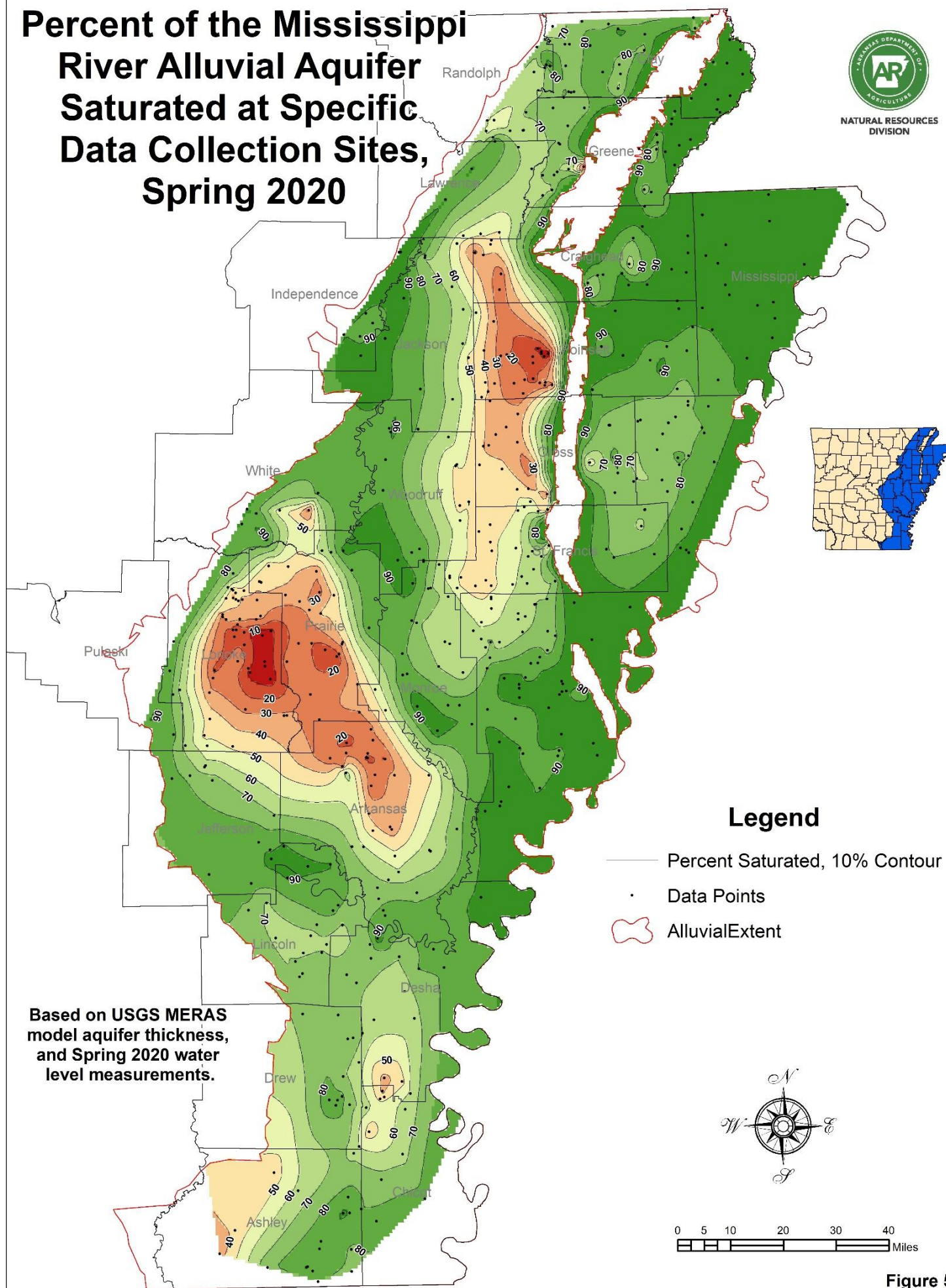


Figure 5



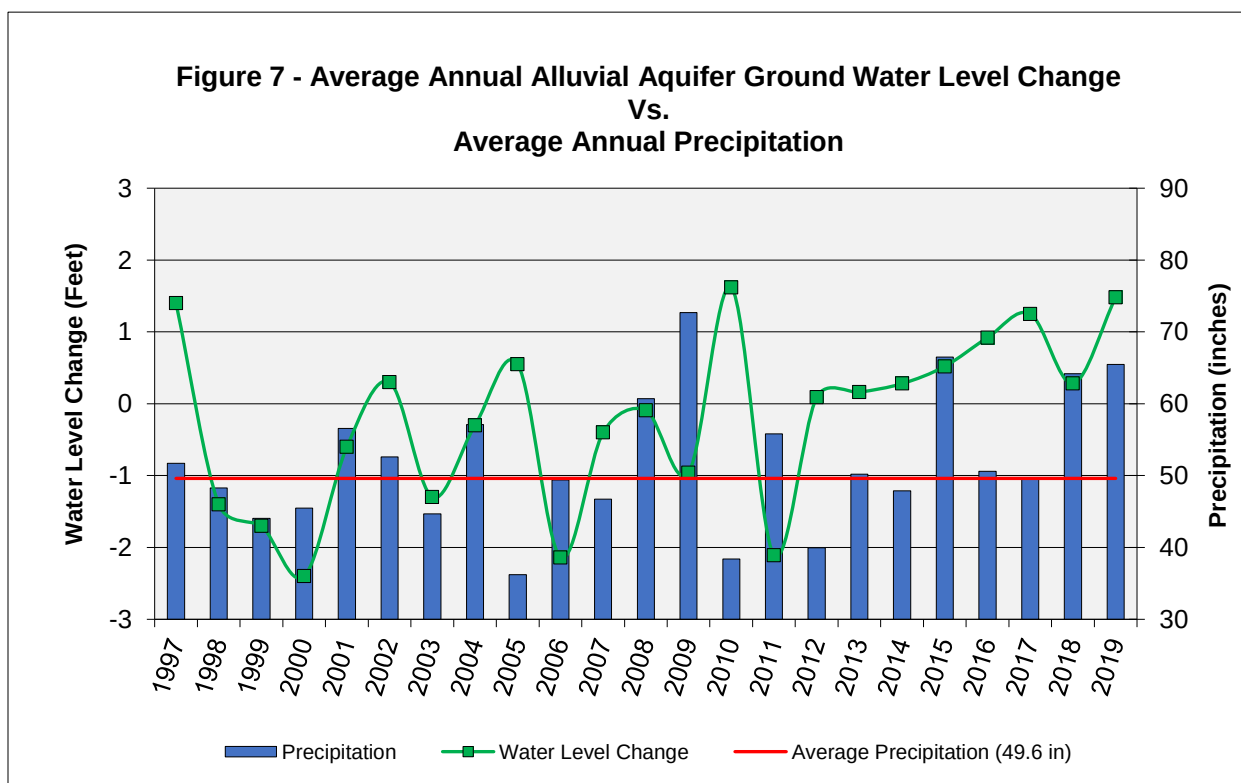
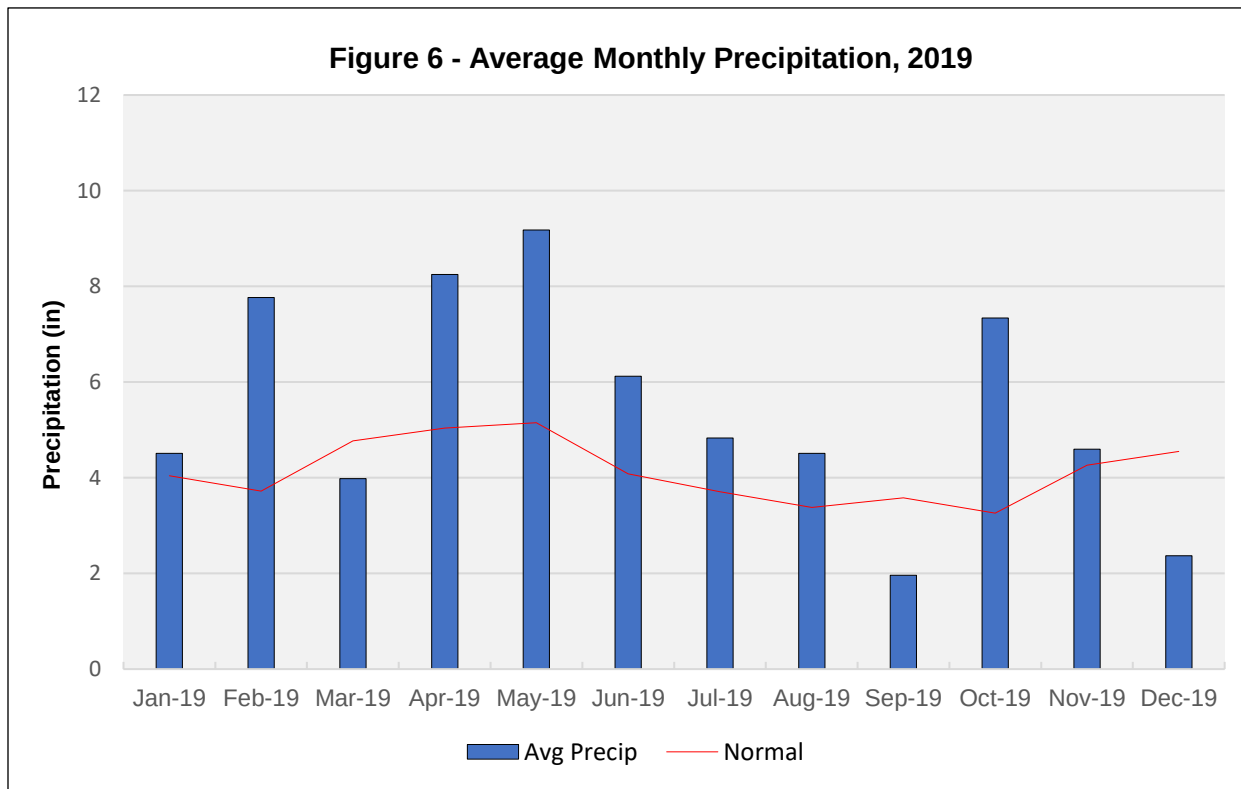
## Precipitation and Weather Events

The amount of rainfall is considered for comparison with the water level change during times of drought or excess rainfall. Years of abundant precipitation benefit the alluvial aquifer by increasing the ability for the aquifer to recharge naturally and by reducing the demand for groundwater, especially adequate amounts of rainfall throughout the growing season. In 2019, the total average precipitation was 65.49 inches, 15.88 inches more than the annual average. January through June 2019 ranked in the Top 5 wettest sixth months of the as far back as 1895, and was the wettest period since 1990 (NWS, 2020). Almost every month of the 2019 growing season (March through September) had above average precipitation in 2019; with only March and September experiencing below average rainfall. Figure 6 shows the monthly precipitation for 2019 compared with the normal monthly values on the following page.

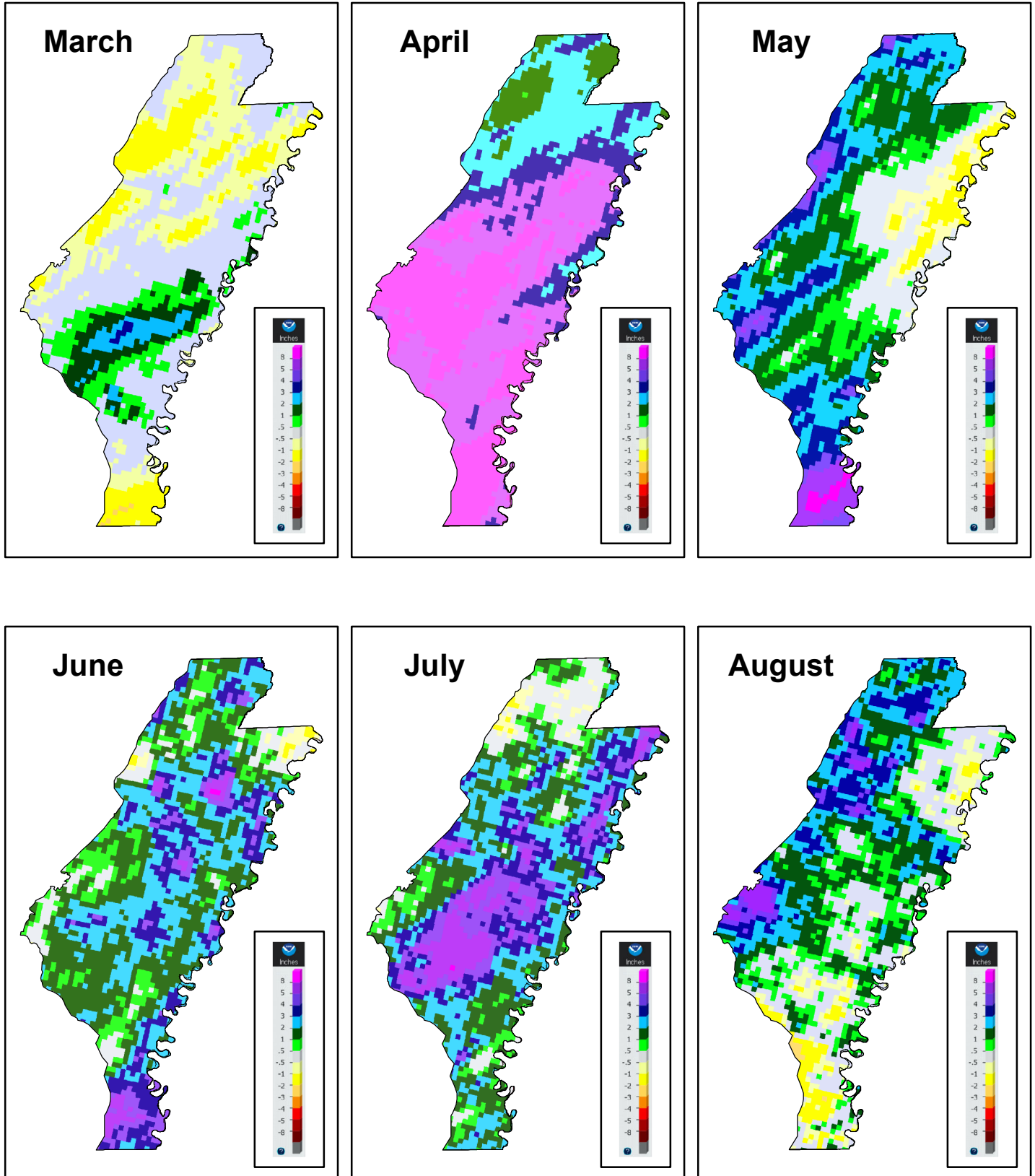
Arkansas has consistently received average to above average rainfall since 2011, except for 2012, and the average change across the alluvial aquifer has been trending upwards since 2012. 2019 was no exception to this trend, with above average rainfall and an average alluvial aquifer groundwater level change from pre-irrigation 2019 to pre-irrigation 2020 of +1.48 feet. Figure 7 compares the statewide annual average precipitation to the average change in water levels in the alluvial aquifer from 1997 to 2019. Figure 8 presents data from the National Weather Service illustrating the total monthly precipitation received as a departure-from-normal value across the Mississippi River Valley Alluvial Plain for most of the 2019 growing season, March through August (NOAA, 2020).

In addition to a wetter than average growing season with widespread rainfall across the alluvial plain as shown in Figure 7, the state experienced extensive river flooding in 2019, including the record Arkansas River flood event in May and June. It is not clear that the potential for increased surface water infiltration during the flooding made a significant impact on water levels based on our available synoptic data. However, the wet conditions and flooding prevented many crops from being planted. According to the 2019 crop acreage data published by the USDA, 1.3 million acres were reported as having been “prevented” from being planted in this year (USDA, 2020). It is likely that the reduced need to irrigate as a result of the rainfall, the flooding, and the uncultivated acreage led to some amount of aquifer recovery; however, the limitations of our synoptic water level data does not illustrate this effect. The 2019 spring to fall water level data comparison may have been the best indicator

of any effect from the flooding, but the dataset did not have the coverage to properly illustrate the impacts. Perhaps in the future, with the increased efforts by all the agencies involved to gather more consistent spring and fall synoptic data, we will be better able to illustrate the impacts of such events as occurred in 2019.



**Figure 8.**  
**Mississippi River Valley Alluvial Plain**  
**2019 Total Monthly Precipitation**  
**Departure from Normal (DFN) Value**





## Water Level Trends

Water level data from the current year are compared with previous data on a well to well basis in one (1), five (5), and ten (10) year intervals to illustrate the water level change of the aquifer over time. For the one-year change comparison, 232 of the 555 wells measured in spring 2020 had data for spring 2019, and when compared, give a total average water level change of +1.48 feet. For the five-year comparison, 302 wells were identified as having data for both 2015 and 2020 giving a total average water level change of +3.45 feet with only 58 (19.21%) wells having declining static water levels. The ten-year comparison found 221 wells with water level data for the spring seasons of 2010 and 2020 and gave a total average water level change of -0.34 with 120 (54.30%) of the wells compared showing declining aquifer levels.

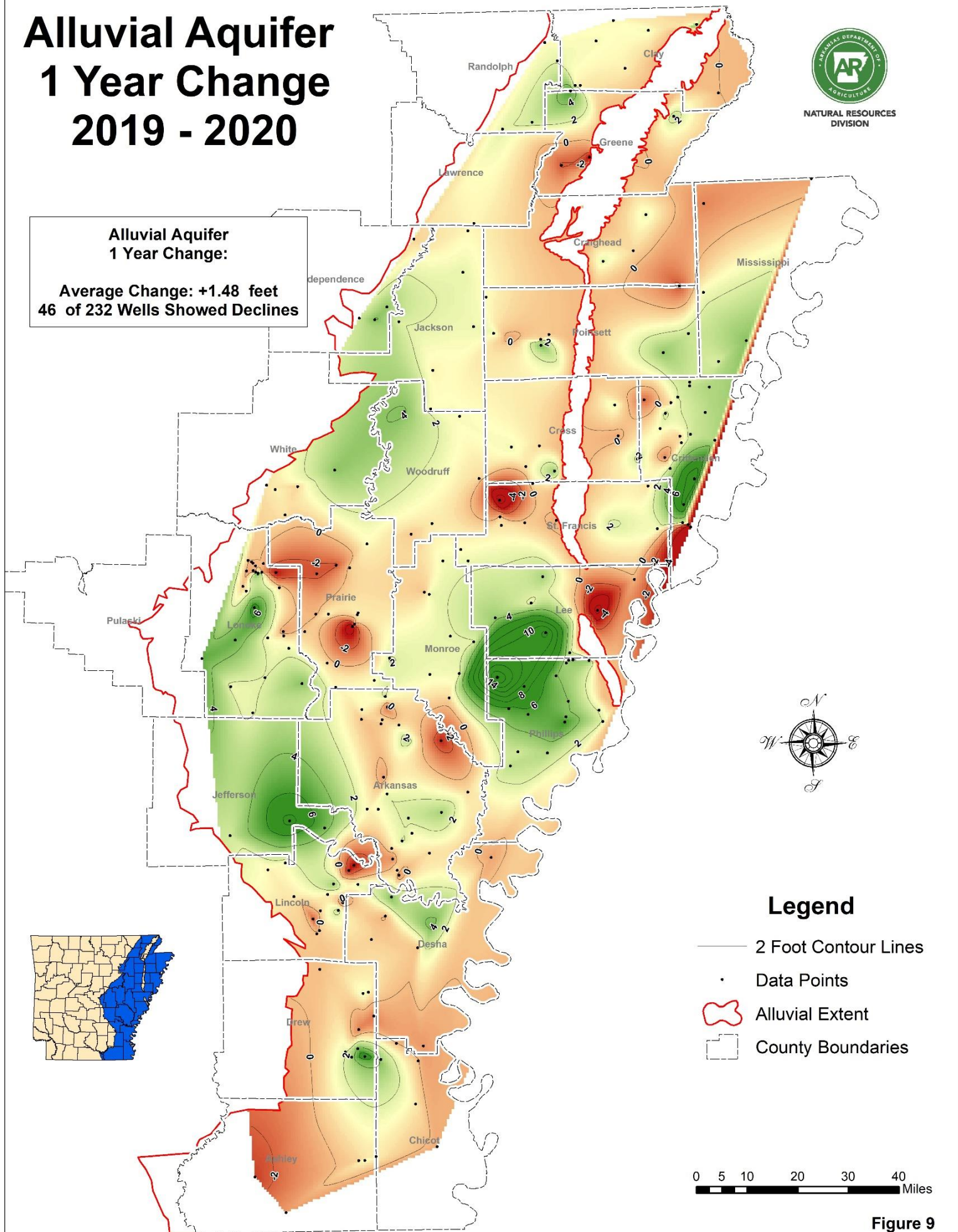
Aquifer-wide water level change maps were created for the different time intervals: Figure 9 presents the one-year spring 2019 to spring 2020 water level change, Figure 10 presents the five-year spring 2015 to spring 2020 water level change, and Figure 11 presents the ten-year spring 2010 to spring 2020 change data. These maps show that water level declines continue to be concentrated in the Cache and Grand Prairie areas where historical declines have been significant, particularly in the areas of the aquifer furthest from a major surface water source (e.g. the Arkansas, White, and Mississippi rivers). Conversely, the areas with increasing water level change values can generally be found along these sources. The five and ten-year change maps illustrate the movement of the existing cones of depression as Prairie and Lonoke counties continue to have declines in the Grand Prairie, and as the Cache depression continues to expand southward into Monroe and Lee counties. Some water level decline can be found in the Beouf-Tensas study area, but these declines do not appear to be causing significant aquifer drawdown.

A much greater effort was put forth for fall measurements in 2020 thanks to the increased interest of the USGS in the data. Approximately 440 alluvial aquifer wells were measured in the fall of 2020, and of those 440 wells, 373 were found to have also been measured during the spring. When compared, the total average change for spring to fall 2020 measurements was -3.32 feet, which is near the average changes calculated in the past (i.e. 2018 (-3.57) and 2019 (-2.90)). Figure 12 presents the spring to fall data for the entire alluvial aquifer.

# Alluvial Aquifer 1 Year Change 2019 - 2020



**Alluvial Aquifer  
1 Year Change:**  
  
**Average Change: +1.48 feet**  
**46 of 232 Wells Showed Declines**



**Figure 9**



# Alluvial Aquifer 5 Year Change 2015 - 2020



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Alluvial Aquifer  
5 Year Change:

Average Change: +3.45 feet  
58 of 302 Wells Showed Declines

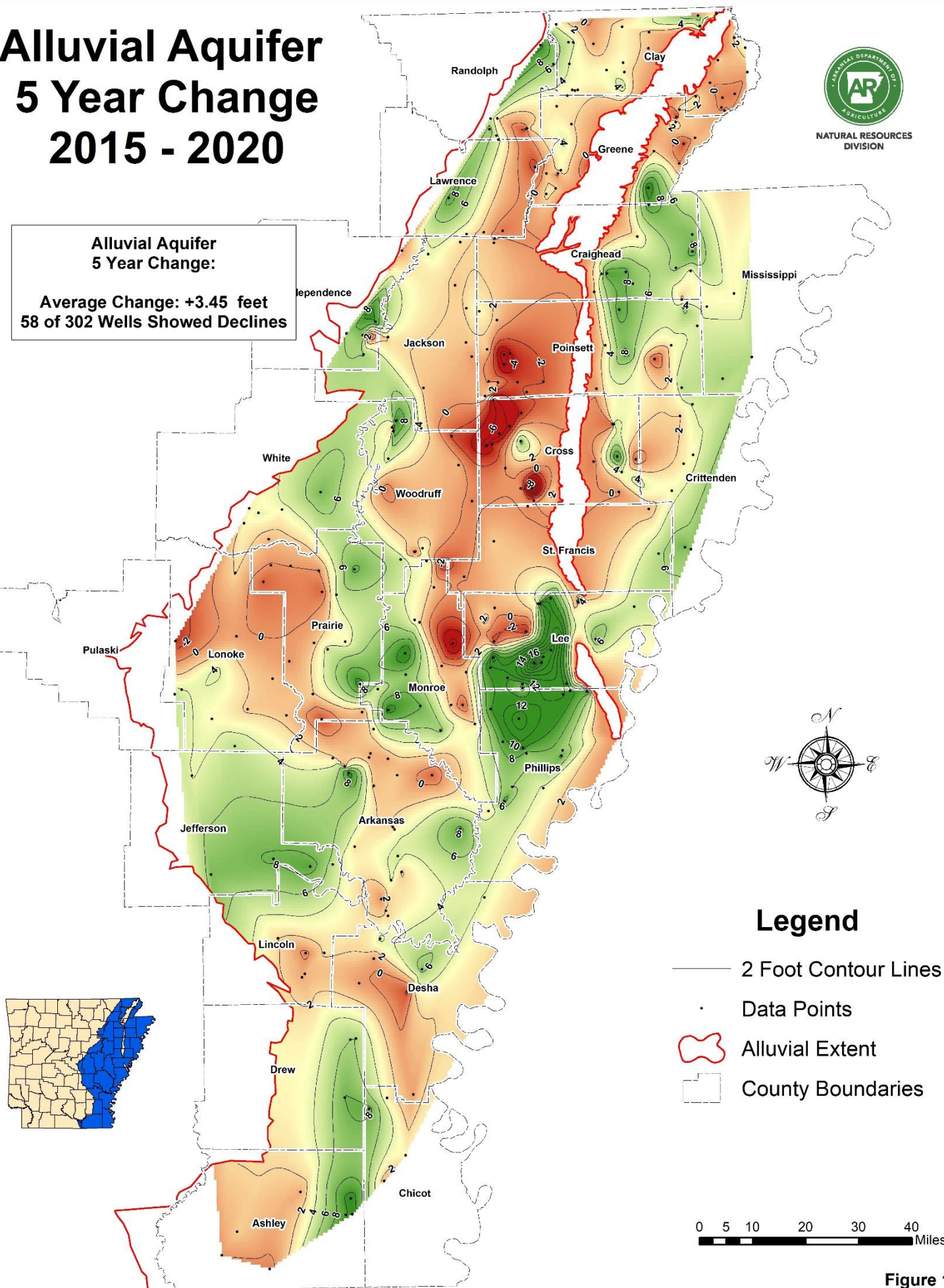


Figure 10

# Alluvial Aquifer 10 Year Change 2010 - 2020



Alluvial Aquifer  
10 Year Change:  
  
Average Change: -0.34 feet  
120 of 221 Wells Showed Declines

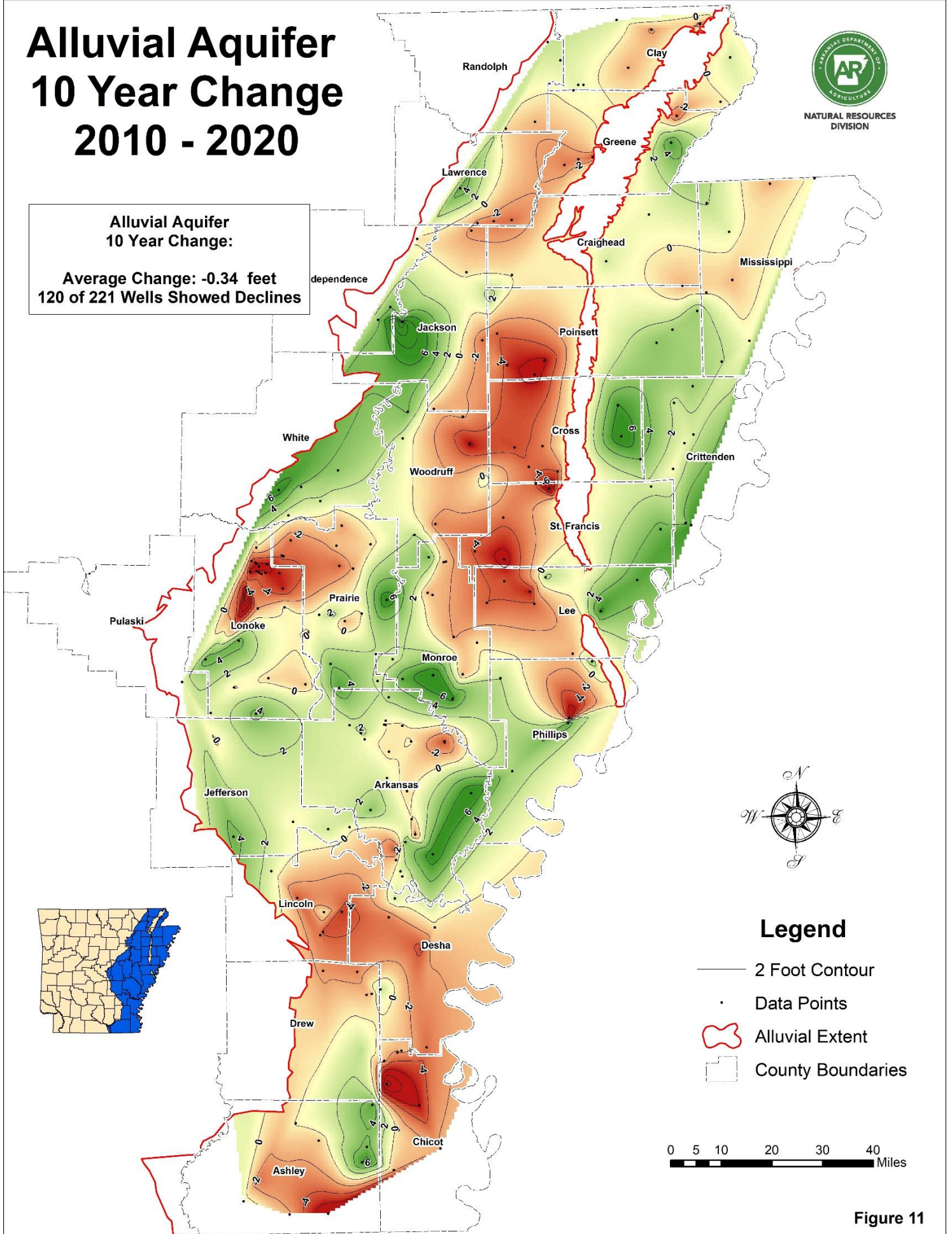


Figure 11



# Alluvial Aquifer Spring/Fall Change 2020



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## Alluvial Aquifer Spring/Fall Change:

Average Change: -3.32 feet  
310 of 373 Wells Showed Declines

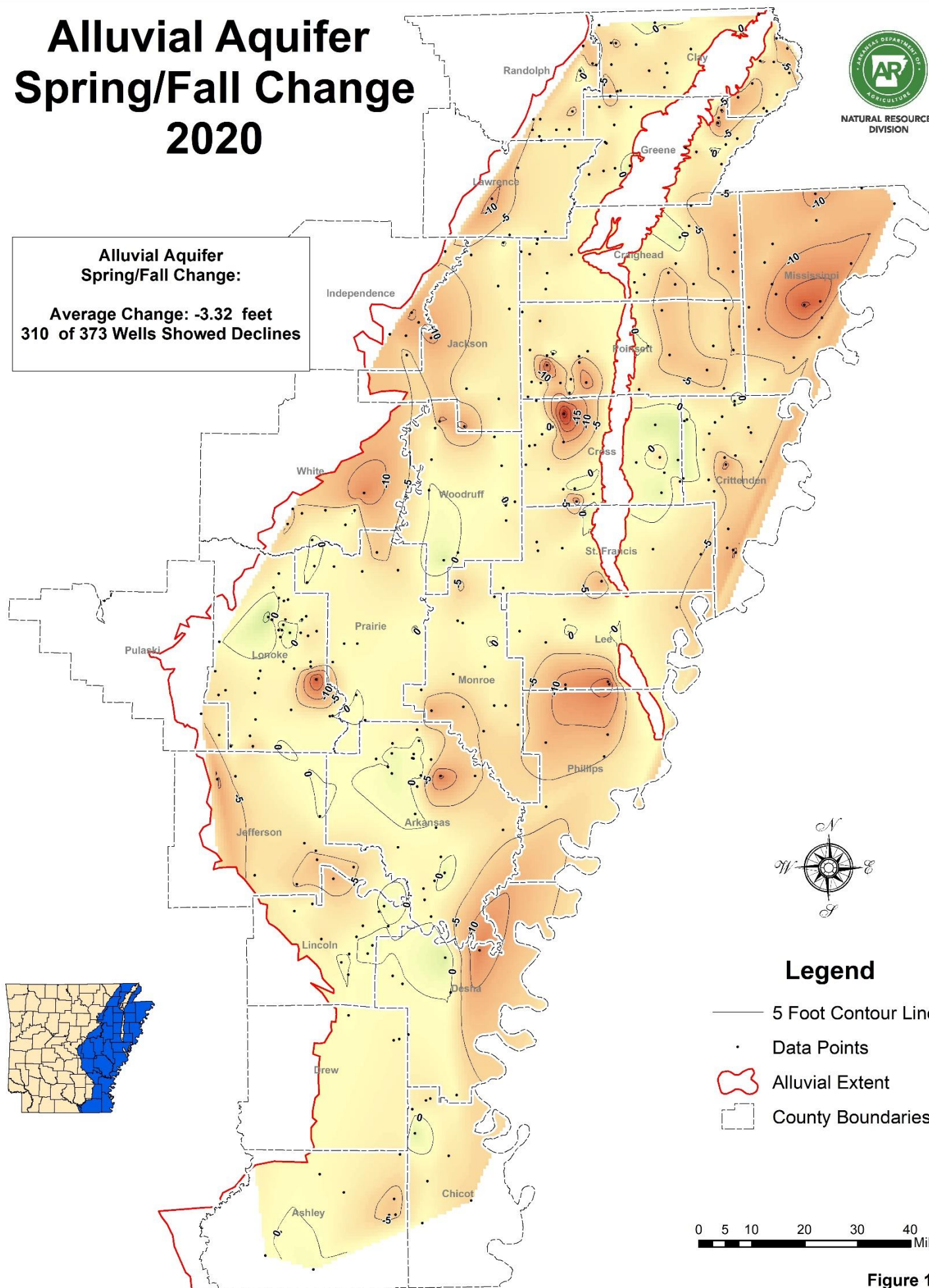
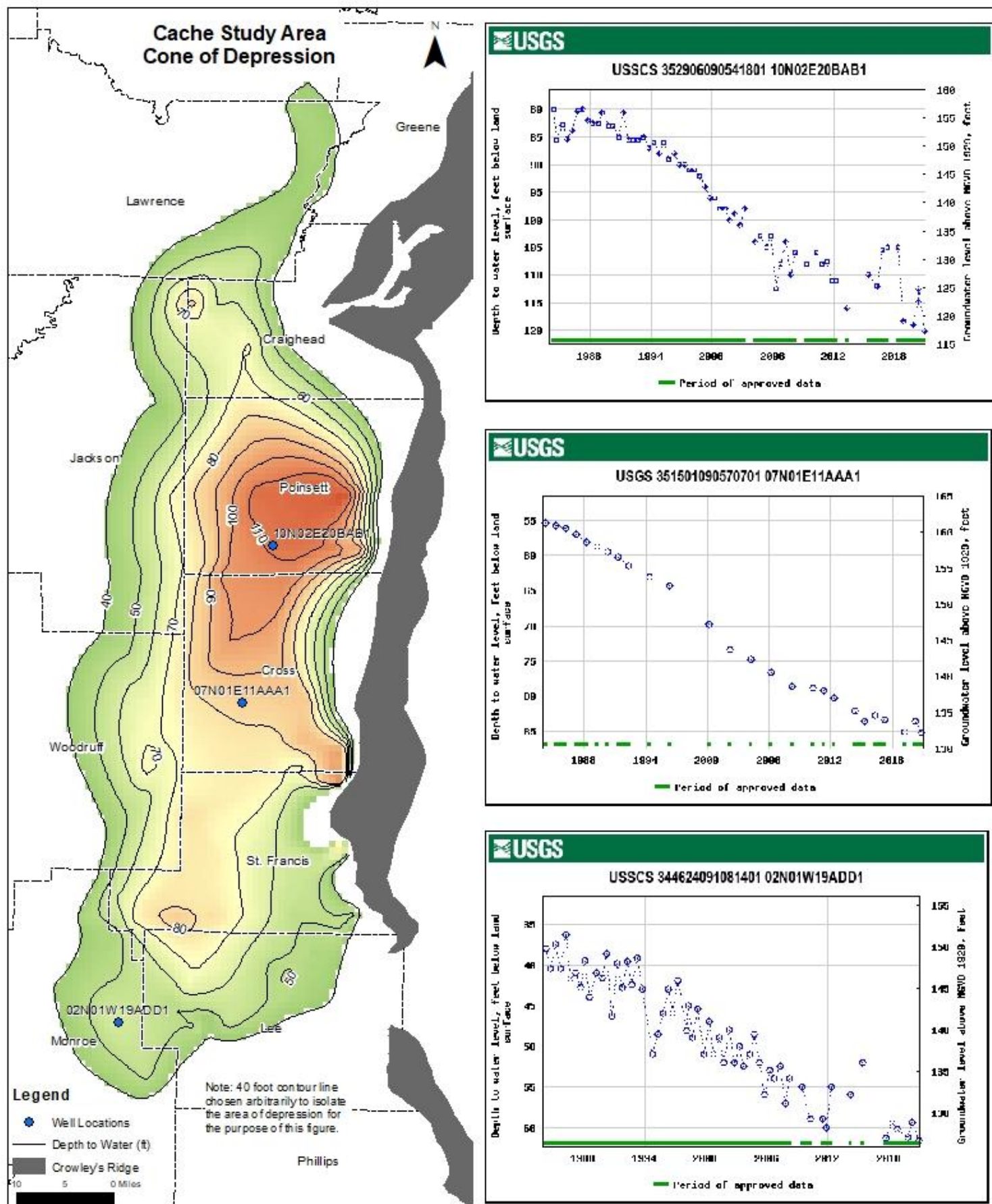


Figure 12



Selected hydrographs from the Grand Prairie and Cache Study Area cones of depression that illustrate the historical nature of decline in these areas are shown below as Figure 13 and Figure 14. Figure 15 presents hydrographs from the 7 “real-time” alluvial aquifer monitoring wells maintained throughout the Mississippi Alluvial plain from January 2019 through December 2020.

**Figure 13. Selected Hydrographs from the Cache Critical Groundwater Area**



**Figure 14. Selected Hydrographs from the Grand Prairie Critical Groundwater Area**

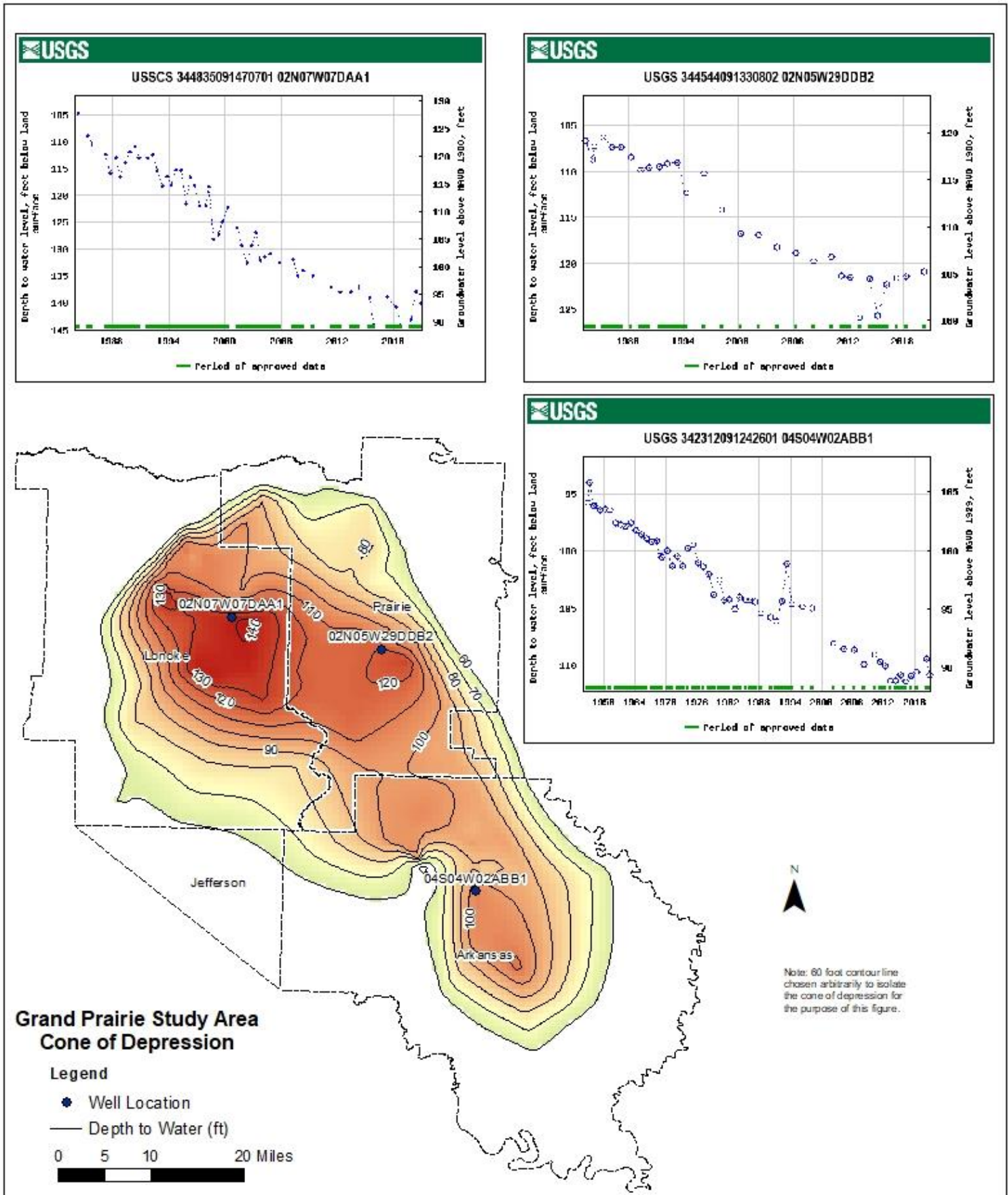




Figure 15a. NRD Real-Time Monitoring Wells, Alluvial Aquifer

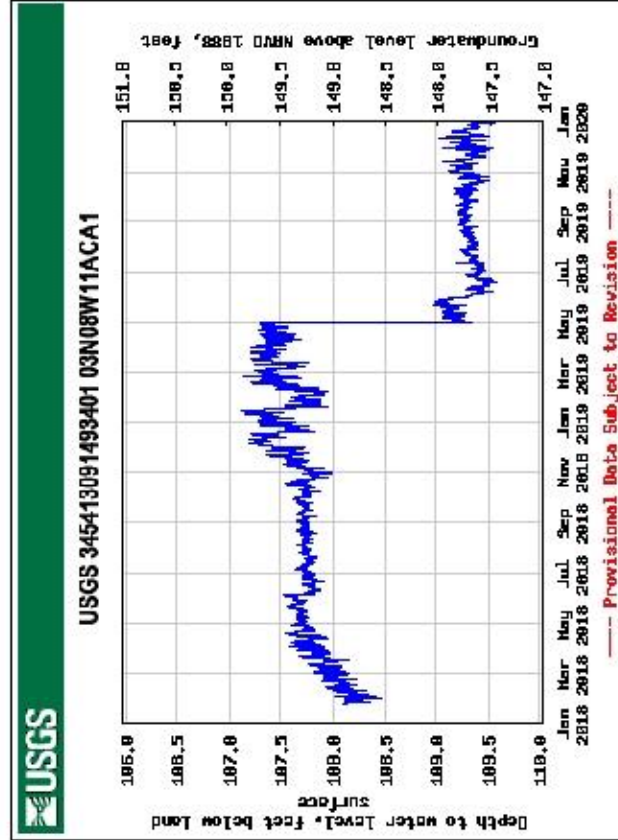
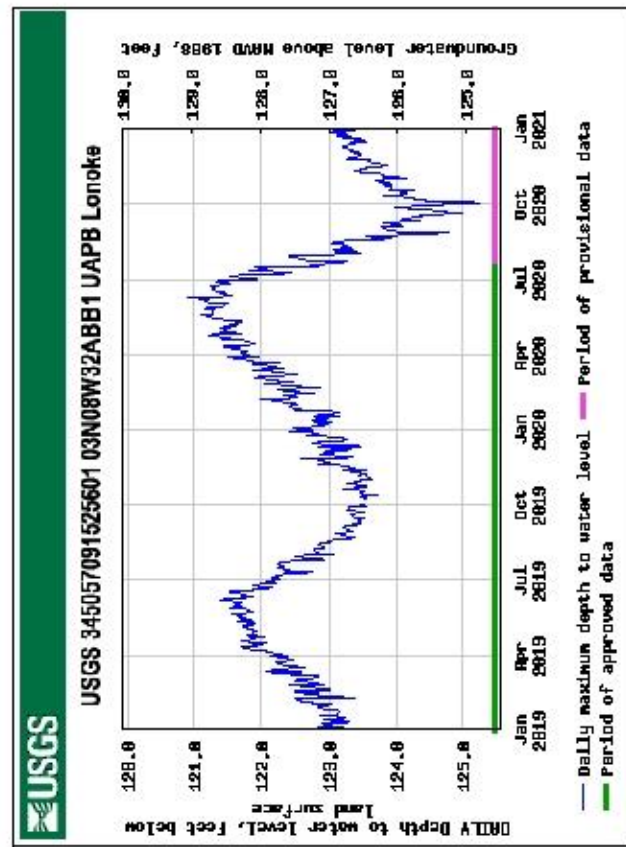
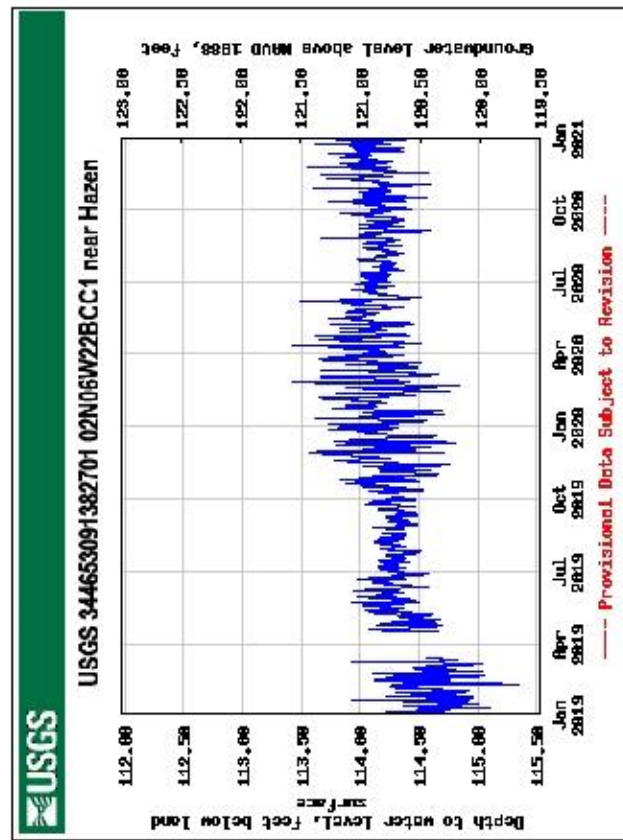
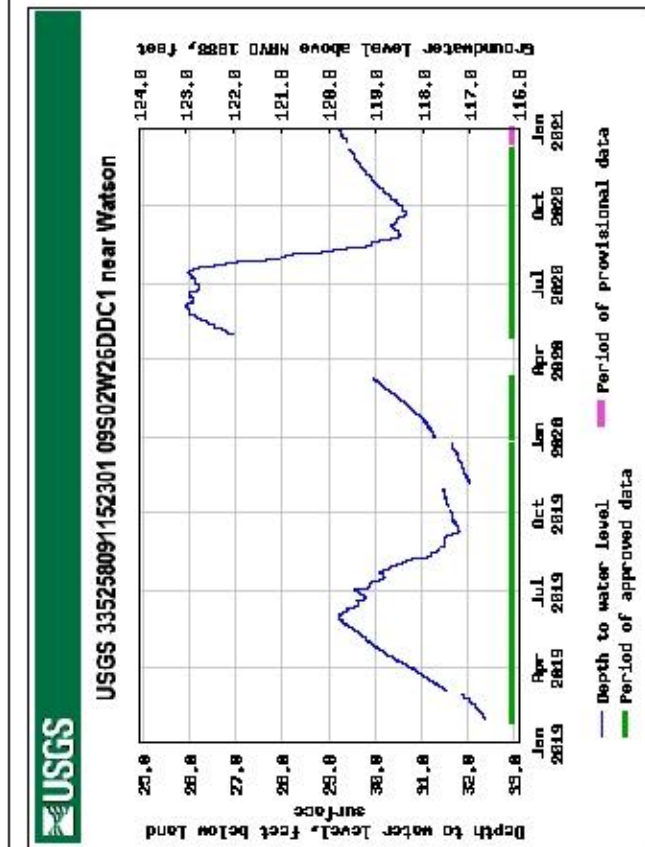
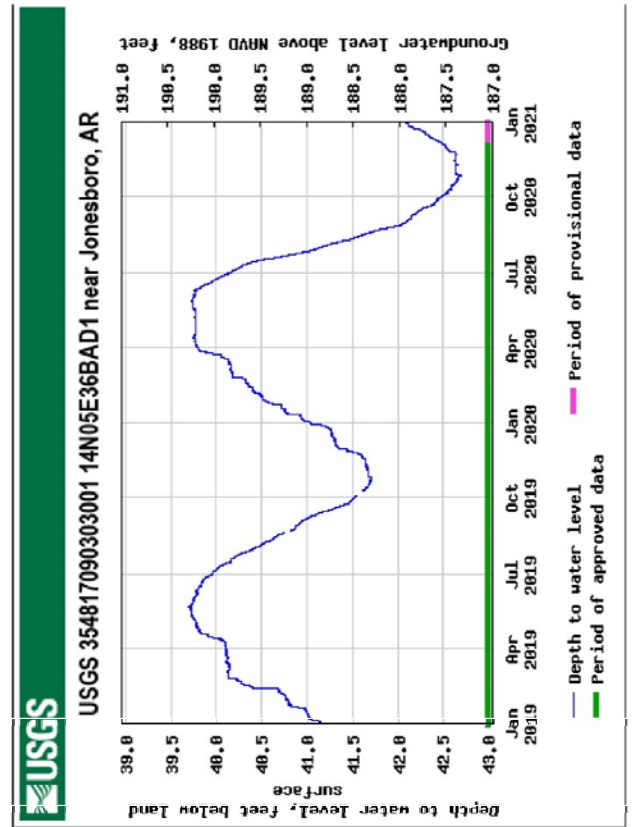
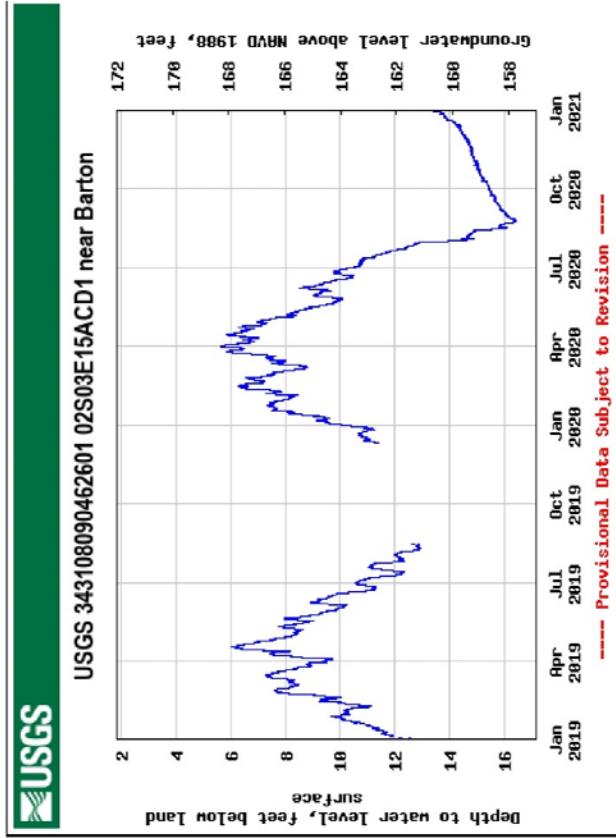
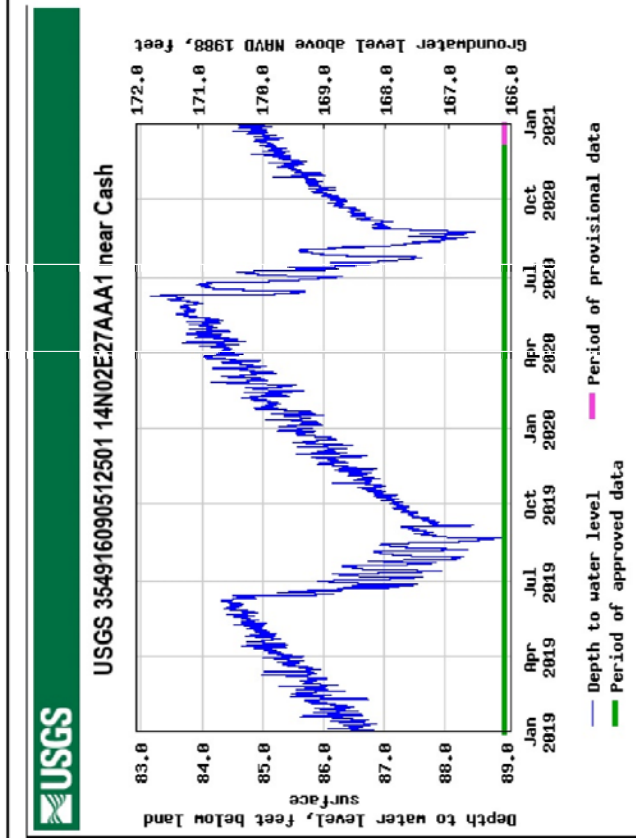




Figure 15b. NRD Real-Time Monitoring Wells, Alluvial Aquifer



As previously mentioned, the spring 2019 to spring 2020 water level change values showed a positive average change for the entire aquifer for the five- and ten-year time periods, while the ten-year period had an average decline of -0.34. The aquifer-wide data has been focused per the four study areas that include the alluvial aquifer, Grand Prairie, Cache, St. Francis, and Beouf-Tensas, for each time period. The 2020 data shows increasing average water level changes for each study area for the one and five-year periods; however, the ten-year periods have average declines, or negative change values, in the Cache, Grand Prairie and Beouf-Tensas areas. The St. Francis area had a positive average ten-year change. Figures 16 through 27 depict the spring 2020 alluvial aquifer water level change data and well locations for the four study areas over the one, five, and ten-year change intervals.

Appendix A presents the 2020 Mississippi River Valley alluvial aquifer water level data along with the 2010, 2015, and 2019 water level data for wells measured in 2020.

# Cache Study Area 2019-2020 Water Level Changes (Alluvial Aquifer)

| County       | Avg. Change, ft. |
|--------------|------------------|
| Clay         | +1.86            |
| Cross        | +1.68            |
| Greene       | -0.30            |
| Independence | +2.71            |
| Jackson      | +1.55            |
| Lee          | +4.74            |
| Monroe       | +1.47            |
| Phillips     | +5.01            |
| Poinsett     | +1.25            |
| Randolph     | +1.86            |
| St. Francis  | -0.37            |
| Woodruff     | +1.52            |

## Cache Study Area 1 year change:

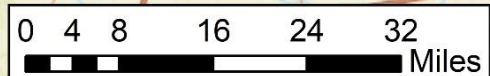
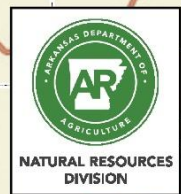
Average Change: +2.30 feet  
5 of 78 Showed Declines

## Legend

### One Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- < -4 Ft.

- Cache Study Area
- ✖ Crowley's Ridge



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Figure 16**



# Cache Study Area 2015-2020 Water Level Changes (Alluvial Aquifer)

| County       | Avg. Change, ft. |
|--------------|------------------|
| Clay         | +3.46            |
| Craighead    | -1.50            |
| Cross        | -2.99            |
| Greene       | +2.31            |
| Independence | +3.91            |
| Jackson      | +2.94            |
| Lawrence     | +2.21            |
| Lee          | +10.70           |
| Monroe       | +3.62            |
| Phillips     | +8.68            |
| Poinsett     | -1.07            |
| Randolph     | +4.51            |
| St. Francis  | +0.35            |

## Cache Study Area 5 year change:

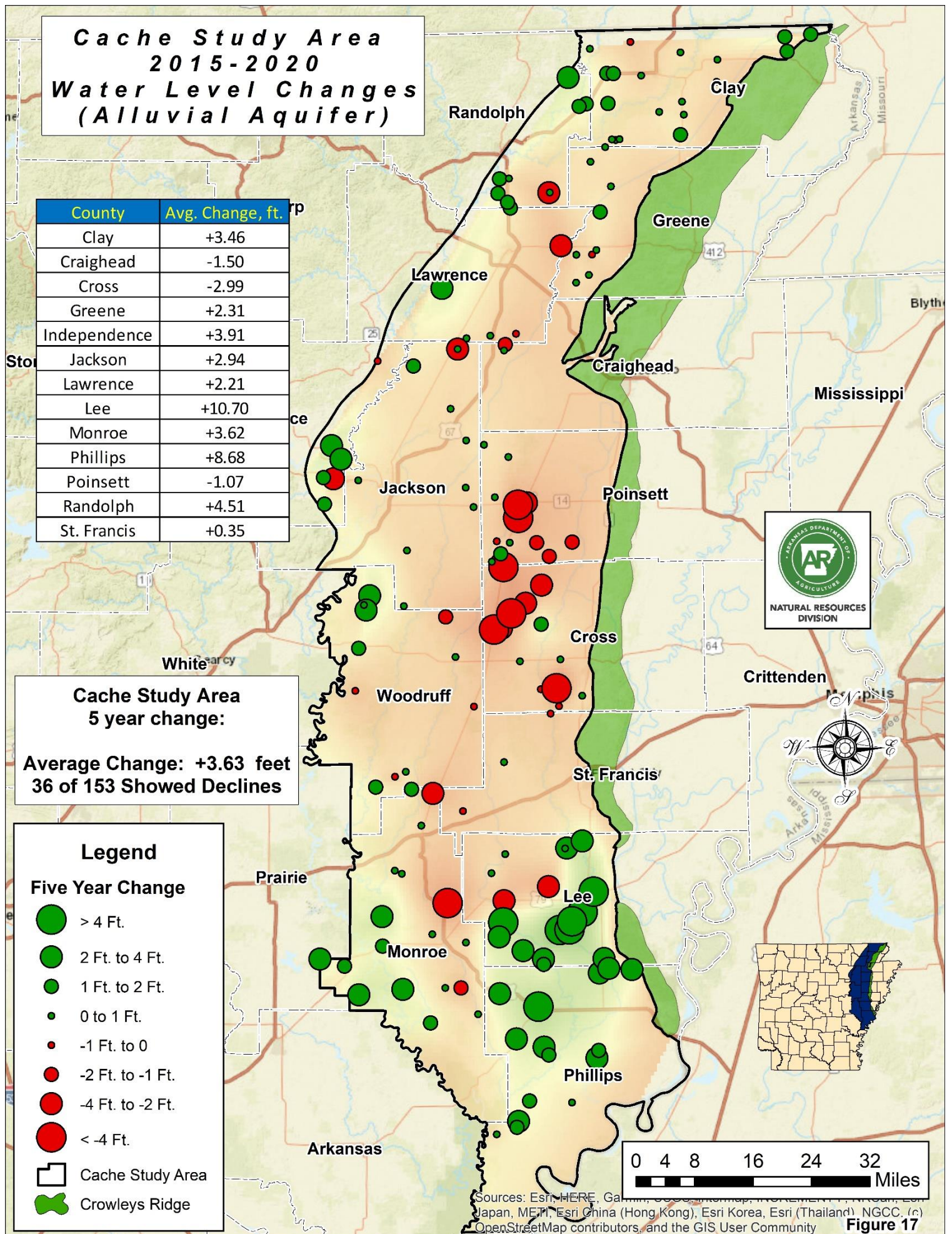
Average Change: +3.63 feet  
36 of 153 Showed Declines

## Legend

### Five Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- < -4 Ft.

- Cache Study Area
- ✂ Crowleys Ridge



Sources: Esri, HERE, Garmin, OpenStreetMap contributors, and the GIS User Community  
Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c)  
OpenStreetMap contributors, and the GIS User Community

Figure 17



# Cache Study Area 2010-2020 Water Level Changes (Alluvial Aquifer)

| County       | Avg. Change, ft. |
|--------------|------------------|
| Clay         | -0.83            |
| Cross        | -3.86            |
| Greene       | -2.52            |
| Independence | +2.46            |
| Jackson      | +1.76            |
| Lawrence     | -1.06            |
| Lee          | -2.88            |
| Monroe       | +1.35            |
| Phillips     | +1.30            |
| Poinsett     | -3.66            |
| Randolph     | +0.29            |
| St. Francis  | -5.95            |
| Woodruff     | -0.40            |

Cache Study Area  
10 year change:

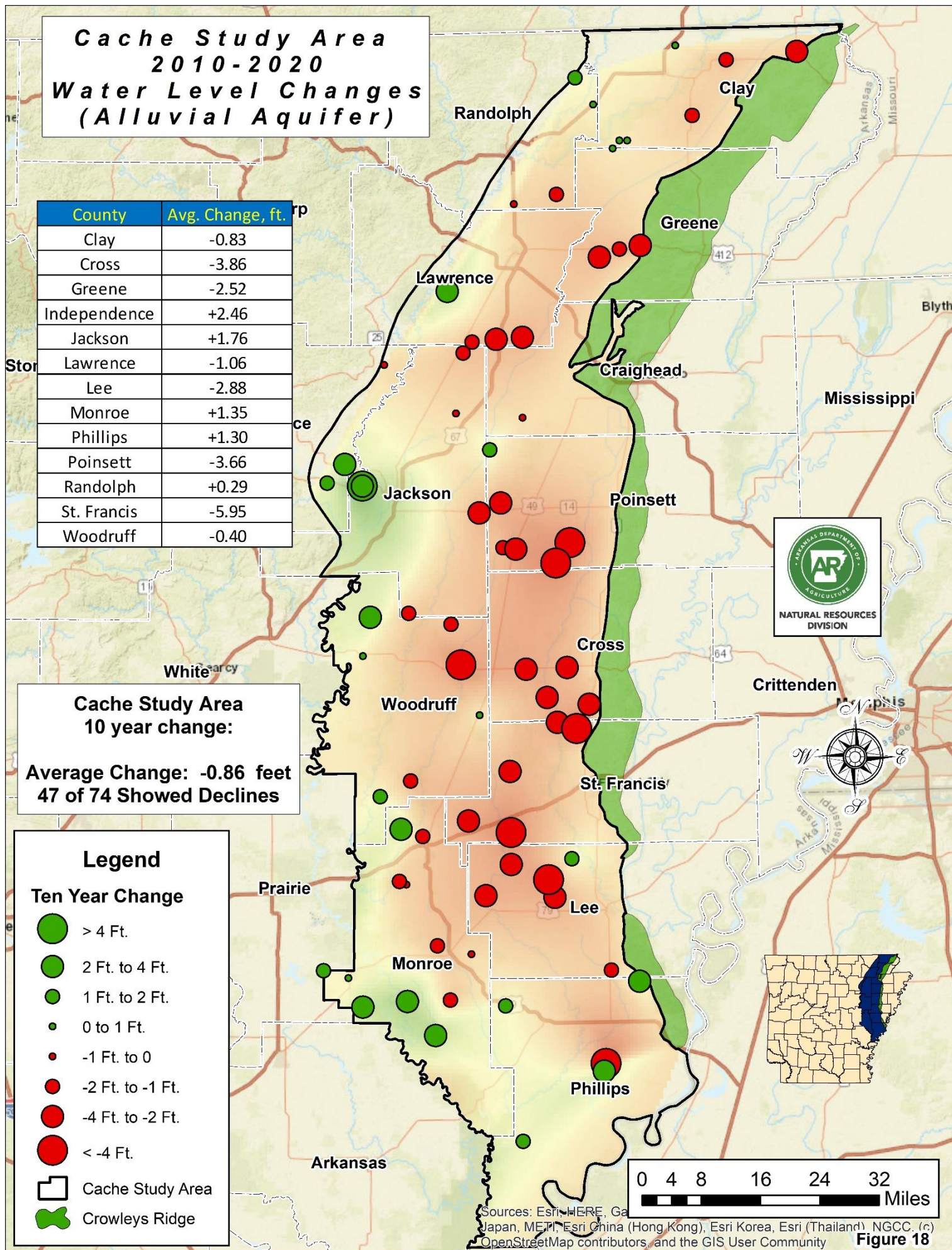
Average Change: -0.86 feet  
47 of 74 Showed Declines

## Legend

### Ten Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- < -4 Ft.

- Cache Study Area
- ✂ Crowley's Ridge



Sources: Esri, HERE, DeLorme, Mapbox, Microsoft, Swire, Japan, MEIT, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Figure 18

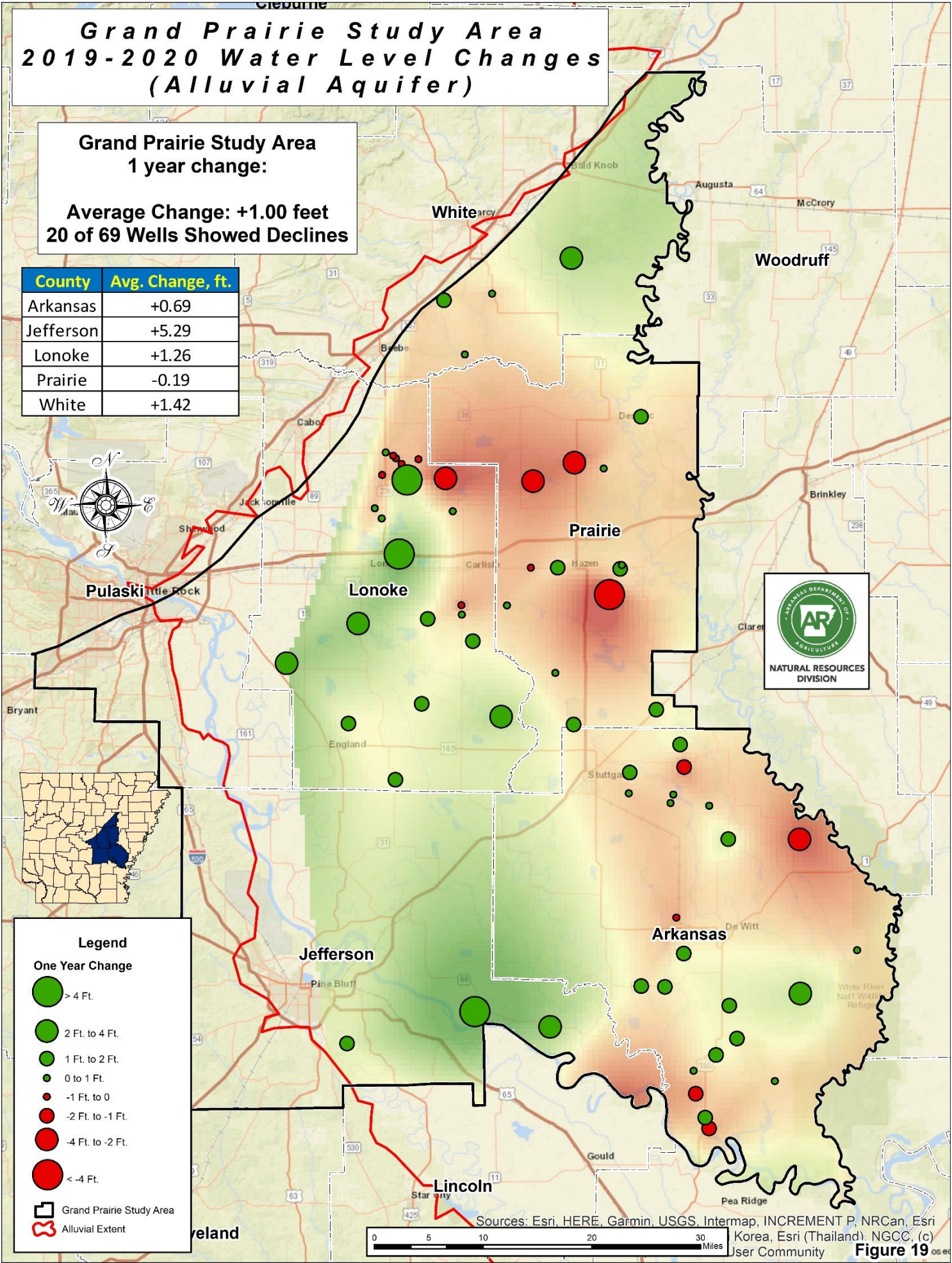


# Grand Prairie Study Area 2019-2020 Water Level Changes (Alluvial Aquifer)

Grand Prairie Study Area  
1 year change:

Average Change: +1.00 feet  
20 of 69 Wells Showed Declines

| County    | Avg. Change, ft. |
|-----------|------------------|
| Arkansas  | +0.69            |
| Jefferson | +5.29            |
| Lonoke    | +1.26            |
| Prairie   | -0.19            |
| White     | +1.42            |





# Grand Prairie Study Area 2015-2020 Water Level Changes (Alluvial Aquifer)

Grand Prairie Study Area  
5 year change:

Average Change: +2.73 feet  
8 of 55 Wells Showed Declines

| County    | Avg. Change, ft. |
|-----------|------------------|
| Arkansas  | +2.61            |
| Jefferson | +6.79            |
| Lonoke    | +2.31            |
| Prairie   | +1.37            |
| White     | +3.67            |

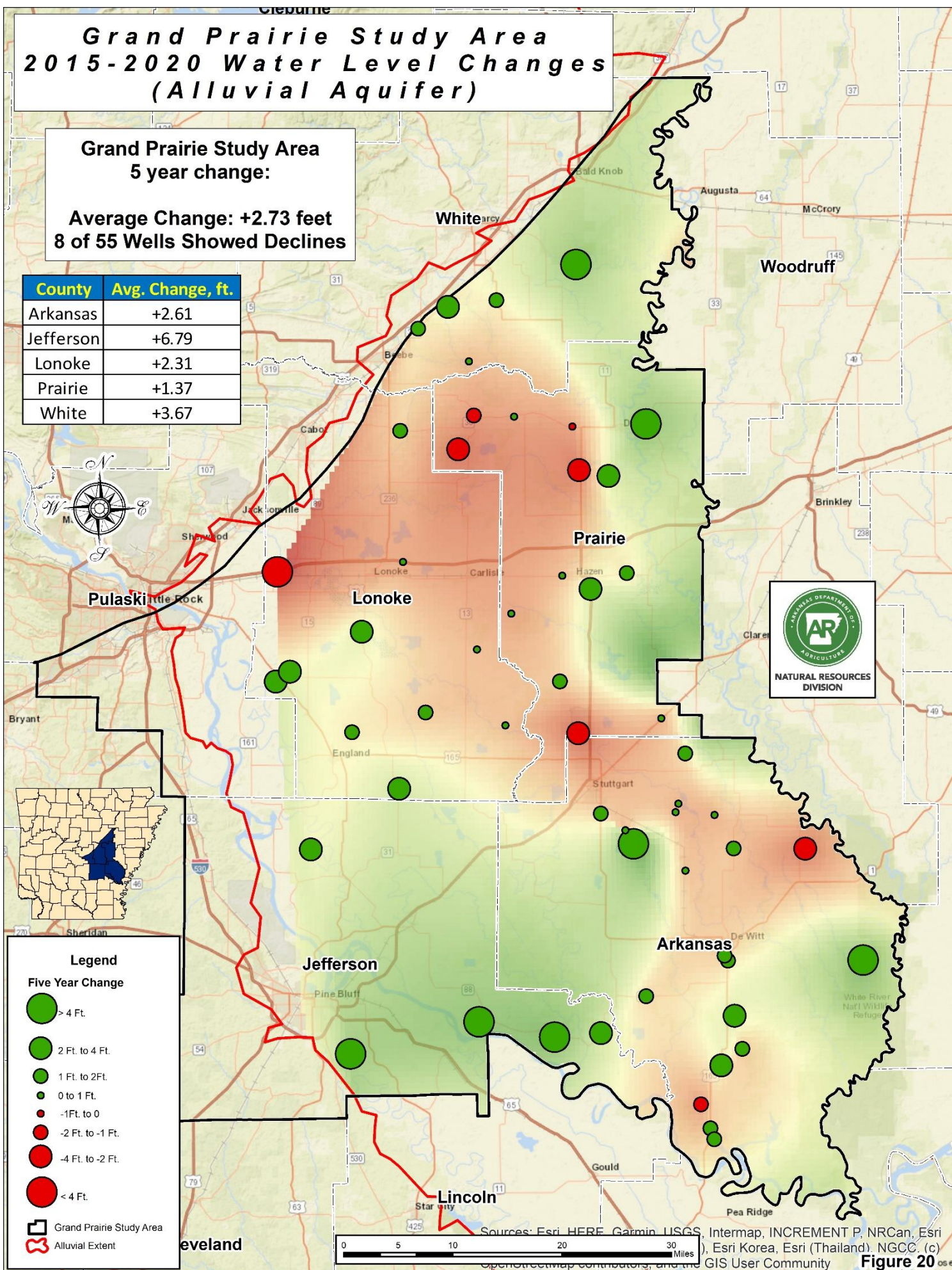


Figure 20

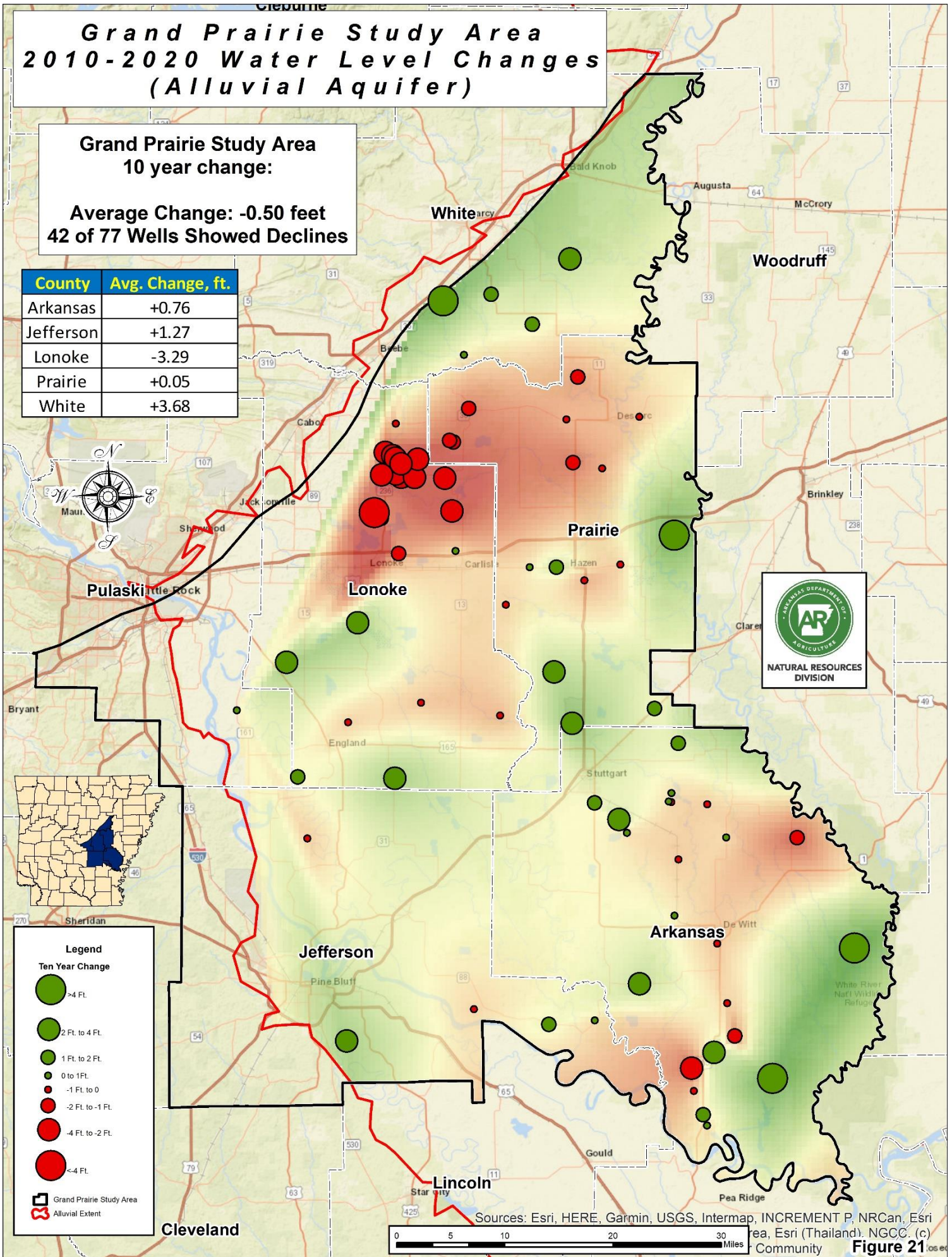


# Grand Prairie Study Area 2010-2020 Water Level Changes (Alluvial Aquifer)

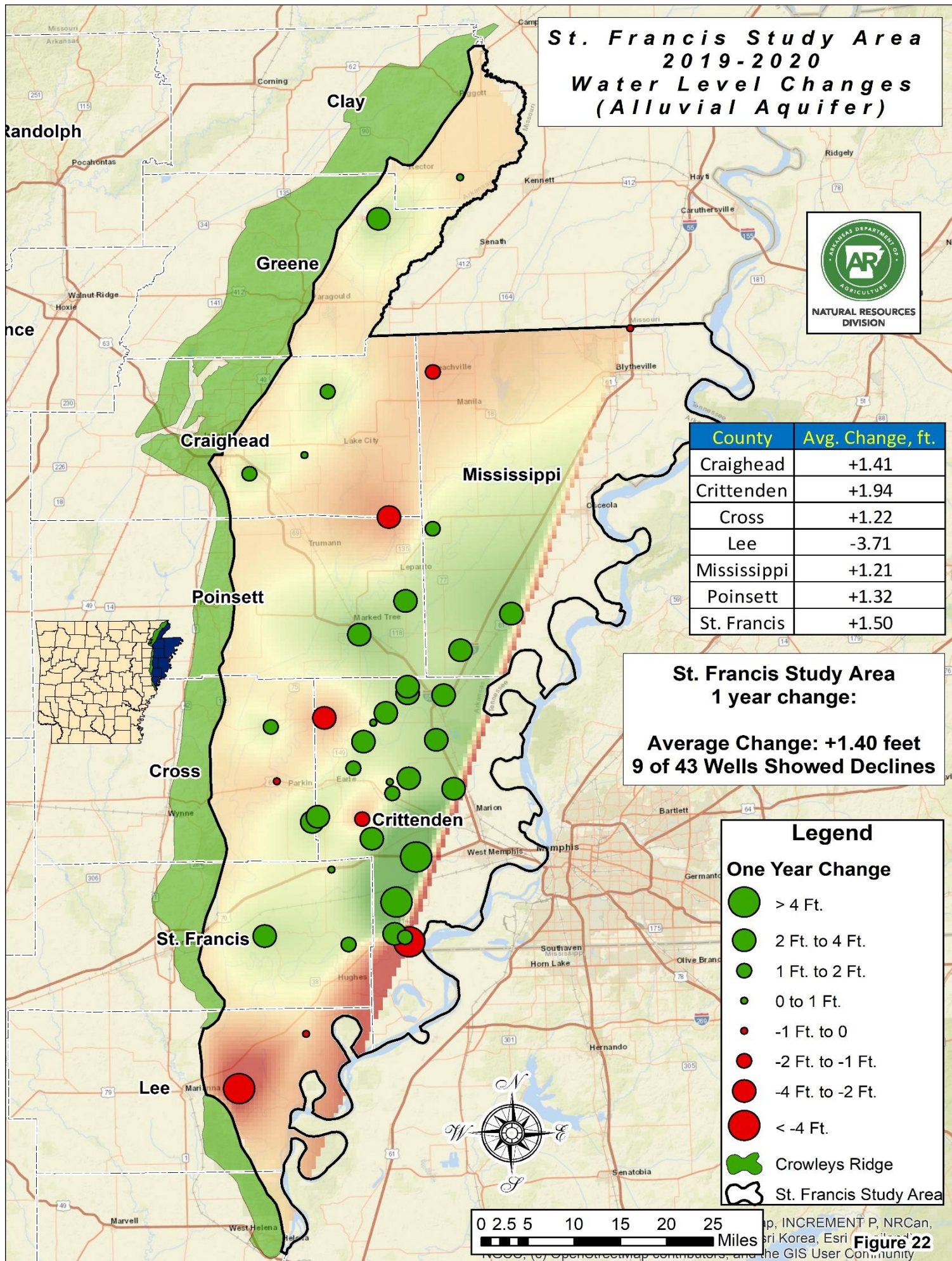
Grand Prairie Study Area  
10 year change:

Average Change: -0.50 feet  
42 of 77 Wells Showed Declines

| County    | Avg. Change, ft. |
|-----------|------------------|
| Arkansas  | +0.76            |
| Jefferson | +1.27            |
| Lonoke    | -3.29            |
| Prairie   | +0.05            |
| White     | +3.68            |

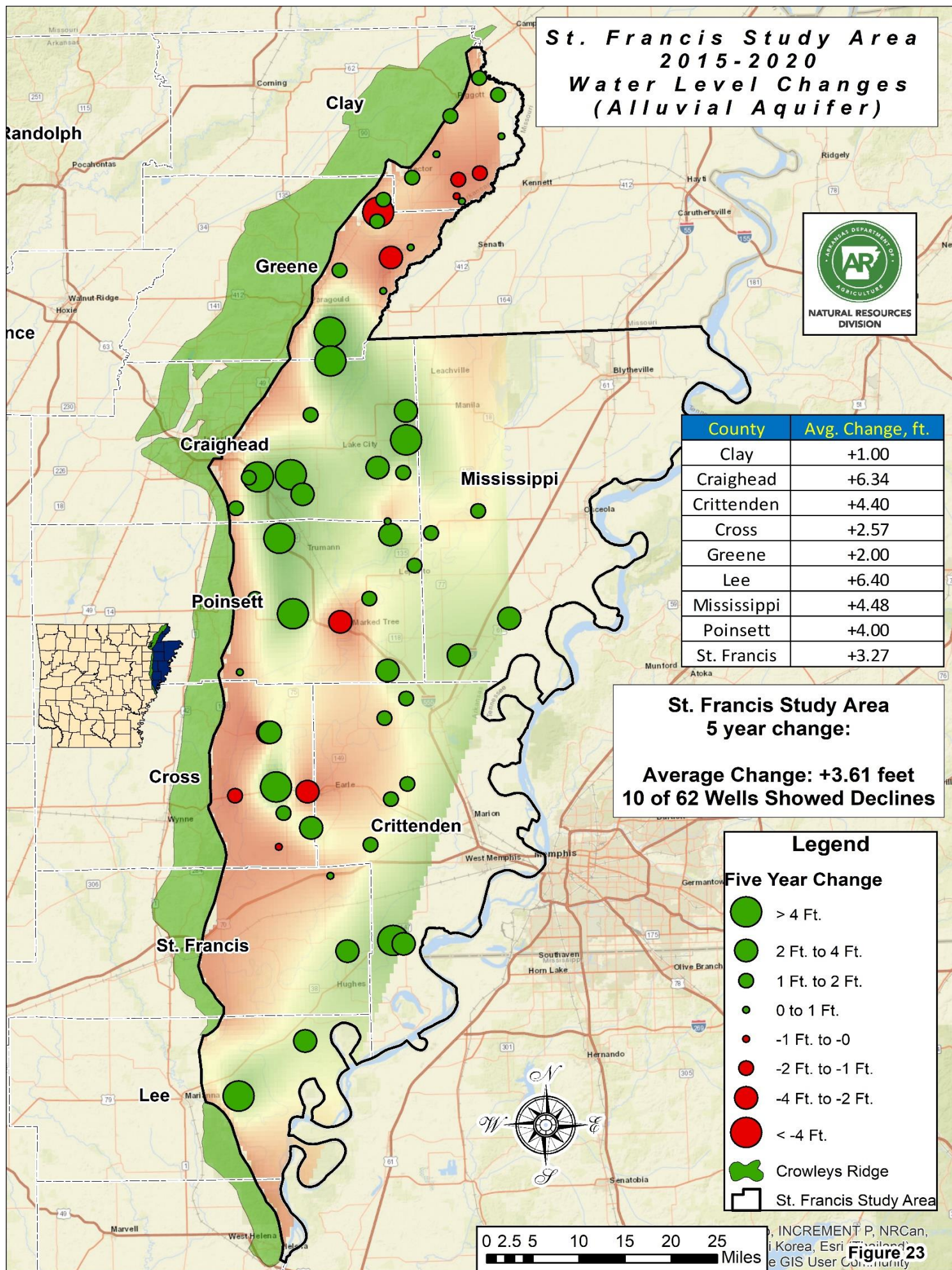






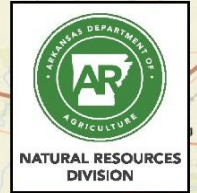
Map, INCREMENT P, NRCAn, Sri Korea, Esri, Figure 22







# St. Francis Study Area 2010-2020 Water Level Changes (Alluvial Aquifer)



| County      | Avg. Change, ft. |
|-------------|------------------|
| Clay        | +0.63            |
| Craighead   | +1.17            |
| Crittenden  | +2.41            |
| Cross       | +6.09            |
| Greene      | +0.92            |
| Lee         | +5.95            |
| Mississippi | +0.35            |
| Poinsett    | +2.02            |
| St. Francis | +3.00            |

**St. Francis Study Area  
10 year change:**

**Average Change: +2.17 feet  
6 of 32 Wells Showed Declines**

## Legend

### Ten Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- <-4 Ft.

- St. Francis Study Area
- Crowley's Ridge



**Figure 24**



# Boeuf-Tensas Study Area 2019-2020 Water Level Changes (Alluvial Aquifer)

| County  | Avg. Change, ft. |
|---------|------------------|
| Ashley  | -0.34            |
| Chicot  | +0.85            |
| Desha   | +1.14            |
| Drew    | +1.98            |
| Lincoln | +0.17            |

**Boeuf-Tensas Study Area  
1 Year Change:**

**Average Change: +0.80 feet  
12 of 40 Wells Showed Declines**

**4 of 40 Wells Had Average Declines  
of 1 ft. per Year or Greater**

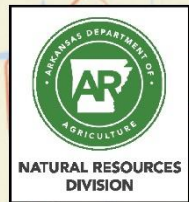
## Legend

### One Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- < -4 Ft.

Boeuf-Tensas Study Area

Alluvial Extent



0 2.5 5 10 15 20 25 Miles

CREMENT P, NRCAn, Esri  
Esri (Thaila Figure 25 c)  
community



# Boeuf-Tensas Study Area 2015-2020 Water Level Changes (Alluvial Aquifer)

| County  | Avg. Change, ft. |
|---------|------------------|
| Ashley  | +4.89            |
| Chicot  | +3.83            |
| Desha   | +1.99            |
| Drew    | +6.69            |
| Lincoln | +1.08            |

**Boeuf-Tensas Study Area  
5 Year Change:**

**Average Change: +3.42 feet  
3 of 26 Wells Showed Declines**

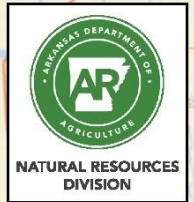
**1 of 26 Wells Had Average Declines  
of 1 ft. per Year or Greater**

## Legend

### Five Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- <-2 Ft.

- Boeuf-Tensas Study Area
- Alluvial Extent



0 2.5 5 10 15 20 25 Miles

CREMENT P, NRCAn, Esri  
Esri (Thailan, NGCC, 2)  
mmunity **Figure 26**



# Boeuf-Tensas Study Area 2010-2020 Water Level Changes (Alluvial Aquifer)

| County  | Avg. Change, ft. |
|---------|------------------|
| Ashley  | +0.91            |
| Chicot  | -3.33            |
| Desha   | -1.34            |
| Drew    | -1.18            |
| Lincoln | -2.85            |

**Boeuf-Tensas Study Area  
10 Year Change:**

**Average Change: -1.53 feet  
25 of 35 Wells Showed Declines**

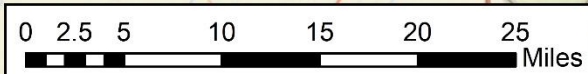
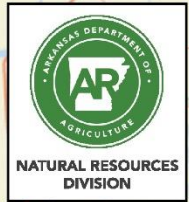
**23 of 35 Wells Had Average Declines  
of 1 ft. per Year or Greater**

## Legend

### Ten Year Change

- > 4 Ft.
- 2 Ft. to 4 Ft.
- 1 Ft. to 2 Ft.
- 0 to 1 Ft.
- -1 Ft. to 0
- -2 Ft. to -1 Ft.
- -4 Ft. to -2 Ft.
- < -4 Ft.

- Boeuf-Tensas Study Area
- Alluvial Extent



CREMENT P, NRCAn, Esri  
Esri (Thaile  
community  
**Figure 27(c)**

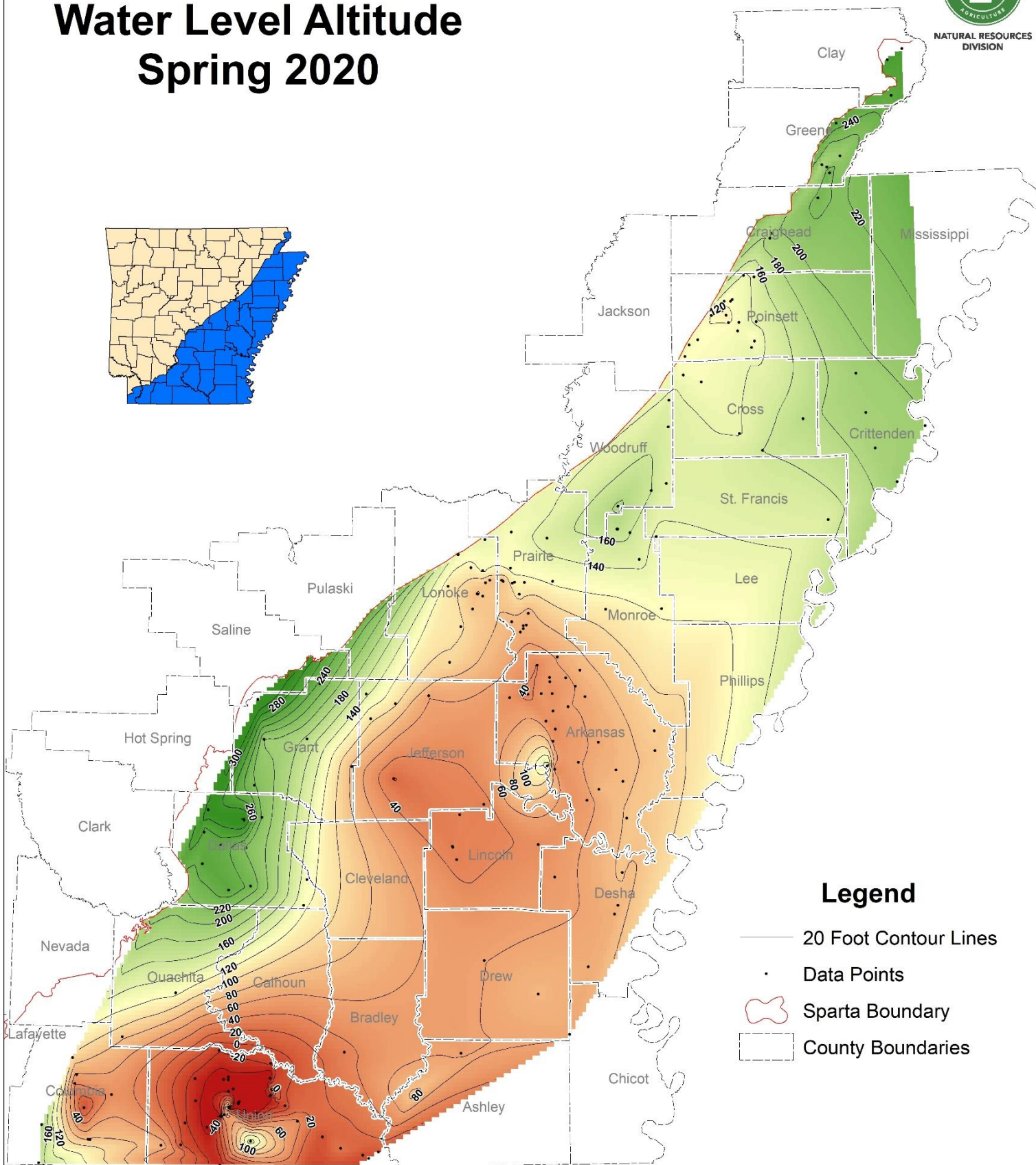
## **Sparta Aquifer**

The Sparta aquifer, also known as the Sparta Sand or Memphis Sand, is a Tertiary-aged water bearing assemblage composed mainly of sand with considerable amounts of silt, clay, shale, and lignite found in lenses throughout the unit. The formation outcrops along the western edge of the Embayment in south Arkansas and is overlain by the Mississippi River Valley alluvial aquifer throughout central and northeastern Arkansas. The Sparta Sand is the thickest sand unit in the Embayment system, ranging in thickness from 0 to 200 feet along the outcrop to up to 900 ft in the southeastern part of the state. Generally, the Sparta Sand is a confined aquifer system as it is confined by the underlying Cook Mountain formation and overlying Cane River formation. Lithological differences occur in the Sparta aquifer in southern Arkansas and northeastern Arkansas. In southern Arkansas, the Sparta aquifer is divided into two units, Greensand (upper Sparta) and the El Dorado sand (lower Sparta), by a confining layer. In northeastern Arkansas, the underlying Cane River and Carrizo Sand formations become sand and are generally indistinguishable from the Sparta Sand; because of this, the three formations are grouped together and referred to as the Memphis Sand, or the Memphis Aquifer, in this region. (Kresse, T. M., et al., 2014.)

Groundwater levels were collected from 202 water wells in the Sparta/Memphis aquifer throughout the south and east portions of Arkansas in spring 2020. Most of the measurements were collected by ADA-NRD staff during April. The Covid-19 pandemic did impact the monitoring season as access was not granted to some wells because access was denied by the operator or the operator could not be reached for permission. Our South Arkansas monitoring team was unable to obtain some data as they were in quarantine for part of the monitoring window. For these reasons, data is sparse in the southern Cache and the northern south Arkansas study areas. Figure 28 depicts the spring 2020 potentiometric surface as water level altitude in feet above mean sea level, and Figure 29 presents the depth to water as feet below ground surface for the Sparta/Memphis aquifer.



# Sparta Aquifer Water Level Altitude Spring 2020



## Legend

- 20 Foot Contour Lines
- Data Points
- Sparta Boundary
- County Boundaries

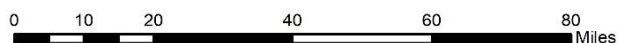


Figure 28

# Sparta Aquifer Depth to Water Spring 2020



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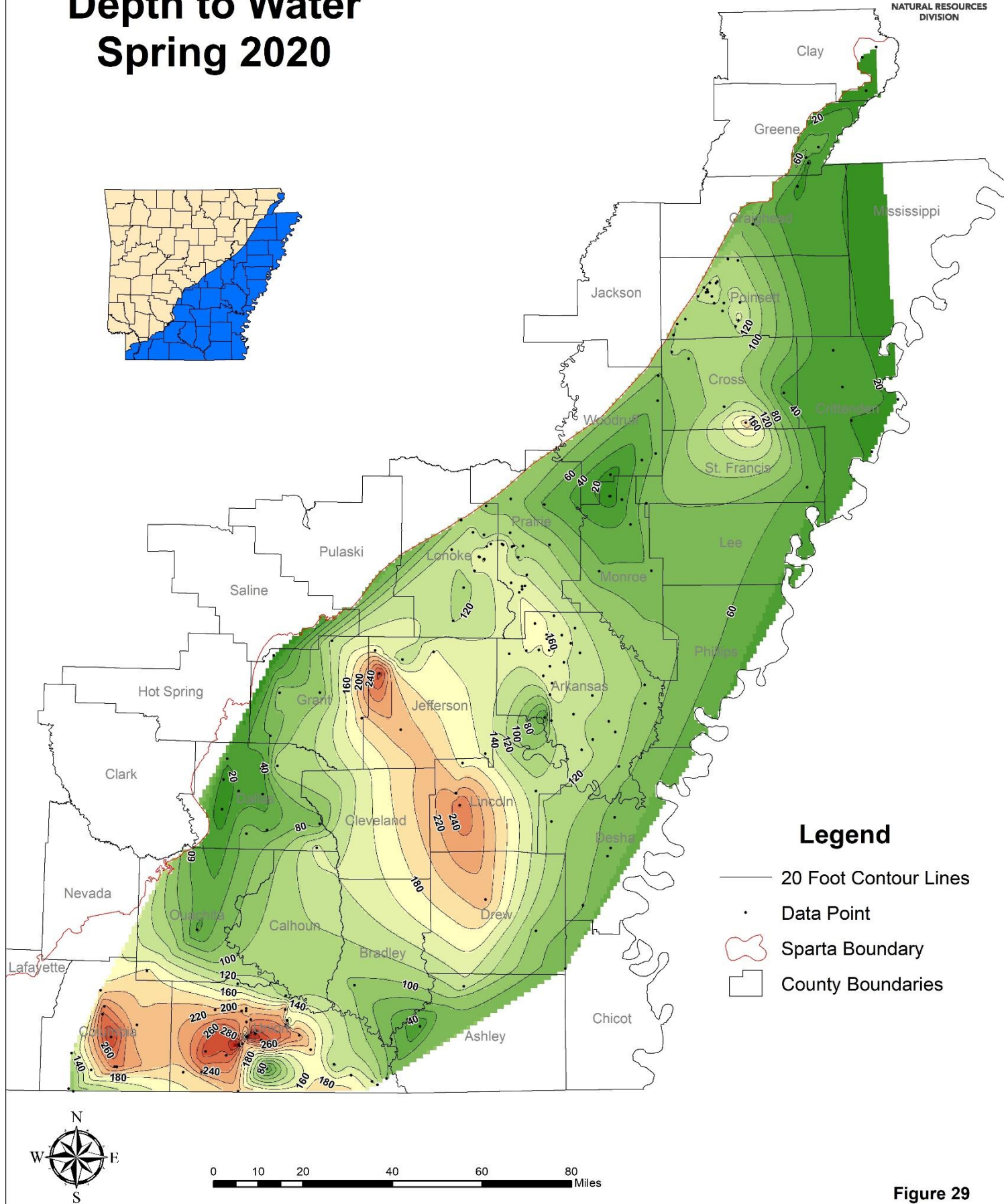


Figure 29



## Water Level Trends

Water level data from the 202 wells collected in spring 2020 were compared with historical data in one, five and ten-year intervals. The one-year interval had 89 comparable wells giving a total average water level change of +0.93 feet with 26 (29.21%) of the wells in decline. The five-year change had data for 138 comparable wells with a total average change of +5.92 with 35 (25.36%) wells in decline. As for the ten-year interval, water level data was compared for 132 wells with total average water level change of +3.05 with 55 (41.67%) wells in decline. Aquifer-wide water level change maps were created for the five and ten-year period; Figure 30 presents the five-year comparison and Figure 31 presents the ten-year comparison. Due to the lack of data in 2019, aquifer-wide water level change maps were not created for the one-year interval.

In the Grand Prairie, overall water levels in the Sparta show a study area-wide average water level changes of +1.12, +3.75, and -0.73 feet throughout the one, five- and ten-year intervals, respectively. The primary areas with consistently declining water level change values are central Lonoke and Prairie counties and Arkansas county near Stuttgart. Prairie and Lonoke county 10-year average change values are the only negative average county change values in the study area throughout the three time periods.

Overall recovery continues in the areas where historical drawdown has been the most significant in South Arkansas with the study area having positive average water level change values of +1.52, +13.56, and +15.70 feet in the one, five- and ten-year intervals, respectively. The 10-year change only had 2 of the 29 wells in decline across the entire study area. The areas of most significant recovery are Union county where several wells have positive water level change values as much as 45 feet. Data for Ouachita, Calhoun, and Bradley counties were more sparse than is typical due to issues related to the pandemic.

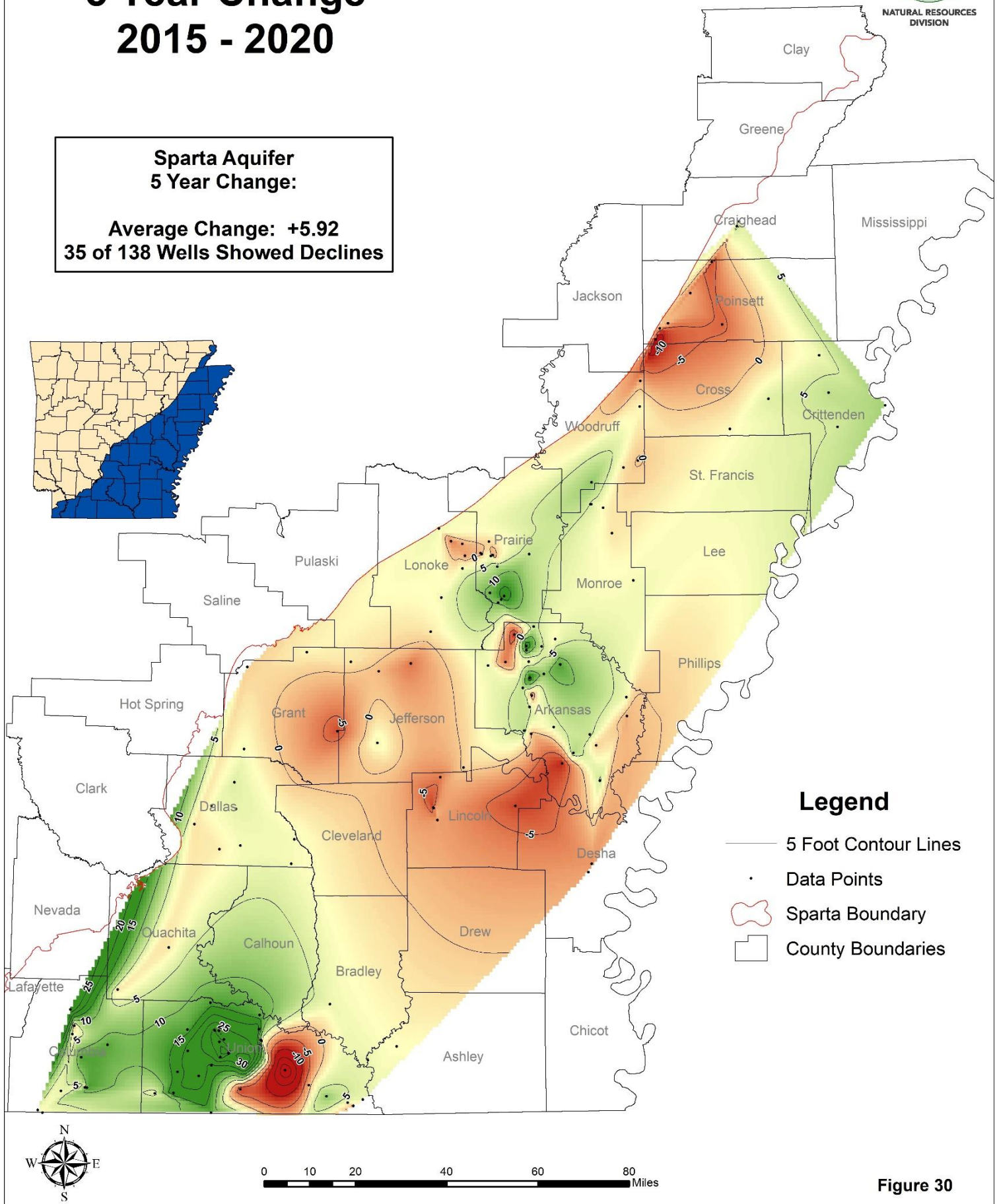
The St. Francis study area only had a few comparable wells in the 5 and 10-year periods and had positive average water level changes in both. In the Cache study area, declining water levels in Poinsett, Cross, and Woodruff counties give negative average change values in the 5 and 10-year periods. It should be noted that there is a data gap in the southern Cache study area in the 2020 dataset.

# Sparta Aquifer 5 Year Change 2015 - 2020



**Sparta Aquifer  
5 Year Change:**

**Average Change: +5.92**  
**35 of 138 Wells Showed Declines**



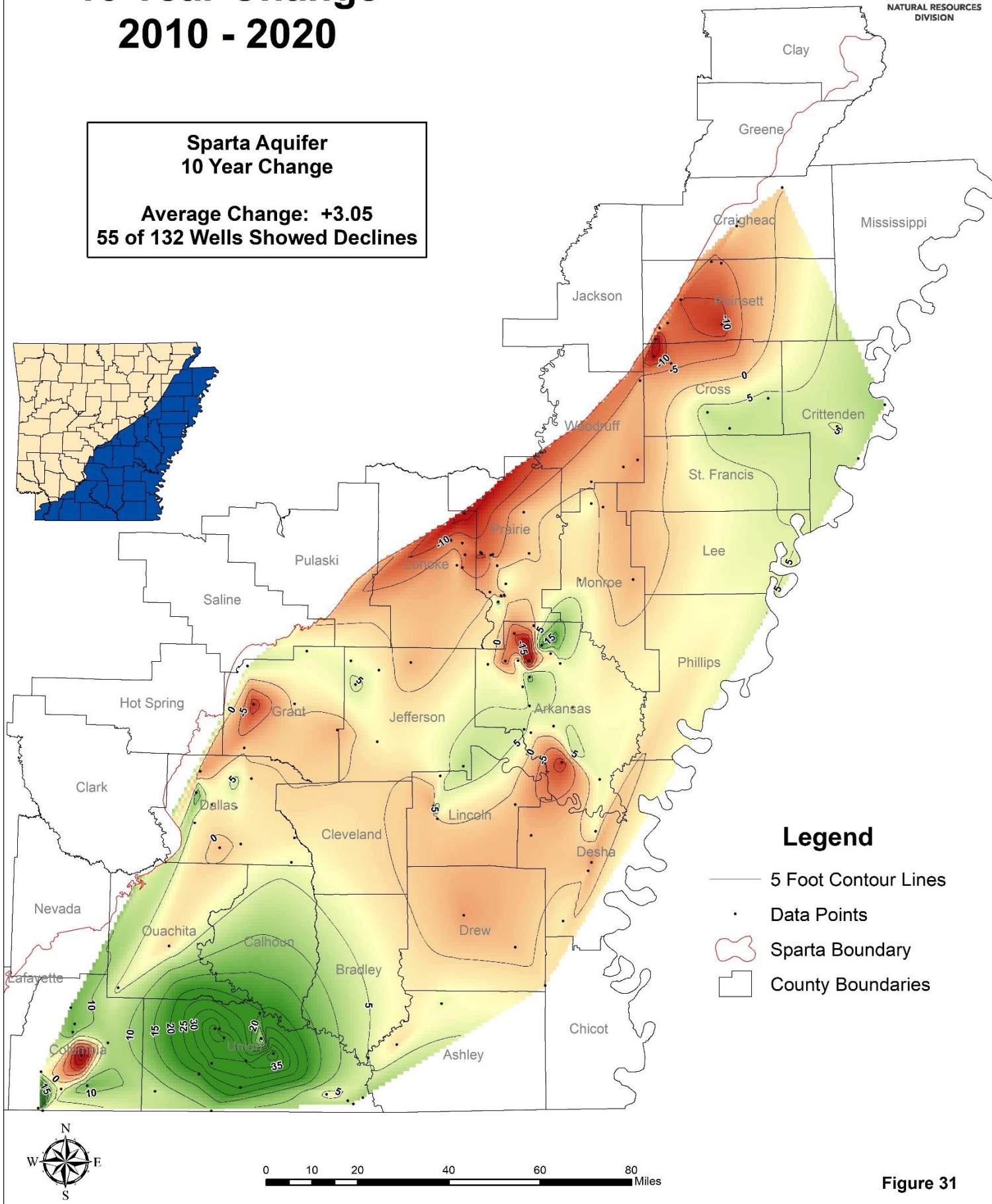


# Sparta Aquifer 10 Year Change 2010 - 2020



**Sparta Aquifer  
10 Year Change**

**Average Change: +3.05**  
**55 of 132 Wells Showed Declines**



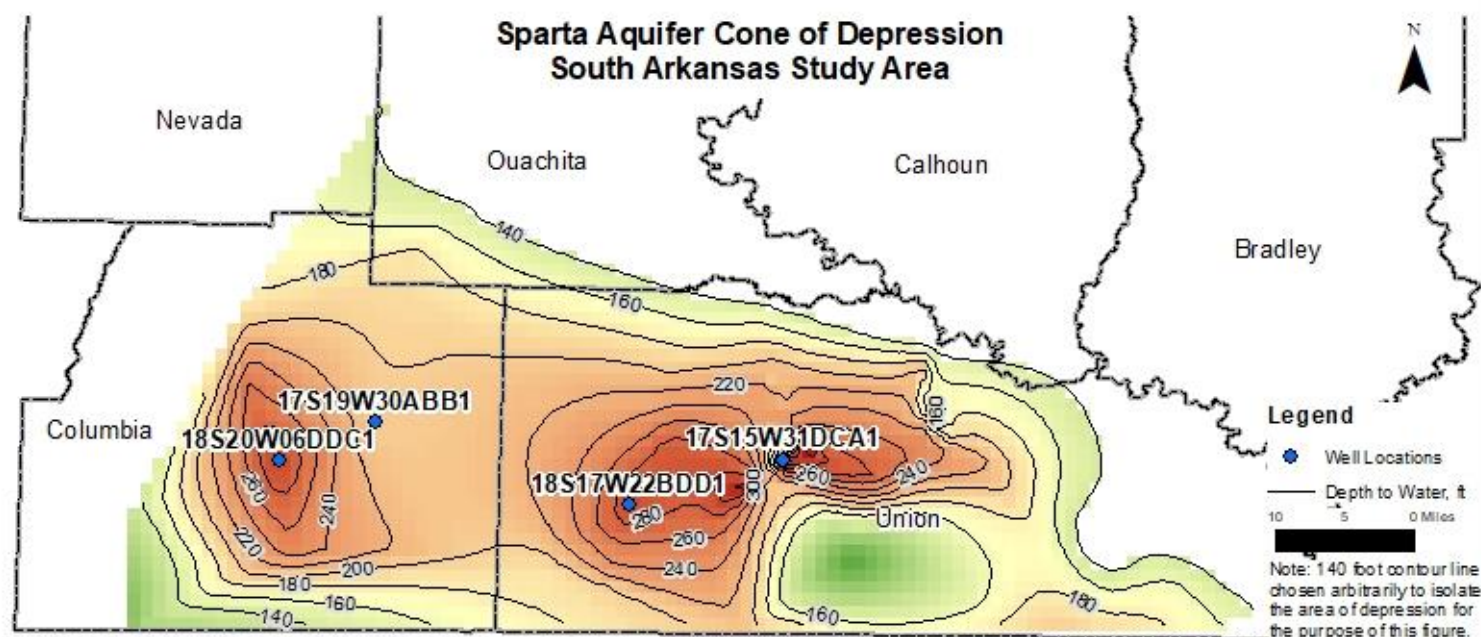
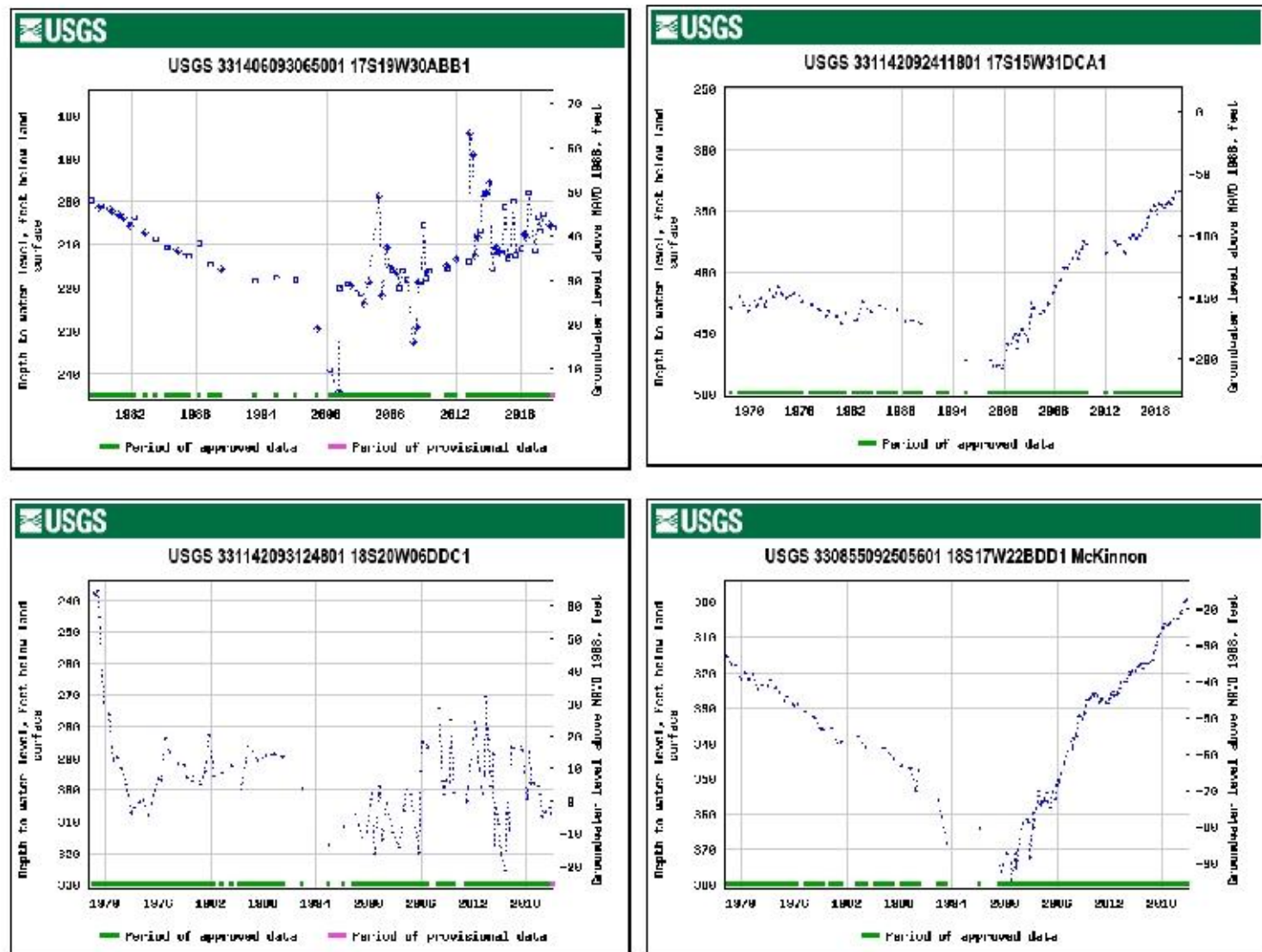
**Figure 31**

While positive average water level changes are present throughout this year's data for the Sparta, decline in the potentiometric surface in the aquifer is expected to continue due to overuse. There has been a statewide increase in water use in the Sparta from 139 million gallons per day (Mgal/d) in 1970 to approximately 160 Mgal/d in 2015. The estimated sustainable yield for the aquifer is 87 Mgal/d leaving an unmet demand of approximately 73 Mgal/d. The most recent significant increase in water use from the Sparta aquifer has been for agriculture-irrigation in the Grand Prairie and Cache Study Areas. In 2018, it is estimated that 68 Mgal/d was used from the Sparta for irrigation; 78% of the estimated yield for the aquifer is being used for irrigation. Groundwater use will be further discussed in the Groundwater Use section below.

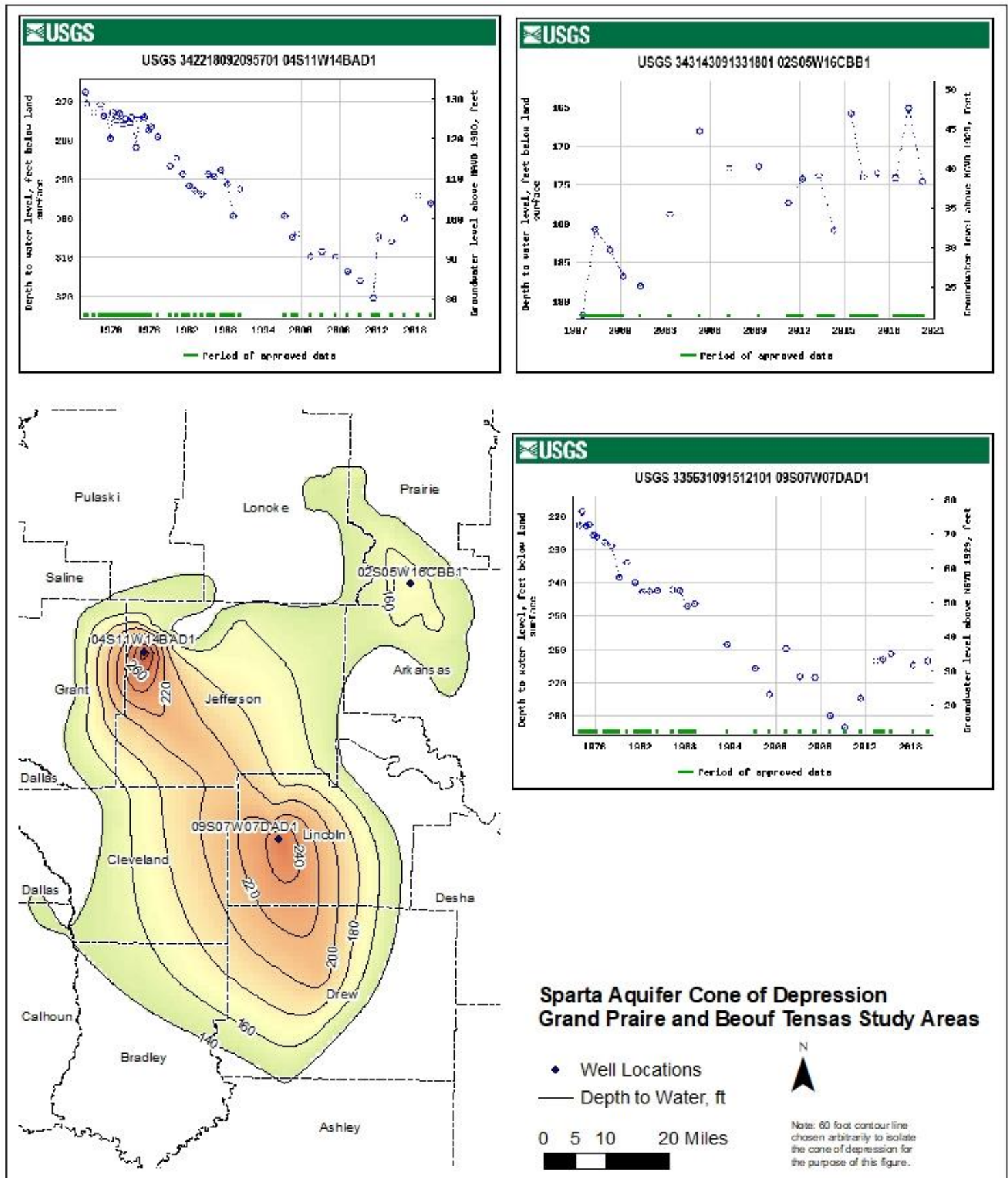
The following Figure 32 and Figure 33 present hydrographs from wells in the South Arkansas and Grand Prairie study areas, respectively. Within the cone of depression in Union and Columbia counties in South Arkansas recovery has been steady for approximately 20 years, except for 18S20W06DDC1 which has stayed relatively stable since the early 1980s. In the Grand Prairie depression, the hydrographs show that wells have recovered slightly since approximately 2009-2012 when water levels were at their lowest in the period of record.



**Figure 32. Selected Hydrographs from the Sparta Aquifer  
South Arkansas Critical Groundwater Area**



**Figure 33. Selected Hydrographs from the Sparta Aquifer Grand Prairie/Beouf-Tensas Study Area**

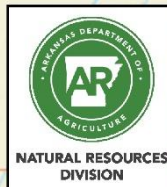




The following Figures 34 through 41 present the 2020 Sparta aquifer water level change data and well locations for the Cache/St. Francis, Grand Prairie, and South Arkansas study areas over the one, five, and ten-year change intervals. No maps were made for the Cache and St. Francis study area one-year interval or for the Beouf-Tensas study area in any interval due to the lack of data.

Appendix B presents a table of specific water-level monitoring data for the Sparta/Memphis aquifer from the 2020 monitoring period, as well as the one, five, and ten-year water level change data.

**Cache & St. Francis  
Study Areas  
2015-2020  
Water Level Changes  
(Sparta Aquifer)**



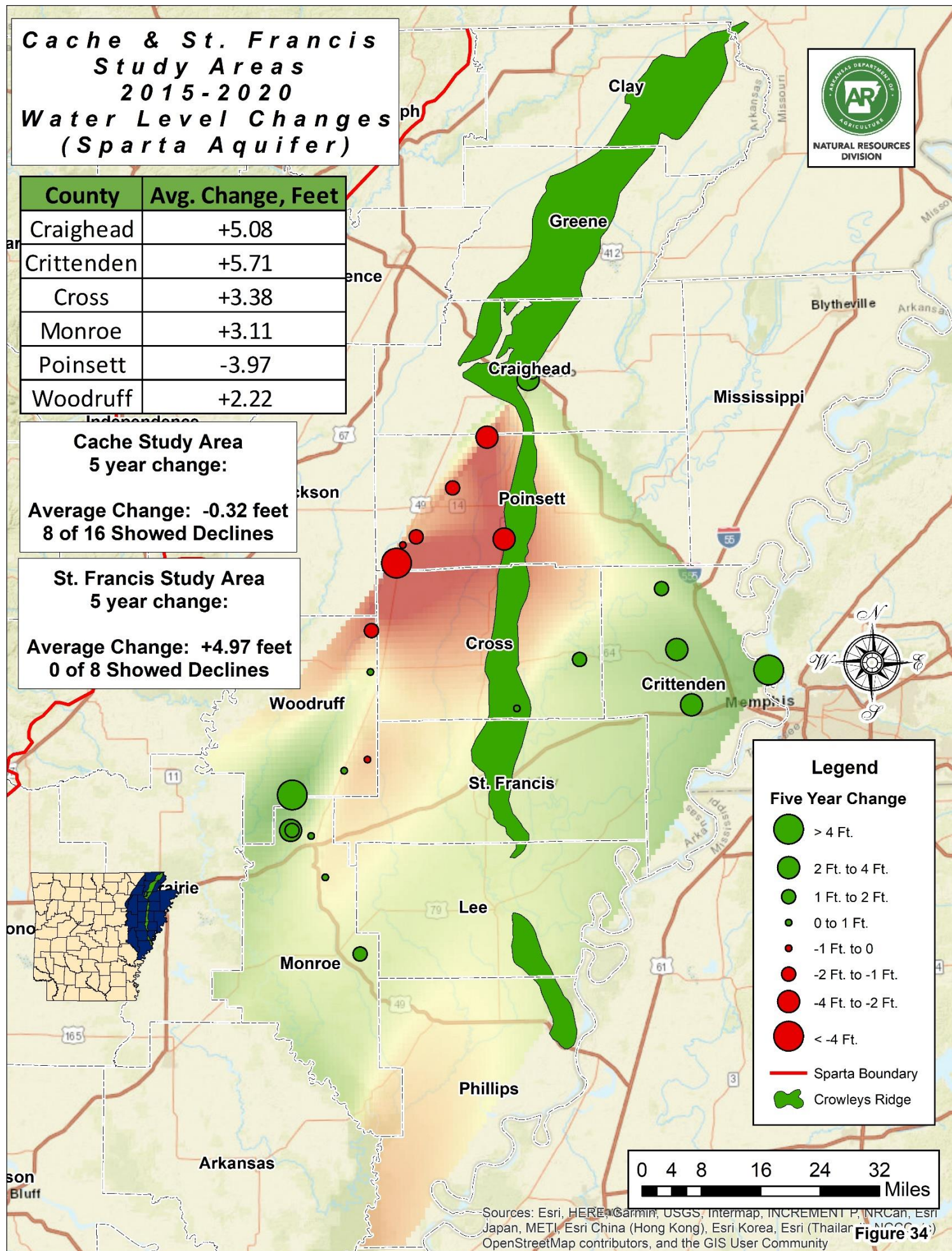
| County     | Avg. Change, Feet |
|------------|-------------------|
| Craighead  | +5.08             |
| Crittenden | +5.71             |
| Cross      | +3.38             |
| Monroe     | +3.11             |
| Poinsett   | -3.97             |
| Woodruff   | +2.22             |

**Cache Study Area  
5 year change:**

Average Change: -0.32 feet  
8 of 16 Showed Declines

**St. Francis Study Area  
5 year change:**

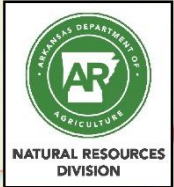
Average Change: +4.97 feet  
0 of 8 Showed Declines



**Figure 34**



**Cache & St. Francis  
Study Areas  
2010-2020  
Water Level Changes  
(Sparta Aquifer)**



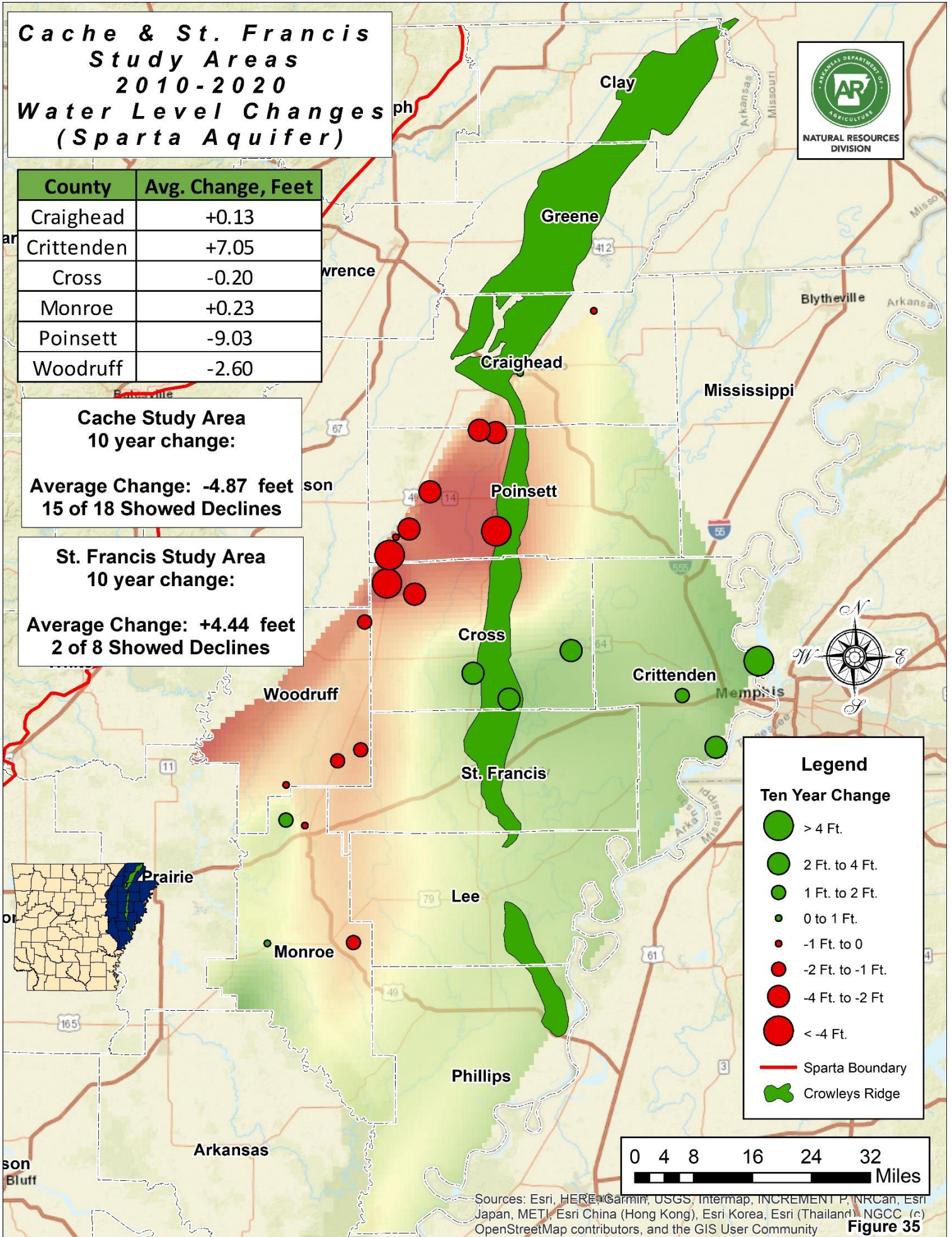
| County     | Avg. Change, Feet |
|------------|-------------------|
| Craighead  | +0.13             |
| Crittenden | +7.05             |
| Cross      | -0.20             |
| Monroe     | +0.23             |
| Poinsett   | -9.03             |
| Woodruff   | -2.60             |

**Cache Study Area  
10 year change:**

**Average Change: -4.87 feet  
15 of 18 Showed Declines**

**St. Francis Study Area  
10 year change:**

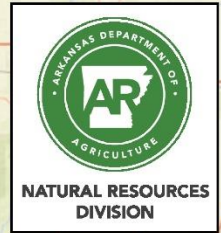
**Average Change: +4.44 feet  
2 of 8 Showed Declines**



**Figure 35**



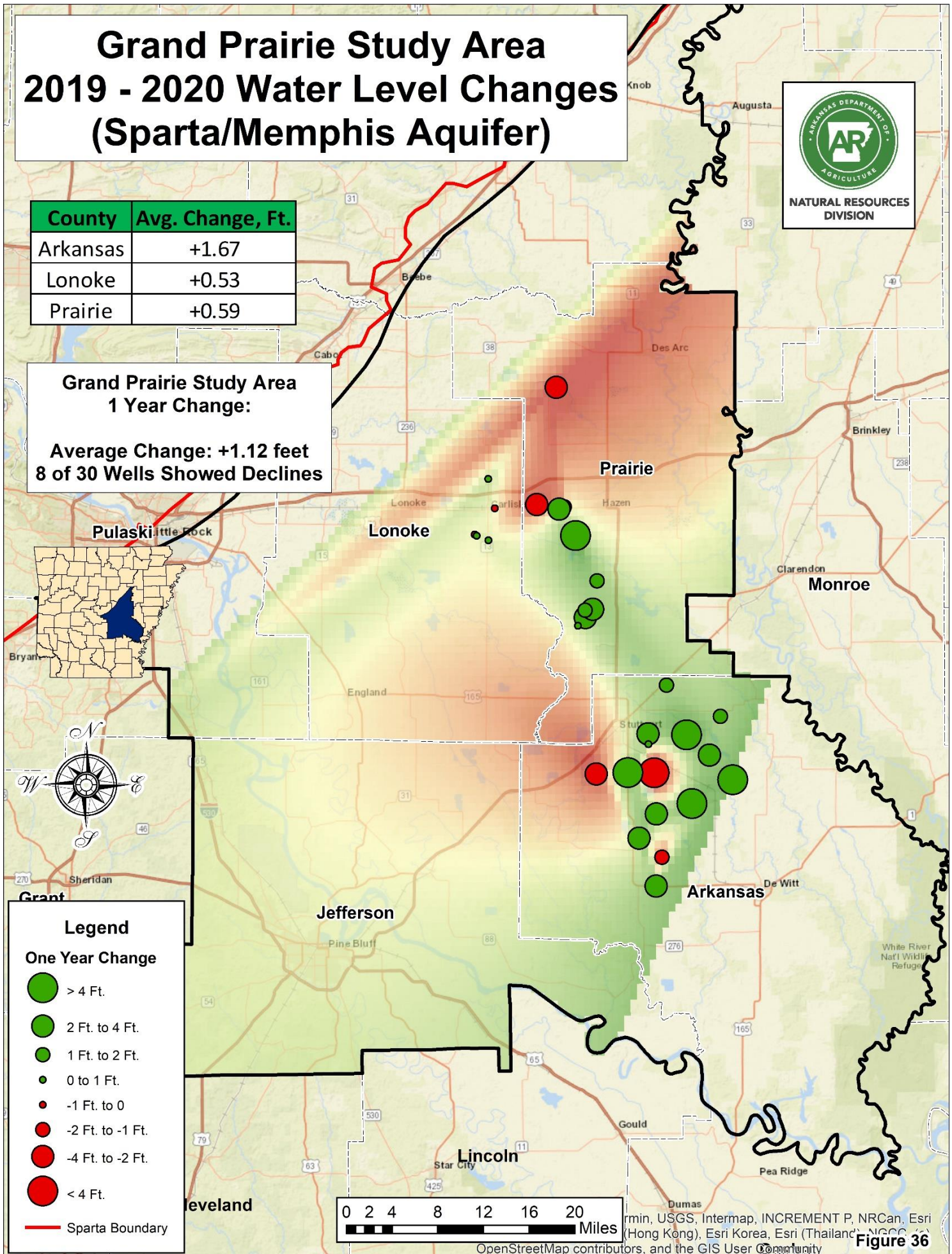
# Grand Prairie Study Area 2019 - 2020 Water Level Changes (Sparta/Memphis Aquifer)



| County   | Avg. Change, Ft. |
|----------|------------------|
| Arkansas | +1.67            |
| Lonoke   | +0.53            |
| Prairie  | +0.59            |

**Grand Prairie Study Area  
1 Year Change:**

**Average Change: +1.12 feet  
8 of 30 Wells Showed Declines**



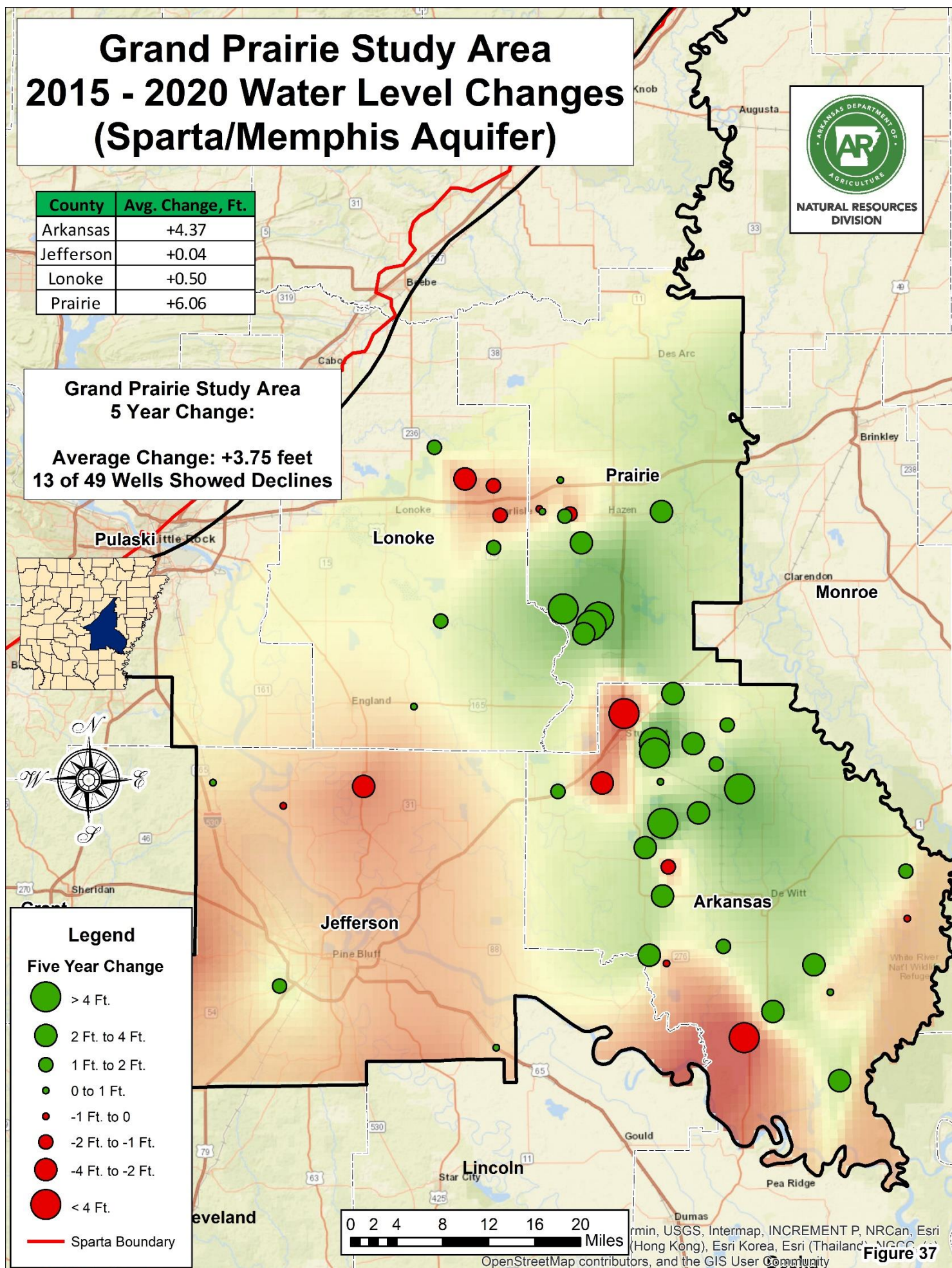




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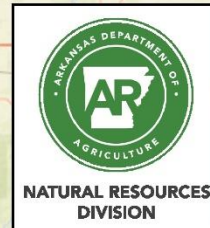
| County    | Avg. Change, Ft. |
|-----------|------------------|
| Arkansas  | +4.37            |
| Jefferson | +0.04            |
| Lonoke    | +0.50            |
| Prairie   | +6.06            |

**Average Change: +3.75 feet**  
**13 of 49 Wells Showed Declines**





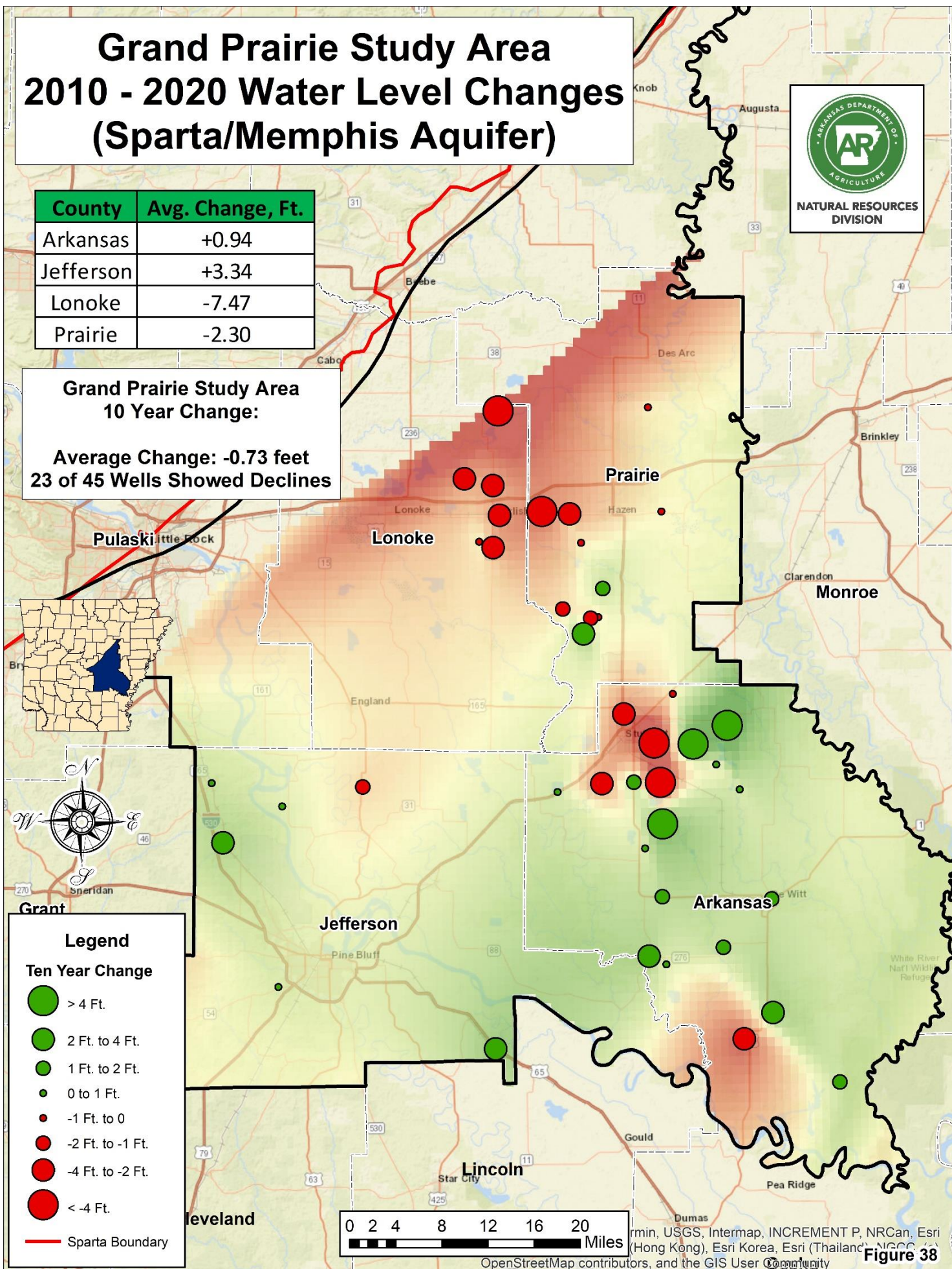
# Grand Prairie Study Area 2010 - 2020 Water Level Changes (Sparta/Memphis Aquifer)



| County    | Avg. Change, Ft. |
|-----------|------------------|
| Arkansas  | +0.94            |
| Jefferson | +3.34            |
| Lonoke    | -7.47            |
| Prairie   | -2.30            |

**Grand Prairie Study Area  
10 Year Change:**

**Average Change: -0.73 feet  
23 of 45 Wells Showed Declines**



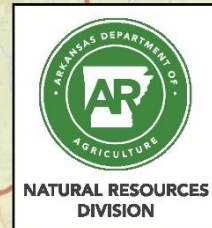
**Figure 38**



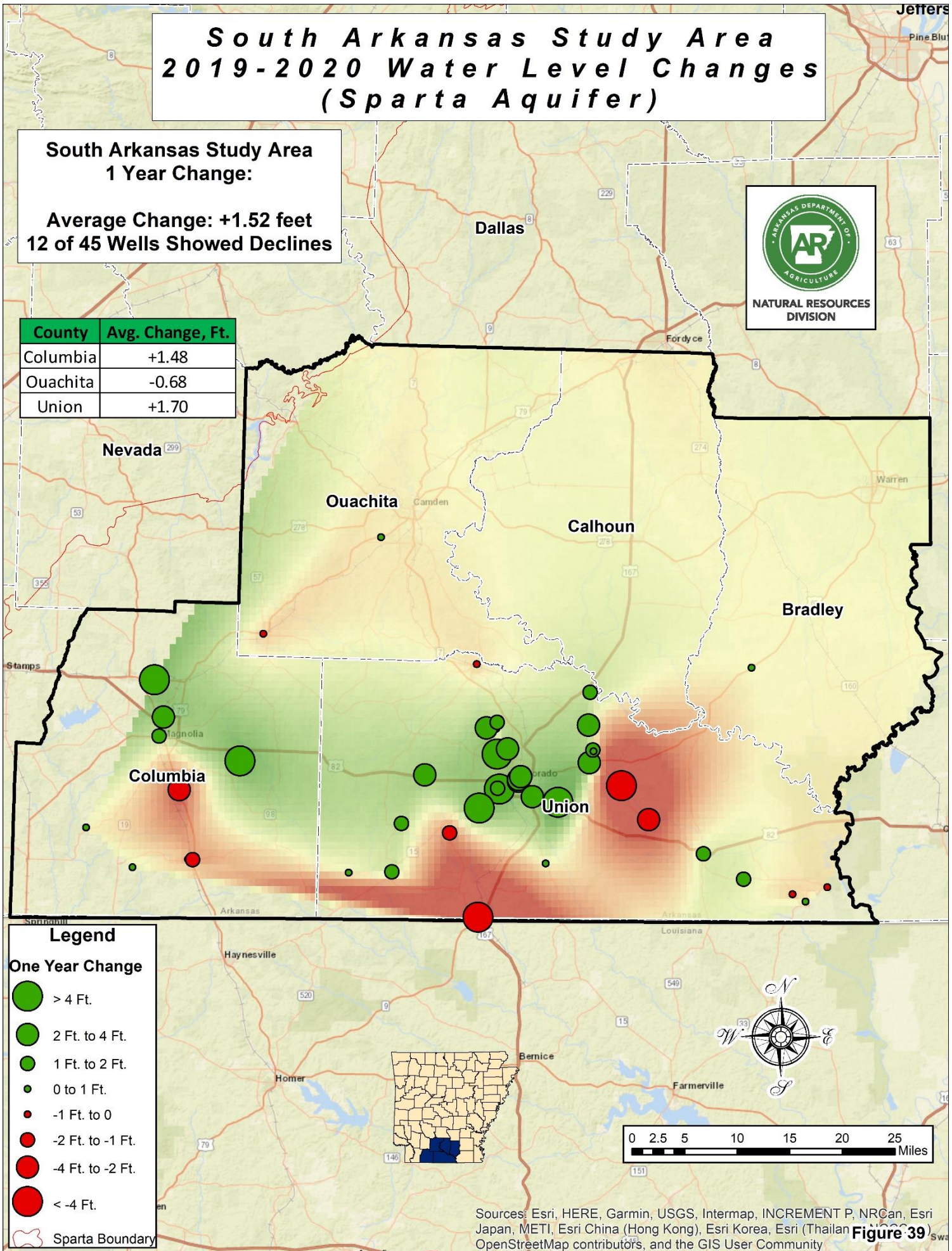
# South Arkansas Study Area 2019-2020 Water Level Changes (Sparta Aquifer)

**South Arkansas Study Area  
1 Year Change:**

**Average Change: +1.52 feet  
12 of 45 Wells Showed Declines**



| County   | Avg. Change, Ft. |
|----------|------------------|
| Columbia | +1.48            |
| Ouachita | -0.68            |
| Union    | +1.70            |



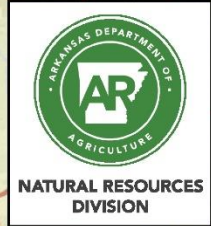
**Figure 39**



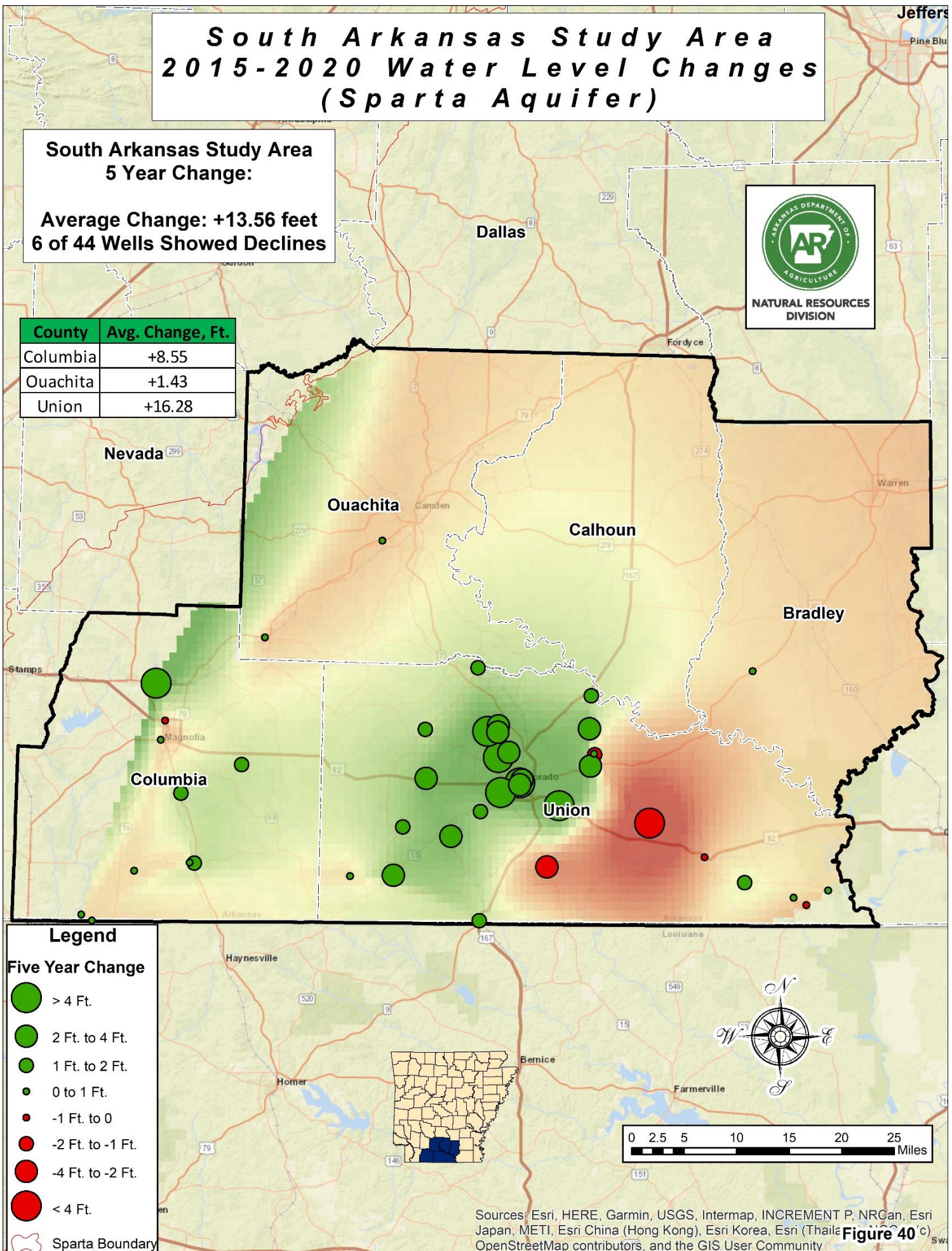
# South Arkansas Study Area 2015-2020 Water Level Changes (Sparta Aquifer)

**South Arkansas Study Area  
5 Year Change:**

**Average Change: +13.56 feet  
6 of 44 Wells Showed Declines**



| County   | Avg. Change, Ft. |
|----------|------------------|
| Columbia | +8.55            |
| Ouachita | +1.43            |
| Union    | +16.28           |





# South Arkansas Study Area 2010-2020 Water Level Changes (Sparta Aquifer)

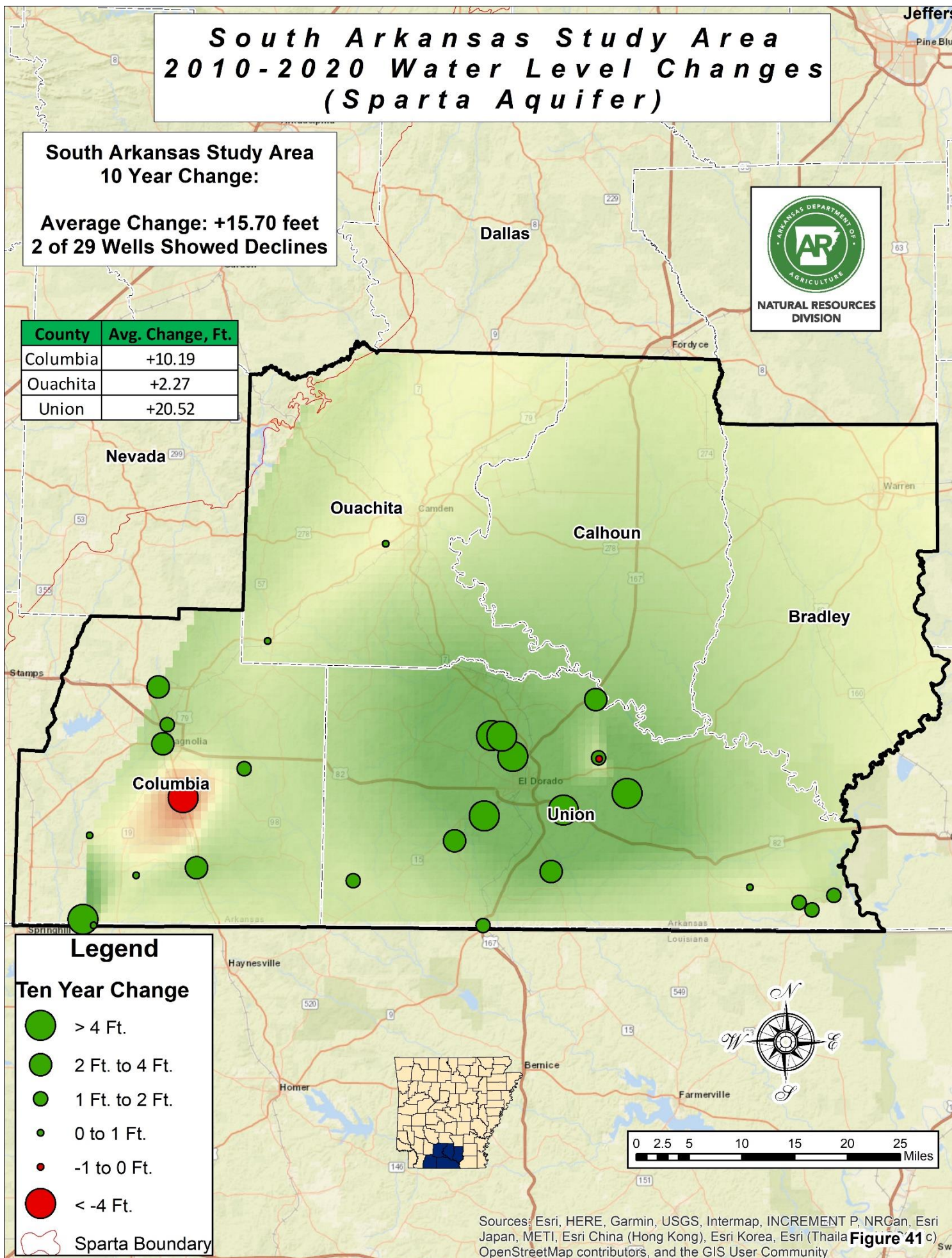
South Arkansas Study Area  
10 Year Change:

Average Change: +15.70 feet  
2 of 29 Wells Showed Declines



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| County   | Avg. Change, Ft. |
|----------|------------------|
| Columbia | +10.19           |
| Ouachita | +2.27            |
| Union    | +20.52           |



# **Groundwater Use**

## **Registered Wells**

In accordance with Act 1051 of 1985, all wells in Arkansas that have the capacity to produce fifty thousand (50,000) gallons per day must be registered with the NRD. Domestic wells are exempt. The quantity used must be reported by March 1st of the following year. USGS reports that there are approximately 50,000 registered wells in the State and over 97% are agricultural wells used primarily for irrigation eastern Arkansas. The remaining approximate 3% reported wells are used predominately for commercial, industrial, and public water supply purposes.

## **Reported Water Use**

In 2015 an estimated total of 8,254.60 million gallons per day (Mgal/d) of water were reportedly withdrawn from all the state's aquifers. The greatest reported volumes are from the alluvial and Sparta aquifers, with approximately 7,636.08 Mgal/d being used from the alluvial and approximately 160 Mgal/d being used from the Sparta. The 2015 total water use data is still the most recent accurate figure for total water use across the state for various reasons; however, reported agricultural-irrigation water use numbers for 2018 have been provided by the USGS as being nearly complete, as the dataset does not contain the results of the mail-out reporting forms. The remaining water use data, non-agricultural/non-irrigation, for 2018 are still being processed.

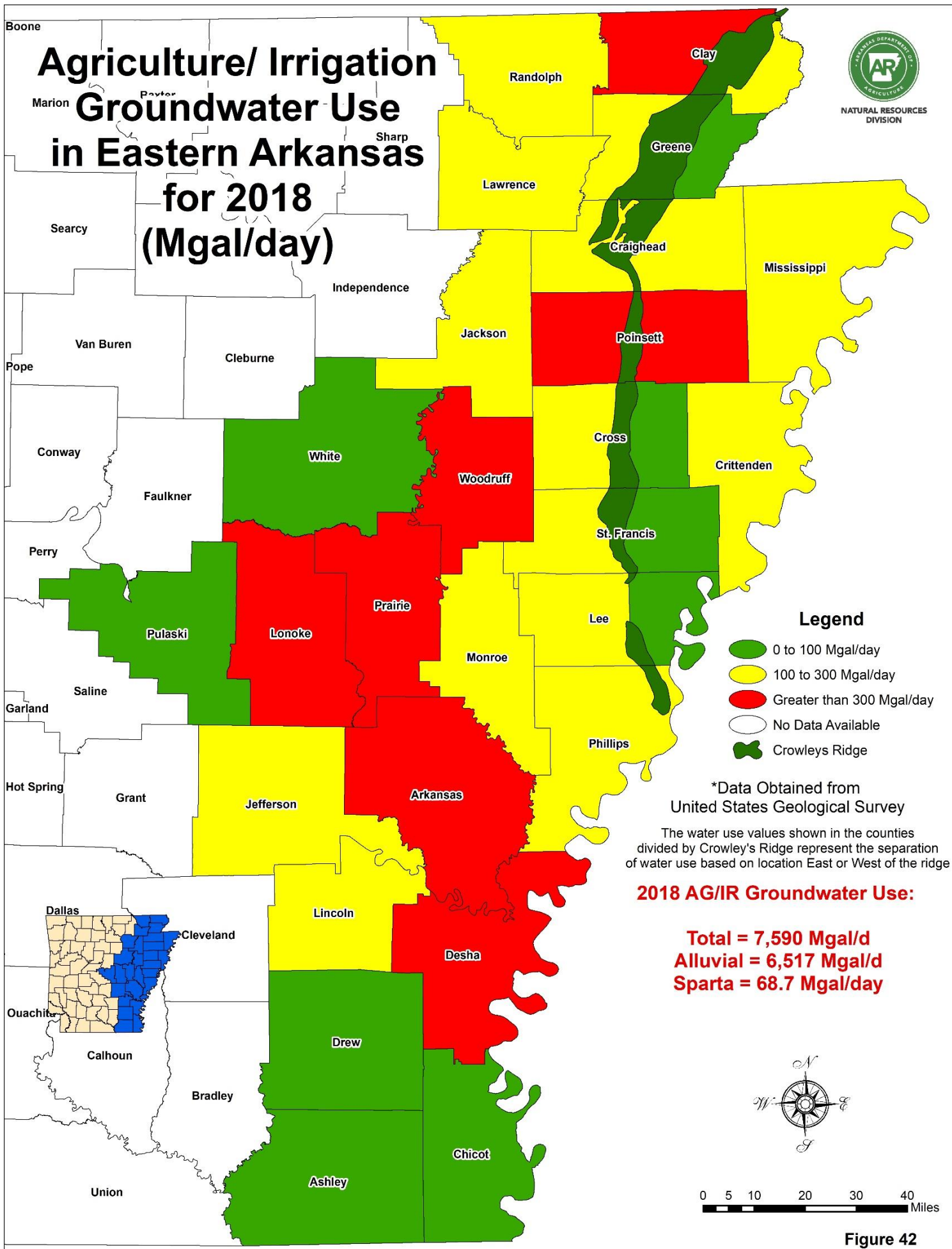
Reported agricultural-irrigation water use in 2018 estimates that a total of 7,590 Mgal/d of groundwater was used for irrigation from all aquifer sources in eastern Arkansas, with 6,570 Mgal/d from 42,452 wells in the alluvial aquifer and 68 Mgal/d from 286 wells in the Sparta aquifer (USGS, 2019). In 2015, reported irrigation groundwater use is estimated to have been 7,434 Mgal/d from 48,410 wells in the alluvial aquifer and 66 Mgal/d from 285 wells in the Sparta aquifer. Based on these numbers, irrigation groundwater use from the alluvial aquifer in 2018 was approximately 864 Mgal/d less than in 2015 with nearly 6,000 fewer wells reported. Reported irrigation groundwater use from the Sparta aquifer in 2018 increased by 2 Mgal/d from 2015 with one more well reported. The discrepancy in the number of wells reported is due partly to the fact that mail-out report forms for 2018 have not yet been received. However, 2018 mail-out forms are expected to be fewer than 6,000 and reported agricultural-irrigation groundwater use is anticipated to be reduced from 2015 reported use.



The estimated sustainable yield of the alluvial aquifer is 3,374 Mgal/d meaning that only 51% of our estimated 2018 irrigation groundwater use is sustainable using an incomplete, conservative estimate. Regarding the Sparta aquifer, 2018 irrigation water use estimates of 68 Mgal/d would account for approximately 78% of the estimated sustainable yield of 87 Mgal/d. Total water use numbers estimate that 160 Mgal/d is being used from the Sparta aquifer, mostly used for municipal and industrial purposes. Based on these figures, only 54% of the total water use from the Sparta is sustainable.

Historically, counties that report the largest groundwater withdrawals from the alluvial aquifer are the same counties with groundwater depletion issues. Based on 2018 water use numbers Arkansas, Lonoke, Poinsett, Woodruff, Clay, Desha, and Prairie counties used the most groundwater for irrigation. This is mostly consistent with the areas of significant drawdown in the alluvial aquifer.

Figure 42 presents the 2018 agricultural-irrigation water use as reported at the time of this report.





## Water Conservation Tax Incentive Program

The Water Conservation Tax Incentive Program encourages water users to invest in water conservation practices by offering a tax credit equal to 10% (statewide) or 50% (in a Critical Groundwater Area) of the cost to implement the practice. The following water conservation practices are eligible for tax credits: (1) the construction of impoundments to utilize available surface water and reduce our dependence on ground water; (2) the conversion from ground water use to surface water use when surface water is available; (3) land leveling to reduce agricultural irrigation water use; and (4) the installation of water meters to monitor ground water usage.

Figure 43 shows the locations of the water conservation projects that were approved for a tax credit for the years 2016 through 2020. A summary table of the number and types of conservation practices approved for a tax credit can be found below.

| Approved Tax Credits 2016 - 2020 |               |      |      |      |      |
|----------------------------------|---------------|------|------|------|------|
| Conservation Practice            | Year Approved |      |      |      |      |
|                                  | 2016          | 2017 | 2018 | 2019 | 2020 |
| Water Meters                     | 22            | 12   | 13   | 9    | 80   |
| Impoundments                     | 10            | 8    | 15   | 27   | 7    |
| Land Leveling                    | 64            | 45   | 22   | 12   | 29   |
| Surface Water Conversions        | 0             | 0    | 23   | 9    | 10   |
| Total Approved                   | 96            | 65   | 73   | 57   | 126  |

Each applicant is required to list the estimated total acre-footage of groundwater used in the year prior to applying for a tax credit and the estimated total acre-footage of groundwater used after the project has been completed. Based on the 417 tax credit projects that were approved in 2016 through 2020, an estimated 139,812 acre-feet per year of groundwater will be conserved after these projects have been completed and implemented. In 2020, a total of 126 conservation practices were approved on approximately 4,017 acres of land in Arkansas.

# Water Conservation Tax Credits Approved from 2016 to 2020



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## Legend

- 2020 Water Meters
- ▲ 2020 Impoundments
- 2020 Land Leveling
- ◆ 2020 Surface Water Conversion
- 2016 Land Leveling
- ▲ 2016 Impoundments
- ◆ 2016 Surface Water Conversions
- 2017 Land Leveling
- ▲ 2017 Impoundments
- ◆ 2017 Surface Water Conversions
- 2018 Land Leveling
- ▲ 2018 Impoundments
- ◆ 2018 Surface Water Conversions
- 2018 Water Meters
- 2019 Land Leveling
- ▲ 2019 Impoundments
- ◆ 2019 Surface Water Conversions
- 2019 Water Meters
- County Boundaries

| Project Type              | Number Of Projects Approved |           |           |           |            |
|---------------------------|-----------------------------|-----------|-----------|-----------|------------|
|                           | 2016                        | 2017      | 2018      | 2019      | 2020       |
| Impoundments              | 22                          | 12        | 13        | 9         | 7          |
| Land Leveling             | 64                          | 45        | 22        | 27        | 29         |
| Surface Water Conversions | 10                          | 8         | 15        | 12        | 10         |
| Water Meter Installations | 0                           | 0         | 23        | 9         | 80         |
| <b>Total</b>              | <b>96</b>                   | <b>65</b> | <b>73</b> | <b>57</b> | <b>126</b> |

0 5 10 20 30 40  
Miles

Figure 43



## Summary

The Groundwater Protection and Management Report for 2020 is a summary of the activities and significant findings of the Arkansas Department of Agriculture – Natural Resources Division (NRD) Groundwater Section staff. This report is prepared annually in response to legislative mandates that direct the NRD to study the state's groundwater resources.

The purposes of the programs outlined in this report are to monitor the condition of the state's groundwater resources and to evaluate trends in water-level and water-quality fluctuations. The NRD, the USDA-NRCS, and the USGS monitor up to approximately 1,000 water wells each year for water levels and prescribed water quality parameters. This monitoring is accomplished through a cooperative agreement with the NRD and the USGS.

In the Mississippi River Valley alluvial aquifer, 555 water wells were measured in the spring of 2020, primarily during the month of April. When compared to historical spring measurement data in 2019 and 2015 with the 2020 data gives change values of +1.48 ft and +3.45 ft, while the 2010 ten-year data comparison has a negative average change value of -0.34 feet. In October and November 2020, 373 wells were measured that had data from the spring 2020 dataset as a part of an increased effort to acquire more fall data. The spring to fall 2020 measurement comparisons yielded a total average change of -3.32 feet, with 310 of the 373 wells in decline. The areas with the most severe groundwater declines continue to be the Grand Prairie and Cache study areas, particularly in the areas of the aquifer furthest from a major surface water source i.e. the Arkansas, White, and Mississippi rivers. Water level decline in the Cache study area continues to worsen in the southern part of the area moving into St. Francis, Monroe, and Lee counties. Some water level decline has been observed in the Beouf-Tensas study area, but these declines do not appear to be causing significant aquifer drawdown in the area.

In the Sparta/Memphis aquifer, 202 synoptic water level measurements were collected for the spring 2020 dataset. Due to some hinderance with the pandemic and accessibility issues, there is a lack of data coverage in the southern Cache and northern South Arkansas study areas. The spring 2020 data shows average water level change values of +0.93, +5.92, and +3.05 feet in the one, five, and ten-year intervals, respectively. It should be noted that

the spring 2020 to spring 2019 change value is only based on 89 wells due to poor data coverage in the 2019 dataset.

The Sparta aquifer in the South Arkansas study area continues to see recovery in the areas where historical drawdown has been the most severe with positive average water level change values in the one- and five-, and ten-year change intervals. Union County continues to experience the most recovery, having the greatest average change in the five- and ten-year intervals. In the Grand Prairie, Sparta wells have measured positive average water level change values in the one and five-year change interval, while the 10-year interval has a negative average water level change with Lonoke and Prairie counties in decline. The Cache study area has negative average water level change values in the five and 10-year comparisons with wells in Poinsett, Cross, and Woodruff county values amounting for most of the shown decline.

While we are seeing positive average change values in the one, five and even the ten-year intervals in these reports, it is important to realize that groundwater levels continue to decline in areas with the highest water use for both the Mississippi River Valley alluvial aquifer and the Sparta aquifer. The study area ten-year change maps for the Grand Prairie and Cache Critical Groundwater Areas illustrate this point. Arkansas is withdrawing groundwater from the alluvial and Sparta/Memphis aquifers in eastern and southern Arkansas at a rate far above that which is estimated to be sustainable. So long as water use from these aquifers continues to exceed sustainable yield, the resource will continue to be depleted. The NRD should continue to promote conservation, education, and the conjunctive use of ground and surface-water at rates that are sustainable for current and future water use needs.



## References

- Ackerman, D. J., 1996, Hydrology of the Mississippi River Valley Alluvial Aquifer, South-Central United States: U. S. Geological Survey Professional Paper 1416-D, 56 p.
- Kresse, T.M, Hays, P.D., Merriman, K.R., Gillip, J.A., Fugitt, D.T., Spellman, J.L., Nottmeier, A.M., Westerman, D.A., Blackstock, J.M., and Battreal, J.L., 2014, Aquifers of Arkansas – Protection, management, and hydrologic and geochemical characteristics of groundwater resources in Arkansas: U.S. Geological Survey Scientific Investigations Report 2014-5149, 334 p., <http://dx.doi.org/10.3133/sir20145149>
- USGS, 2019, Direct correspondence with USGS Staff regarding 2018 water use, March 2019.
- USDA, 2020, Summary of 2019 Acres and Farm Count by County Reported to Farm Service Agency, Jan 2, 2020, Farm Service Agency, United States Department of Agriculture, <https://www.fsa.usda.gov/news-room/efoia/electronic-reading-room/frequently-requested-information/crop-acreage-data/index>
- NOAA, 2019., *water.weather.gov/precip*
- NWS, 2020., A Preliminary Review of 2019 Weather and Climate Data for the State of Arkansas, National Weather Service, Little Rock, AR., Jan 2, 2020
- Pugh, A.L., Table 4. Groundwater Use in Arkansas by Aquifer and Use Type 2012. 2015. Personal Communication.
- Schrader, T.P. Water Levels and Selected Water-Quality Conditions in the Mississippi River Valley Alluvial Aquifer in Eastern Arkansas, 2006. USGS Scientific Investigation Report 2008-5092, 82 p.

## **Appendix A**

### **Alluvial Aquifer Water Level Monitoring Data**





Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Arkansas          | 02S04W11D8B1         | 110ALVM      | 34.542469 | -91.404225 | 213.04                | 152        | Apr 9 2020      | 96.3          | 98.56         | 99.08         | 98.75         | 2.26                       | 2.78                       | 2.45                        | -1.83                      | 130.64                 | 34.34                    | 26.28%      |
| Arkansas          | 02S04W19AA1          | 110ALVM      | 34.506350 | -91.486031 | 205.00                | 155        | Apr 9 2020      | 106.34        | 107.59        |               |               | 1.25                       |                            |                             | -1.43                      | 127                    | 20.66                    | 16.27%      |
| Arkansas          | 02S04W23DA1          | 112MRVAA     | 34.512319 | -91.398119 | 207.00                | 140        | Apr 8 2020      | 97.01         | 95.39         |               |               | -1.62                      |                            |                             | 1.45                       | 133                    | 35.99                    | 27.06%      |
| Arkansas          | 02S05W36DD1          | 110ALVM      | 34.478519 | -91.488119 | 212.00                | 140        | Apr 8 2020      | 100.56        | 100.74        |               |               | 0.18                       |                            |                             | 2.76                       | 143                    | 42.44                    | 29.68%      |
| Arkansas          | 03S02W27AB81         | 110ALVM      | 34.413311 | -91.214169 | 197                   | 87         | Apr 6 2020      | 66.39         | 62.98         | 64.80         | 61.96         | -3.41                      | -1.59                      | -4.43                       | -5.27                      | 126.50                 | 60.11                    | 47.52%      |
| Arkansas          | 03S03W05CD1          | 110ALVM      | 34.460283 | -91.358842 | 201                   | 160        | Apr 16 2020     | 98.61         | 99.35         | 99.37         | 98.33         | 0.74                       | 0.76                       | -0.28                       | -1.17                      | 122.47                 | 23.86                    | 19.48%      |
| Arkansas          | 03S03W27BB1          | 110ALVM      | 34.415203 | -91.328911 | 195                   | 120        | Apr 6 2020      | 92.31         | 95.19         | 94.00         | 92.50         | 2.88                       | 1.69                       | 0.19                        | -16.81                     | 137.00                 | 44.69                    | 32.62%      |
| Arkansas          | 03S04W02BB81         | 110ALVM      | 34.475976 | -91.416175 | 197.63                | 116        | Apr 14 2020     | 92.72         | 93.50         | 93.55         | 92.99         | 0.78                       | 0.83                       | 0.27                        | 0.1                        | 121.40                 | 28.68                    | 23.62%      |
| Arkansas          | 03S04W03DCA6         | 110ALVM      | 34.464808 | -91.421067 | 204                   |            | Apr 14 2020     | 100.03        | 100.96        | 101.54        | 100.40        | 0.37                       | 0.79                       | 0.37                        | 0.17                       | 120.00                 | 19.97                    | 16.64%      |
| Arkansas          | 03S04W03DCA16        | 110ALVM      | 34.464733 | -91.420936 | 205                   | 126        | Apr 14 2020     | 100.75        | 100.96        |               |               | 0.21                       |                            | 0.37                        | -0.18                      | 120.82                 | 20.07                    | 16.61%      |
| Arkansas          | 03S04W03DDA1         | 110ALVM      | 34.463914 | -91.416733 | 202                   | 127        | Apr 14 2020     | 100.82        |               |               |               |                            | -0.09                      | 0.65                        | 0.65                       | 120.00                 | 19.18                    | 15.98%      |
| Arkansas          | 03S04W24CC1          | 112MRVAA     | 34.416931 | -91.393400 | 193                   |            | Apr 8 2020      | 83.12         |               |               |               |                            |                            | 0.95                        | 0.95                       | 113                    | 29.88                    | 26.44%      |
| Arkansas          | 03S05W03CCC1         | 110ALVM      | 34.464486 | -91.540953 | 215                   | 110        | Apr 9 2020      | 102.26        | 104.48        | 103.59        | 103.59        | 2.22                       | 2.22                       | 1.33                        | -0.53                      | 127.76                 | 25.50                    | 19.96%      |
| Arkansas          | 03S05W13CBA2         | 110ALVM      | 34.441667 | -91.501944 | 211                   | 136.25     | Apr 14 2020     | 105.42        | 106.62        | 108.80        | 106.62        | 1.20                       | 1.20                       | 3.38                        | -1.02                      | 129                    | 23.58                    | 18.28%      |
| Arkansas          | 03S05W24DA1          | 110ALVM      | 34.423658 | -91.489439 | 207                   | 145        | Apr 9 2020      | 43.69         | 55.15         | 55.15         | 44.01         | 11.46                      | 11.46                      | 0.32                        | 2.41                       | 127.07                 | 83.38                    | 65.62%      |
| Arkansas          | 04S04W02AB81         | 110ALVM      | 34.387000 | -91.406581 | 200                   | 155        | Apr 15 2020     | 109.43        | 110.85        | 110.85        | 109.05        | 1.42                       | 1.42                       | -0.38                       | -1.37                      | 140.58                 | 31.15                    | 22.16%      |
| Arkansas          | 04S04W35AB1          | 110ALVM      | 34.311689 | -91.414519 | 197                   | 131        | Apr 9 2020      | 104.08        | 103.49        |               |               | -0.59                      |                            | 0.92                        | 0.79                       | 166.70                 | 62.62                    | 37.56%      |
| Arkansas          | 05S01W16AB81         | 110ALVM      | 34.264331 | -91.124858 | 183                   | 165        | Apr 6 2020      | 40.87         | 41.55         | 49.50         | 48.71         | 0.68                       | 8.63                       | 7.84                        | -3.94                      | 170.46                 | 129.59                   | 76.02%      |
| Arkansas          | 05S03W09CBA1         | 110ALVM      | 34.273333 | -91.346111 | 196                   | 180.5      | Apr 15 2020     | 112.78        | 114.74        | 114.74        | 112.19        |                            | 1.96                       | -0.59                       | -0.2                       | 163                    | 50.22                    | 30.81%      |
| Arkansas          | 05S04W16AB81         | 112TRRC      | 34.266667 | -91.340833 | 196                   | 201        | Apr 6 2020      | 112.63        |               | 115.70        |               | 3.07                       |                            |                             | -0.48                      | 172.50                 | 59.87                    | 34.71%      |
| Arkansas          | 05S04W14AAD1         | 112TRRC      | 34.263650 | -91.403442 | 186                   | 160        | Apr 6 2020      | 89.09         | 91.11         |               |               | 2.02                       |                            |                             | -0.48                      | 162.60                 | 73.51                    | 45.21%      |
| Arkansas          | 05S04W32BBA1         | 110ALVM      | 34.221103 | -91.472725 | 191                   | 115        | Apr 6 2020      | 53            | 54.18         | 55.41         | 56.56         | 1.18                       | 2.41                       | 3.56                        | -0.9                       | 115.31                 | 115.31                   | 68.51%      |
| Arkansas          | 05S04W34BAC1         | 112TRRC      | 34.219675 | -91.434817 | 191                   | 142        | Apr 6 2020      | 65.35         | 66.58         |               |               | 1.23                       |                            |                             |                            | 166.00                 | 100.65                   | 60.63%      |
| Arkansas          | 06S02W03AAC1         | 112TRRC      | 34.204722 | -91.213333 | 150                   | 150        | Apr 8 2020      | 54.49         |               |               |               |                            |                            |                             |                            | 136.00                 | 81.51                    | 59.93%      |
| Arkansas          | 06S02W03AB1          | 110ALVM      | 34.207889 | -91.217306 | 188                   | 167        | Apr 8 2020      | 57.21         | 60.46         |               |               | 3.25                       |                            |                             |                            | 165.00                 | 107.79                   | 65.33%      |
| Arkansas          | 06S03W10BBA1         | 110ALVM      | 34.193325 | -91.331617 | 184                   | 155        | Apr 8 2020      | 77.34         | 79.59         | 82.06         | 77.27         | 2.25                       | 4.72                       | -0.07                       | -1.03                      | 164.03                 | 86.69                    | 52.85%      |
| Arkansas          | 06S03W27AAA1         | 110ALVM      | 34.149328 | -91.320217 | 183.14                | 132        | Apr 7 2020      | 64.27         | 65.69         | 66.00         | 61.49         | 1.42                       | 1.73                       | -2.78                       | 2.76                       | 165.11                 | 100.84                   | 61.07%      |
| Arkansas          | 06S03W32ADD1         | 110ALVM      | 34.127778 | -91.354167 | 178                   |            | Apr 14 2020     | 49.90         | 52.08         | 54.21         | 54.24         | 2.18                       | 4.31                       | 4.34                        | -1.13                      | 161                    | 111.10                   | 69.01%      |
| Arkansas          | 07S02W17BBA1         | 110ALVM      | 34.091622 | -91.260728 | 184                   | 95         | Apr 15 2020     | 35.75         | 36.46         |               |               | 0.71                       |                            | 7.52                        |                            | 164.30                 | 128.55                   | 78.24%      |
| Arkansas          | 07S03W18CCD1         | 110ALVM      | 34.076467 | -91.387803 | 186.16                | 132        | Apr 7 2020      | 40.3          | 39.15         | 40.05         | 39.66         | -1.15                      | -0.25                      | -0.64                       | -1.37                      | 137.84                 | 97.54                    | 70.76%      |
| Arkansas          | 07S03W32BBA1         | 110ALVM      | 34.044378 | -91.373219 | 176.92                | 128        | Apr 7 2020      | 21.63         | 22.77         | 23.90         | 23.17         | 1.14                       | 2.27                       | 1.54                        |                            | 152.99                 | 131.36                   | 85.86%      |
| Arkansas          | 07S04W01DDD1         | 110ALVM      | 34.107014 | -91.390875 | 186                   | 155        | Apr 14 2020     | 42.94         | 43.70         |               |               | 0.76                       |                            | -5.27                       | -1.43                      | 163.40                 | 120.46                   | 73.72%      |
| Arkansas          | 08S03W72299          | 110ALVM      | 34.029847 | -91.367361 | 178                   | 158        | Apr 7 2020      | 20.33         | 19.32         | 22.22         | 20.34         | -1.01                      | 1.89                       | 0.01                        | -0.66                      | 161.02                 | 140.69                   | 87.37%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 5                          | 2                          | 9                           | 18                         | Average % Saturated:   |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 23                         | 20                         | 24                          | 27                         | Min % Saturated:       |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 0.69                       | 2.61                       | 0.76                        | -1.03                      | Max % Saturated:       |                          |             |
|                   |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 15.98%                 |                          |             |





Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft)     | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|--------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|-------------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Ashley | 15S04W23DBD1         | 110ALVM      | 33.378131 | -91.482100 | 128                   | 90         | Apr 7 2020      | 27.02         |                   |               | 32.28         |                            |                            | 5.26                        | -2.64                      | 83.00                  | 55.98                    | 67.45%      |
| Ashley | 16S06W08CAA1         | 110ALVM      | 33.328150 | -91.743961 | 185                   | 105        | Apr 8 2020      | 78.15         |                   |               | 78.31         |                            |                            | 0.16                        | -0.67                      | 141.00                 | 62.85                    | 44.57%      |
| Ashley | 16S06W25DDD1         | 110ALVM      | 33.277778 | -91.666111 | 182                   | 130        | Apr 8 2020      | 79.21         |                   | 79.98         | 78.17         |                            | 0.77                       | -1.04                       | -1.31                      | 212.00                 | 132.79                   | 62.64%      |
| Ashley | 17S04W03AAB1         | 110ALVM      | 33.258081 | -91.502750 | 124                   | 105        | Apr 9 2020      | 22.9          |                   | 34.30         | 27.31         |                            | 11.40                      | 4.41                        | -6.46                      | 158.00                 | 135.10                   | 85.51%      |
| Ashley | 17S04W15DDC1         | 110ALVM      | 33.214578 | -91.498358 | 116                   | 57         | Apr 9 2020      | 19.4          | 21.05             | 30.60         | 26.47         | 1.65                       | 11.20                      | 7.07                        | -6.01                      | 185.00                 | 165.60                   | 89.51%      |
| Ashley | 17S04W21AAB1         | 110ALVM      | 33.213914 | -91.519450 | 117                   |            | Apr 9 2020      | 15.84         | 16.33             | 25.45         | 21.87         | 0.49                       | 9.61                       | 6.03                        | -6.61                      | 190.00                 | 174.16                   | 91.66%      |
| Ashley | 18S04W23DDD1         | 110ALVM      | 33.114278 | -91.494778 | 103                   | 100        | Apr 17 2020     | 33.11         |                   |               |               |                            |                            |                             |                            | 155.20                 | 122.09                   | 78.67%      |
| Ashley | 18S05W11CCD1         | 110ALVM      | 33.137944 | -91.593694 | 118                   | 75         | Apr 17 2020     | 29.35         |                   |               |               |                            |                            |                             |                            | 240.00                 | 210.65                   | 87.77%      |
| Ashley | 18S05W22DDA1         | 110ALVM      | 33.117083 | -91.598328 | 125                   | 100        | Apr 17 2020     | 26.71         |                   |               |               |                            |                            |                             |                            | 248.00                 | 221.29                   | 89.23%      |
| Ashley | 18S08W01AAB1         | 110ALVM      | 33.170825 | -91.873644 | 181                   | 128        | Apr 7 2020      | 88.34         | 85.56             | 90.12         | 84.92         | -2.78                      | 1.78                       | -3.42                       | 0.44                       | 152.00                 | 63.66                    | 41.88%      |
| Ashley | 18S08W28DDD2         | 110ALVM      | 33.106889 | -91.924572 | 163                   | 156        | May 1 2020      | 84.32         |                   | 84.40         | 85.17         |                            | 0.08                       | 0.85                        | -0.46                      | 131.00                 | 46.68                    | 35.63%      |
| Ashley | 19S04W14BBB1         | 110ALVM      | 33.053944 | -91.494611 | 107                   | 100        | Apr 17 2020     | 30.72         |                   |               |               |                            |                            |                             |                            | 141.00                 | 110.28                   | 78.21%      |
| Ashley | 19S05W08CA1          | 110ALVM      | 33.067258 | -91.641722 | 107                   |            | Apr 10 2020     | 14.2          |                   |               |               |                            |                            |                             |                            | 179.00                 | 164.80                   | 92.07%      |
| Ashley | 19S05W08ACA1         | 110ALVM      | 33.068528 | -91.637528 | 109                   | 70         | Apr 17 2020     | 32.54         |                   |               | 24            |                            |                            | -8.54                       |                            | 179                    | 146.46                   | 81.82%      |
| Ashley | 19S05W16AAB1         | 110ALVM      | 33.056514 | -91.621789 | 116                   | 79         | Apr 17 2020     | 18.91         |                   |               |               |                            |                            |                             |                            | 141.10                 | 122.19                   | 86.60%      |
| Ashley | 19S05W22DCD1         | 110ALVM      | 33.027444 | -91.604444 | 107                   | 100        | Apr 17 2020     | 25.21         |                   |               |               |                            |                            |                             |                            | 126.60                 | 101.39                   | 80.09%      |
| Ashley | 19S06W07BCC1         | 110ALVM      | 33.067656 | -91.768867 | 134.7                 | 152        | Apr 10 2020     | 31.59         | 30.89             | 31.00         | 29.95         | -0.70                      | -0.59                      | -1.64                       | 0.85                       | 138.39                 | 106.80                   | 77.17%      |
|        |                      |              |           |            |                       |            |                 |               | Wells in Decline: |               | 2             | 1                          | 4                          | 7                           | 9                          | Average % Saturated:   |                          |             |
|        |                      |              |           |            |                       |            |                 |               | Total Wells:      |               | 4             | 7                          | 10                         | 9                           | 8                          | Min % Saturated:       |                          |             |
|        |                      |              |           |            |                       |            |                 |               | Average Change:   |               | -0.34         | 4.89                       | 0.91                       | -2.54                       |                            | Max % Saturated:       |                          |             |
| Chicot | 13S03W27AAA1         | 110ALVM      | 33.548550 | -91.385122 | 138                   | 90         | Apr 7 2020      | 48.95         | 49.01             |               |               | 0.06                       |                            |                             |                            | 75.62                  | 26.67                    | 35.27%      |
| Chicot | 13S03W34CAA1         | 110ALVM      | 33.526533 | -91.393278 | 132                   | 75         | Apr 6 2020      | 40.52         |                   |               | 37.67         |                            |                            | -2.85                       | -2.99                      | 79.00                  | 38.48                    | 48.71%      |
| Chicot | 13S03W35BAC1         | 110ALVM      | 33.531681 | -91.379314 | 134                   | 90         | Apr 6 2020      | 41.92         |                   | 44.70         | 40.92         |                            | 2.78                       | -1.00                       | -2.65                      | 79.00                  | 37.08                    | 46.94%      |
| Chicot | 14S02W09BBD1         | 110ALVM      | 33.497147 | -91.311019 | 133                   | 100        | Apr 6 2020      | 29.22         | 29.31             |               |               | 0.09                       |                            |                             |                            | 87.40                  | 58.18                    | 66.57%      |
| Chicot | 14S03W07BBD1         | 110ALVM      | 33.503081 | -91.438889 | 134                   | 77         | Apr 6 2020      | 27.83         | 31.21             | 36.52         | 26.45         | 3.38                       | 8.69                       | -1.38                       | -1.66                      | 81.00                  | 53.17                    | 65.64%      |
| Chicot | 14S03W32CDB2         | 110ALVM      | 33.437075 | -91.430958 | 134                   | 100        | Apr 7 2020      | 46.2          |                   | 34.75         | 34.75         |                            | 2.95                       | -11.45                      | 4.04                       | 82.00                  | 35.80                    | 43.66%      |
| Chicot | 15S02W20DDC1         | 110ALVM      | 33.374053 | -91.322175 | 126                   | 85         | Apr 9 2020      | 33.75         | 34.67             | 36.70         | 27.64         | 0.92                       |                            | -6.11                       | -2.83                      | 100.00                 | 66.25                    | 66.25%      |
| Chicot | 15S04W13DAD1         | 110ALVM      | 33.397097 | -91.464072 | 125                   | 125        | Apr 7 2020      | 38.12         |                   |               |               |                            |                            |                             |                            | 93.55                  | 55.43                    | 59.25%      |
| Chicot | 16S03W15DAD1         | 110ALVM      | 33.305000 | -91.392778 | 118                   | 97.6       | Apr 8 2020      | 32.43         |                   | 33.34         | 31.75         | 0.91                       |                            | -0.68                       | -1.55                      | 121.23                 | 88.80                    | 73.25%      |
| Chicot | 17S01W06BCC1         | 110ALVM      | 33.250328 | -91.251450 | 115                   | 100        | Apr 9 2020      | 21.32         | 20.98             |               | 19.64         | -0.34                      |                            | -1.68                       | -4.89                      | 139.00                 | 117.68                   | 84.66%      |
| Chicot | 17S03W18CBC1         | 110ALVM      | 33.225044 | -91.460106 | 117                   | 115        | Apr 7 2020      | 31.25         | 32.21             |               |               | 0.96                       |                            |                             |                            | 156.80                 | 125.55                   | 80.07%      |
| Chicot | 17S03W28DBA1         | 110ALVM      | 33.190719 | -91.411506 | 110                   | 95         | Apr 9 2020      | 24.98         |                   |               | 23.53         |                            |                            | -1.45                       | -0.09                      | 154.00                 | 129.02                   | 83.78%      |
|        |                      |              |           |            |                       |            |                 |               | Wells in Decline: |               | 1             | 0                          | 8                          | 8                           | 7                          | Average % Saturated:   |                          |             |
|        |                      |              |           |            |                       |            |                 |               | Total Wells:      |               | 6             | 4                          | 8                          | 8                           | 8                          | Min % Saturated:       |                          |             |
|        |                      |              |           |            |                       |            |                 |               | Average Change:   |               | 0.85          | 3.83                       | -3.33                      | -1.58                       |                            | Max % Saturated:       |                          |             |

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| County                                | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft)      | Saturated Thickness (ft) | % Saturated |
|---------------------------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|--------------------------|-------------|
| Clay                                  | 18N08E03DAB1         | 110ALVM      | 36.223119 | -90.198064 | 257                   | 133        | Apr 6 2020      | 6.4           |               | 5.90          | 6.19          |                            | -0.50                      | -0.21                       | -3.79                      | 131.00                      | 124.60                   | 95.11%      |
| Clay                                  | 18N08E11BAA1         | 112TRRC      | 36.214787 | -90.188153 | 259                   | 100        | Apr 27 2020     | 6.5           |               | 6.80          |               |                            | 0.30                       |                             | -1.12                      | 135                         | 128.50                   | 95.19%      |
| Clay                                  | 19N03E24AAA1         | 112TRRC      | 36.281942 | -90.699197 | 278                   |            | Apr 9 2020      | 18.66         |               | 19.95         | 19.84         | 1.29                       | 2.94                       | 1.18                        |                            | 90                          | 71.34                    | 79.27%      |
| Clay                                  | 19N04E19AAA1         | 110ALVM      | 36.281778 | -90.680553 | 282                   |            | Apr 9 2020      | 29.47         |               | 30.42         | 30.15         | 0.95                       | 3.03                       | 0.68                        | -2.96                      | 139.50                      | 110.03                   | 78.87%      |
| Clay                                  | 19N04E19BAA1         | 110ALVM      | 36.280342 | -90.690391 | 279                   | 100        | Apr 9 2020      | 21.06         |               | 24.20         |               |                            | 3.14                       |                             | -3.5                       | 90                          | 68.94                    | 76.60%      |
| Clay                                  | 19N05E15BBD1         | 112TRRC      | 36.287841 | -90.531219 | 289                   | 110        | Apr 8 2020      | 41.87         |               | 47.10         |               |                            | 5.23                       |                             | -3.86                      | 126                         | 84.13                    | 66.77%      |
| Clay                                  | 19N07E25B8B1         | 112TRRC      | 36.255341 | -90.283434 | 268                   |            | Apr 7 2020      | 12.41         |               | 15.00         |               |                            | 2.59                       |                             | -10.02                     | 114                         | 101.59                   | 89.11%      |
| Clay                                  | 19N08E08DCA1         | 112TRRC      | 36.291964 | -90.234808 | 270                   |            | Apr 7 2020      | 2.65          |               | 2.90          |               |                            | 0.25                       |                             | -7.79                      | 90                          | 87.35                    | 97.06%      |
| Clay                                  | 19N08E27DA1          | 110ALVM      | 36.250039 | -90.193964 | 260                   |            | Apr 16 2020     | 3.7           |               | 3.71          | 2.82          | 0.01                       | -0.88                      |                             |                            | 117                         | 113.30                   | 96.84%      |
| Clay                                  | 19N09E19DCD1         | 112TRRC      | 36.259442 | -90.151797 | 265                   | 120        | Apr 27 2020     | 6.7           |               | 5.80          |               |                            | -0.90                      |                             | -1.52                      | 132                         | 125.30                   | 94.92%      |
| Clay                                  | 20N03E25BAA1         | 110ALVM      | 36.353333 | -90.706944 | 290                   |            | Apr 14 2020     | 19.8          |               | 23.70         |               |                            | 3.90                       |                             | -3.16                      | 74                          | 54.20                    | 73.24%      |
| Clay                                  | 20N04E02B8C1         | 112TRRC      | 36.407936 | -90.621611 | 285                   | 100        | Apr 14 2020     | 13.32         | 14.79         |               |               | 1.47                       |                            |                             |                            | 126.30                      | 112.98                   | 89.45%      |
| Clay                                  | 20N04E03ADA1         | 112TRRC      | 36.407006 | -90.623724 | 290                   |            | Apr 27 2020     | 14.74         |               | 15.40         |               |                            | 0.66                       |                             | -2.08                      | 84                          | 69.26                    | 82.45%      |
| Clay                                  | 20N04E06B81          | 110ALVM      | 36.412317 | -90.692014 | 290                   | 110        | Apr 14 2020     | 16.87         |               | 21.10         |               |                            | 4.23                       |                             | -6.1                       | 66                          | 49.13                    | 74.44%      |
| Clay                                  | 20N05E22CAD1         | 112TRRC      | 36.353317 | -90.525189 | 290                   |            | Apr 8 2020      | 29.97         |               | 33.20         | 20.60         |                            | 3.23                       |                             | -2.9                       | 122                         | 92.03                    | 75.43%      |
| Clay                                  | 20N05E30CAC1         | 110ALVM      | 36.334229 | -90.581777 | 283                   |            | Apr 27 2020     | 17.25         |               | 20.60         |               |                            | 3.35                       |                             | -4.28                      | 145                         | 127.75                   | 88.10%      |
| Clay                                  | 20N05E34DBA1         | 110ALVM      | 36.327586 | -90.521436 | 285                   | 110        | Apr 8 2020      | 31.83         | 32.89         | 34.30         | 30.09         | 1.06                       | 2.47                       | -1.74                       | -1.87                      | 121.53                      | 89.70                    | 73.81%      |
| Clay                                  | 20N06E09B8A1         | 112TRRC      | 36.390894 | -90.438995 | 290                   |            | Apr 8 2020      | 23.12         |               | 24.60         |               |                            | 1.48                       |                             | -1.8                       | 105                         | 81.88                    | 77.98%      |
| Clay                                  | 20N08E22BDC1         | 112TRRC      | 36.353164 | -90.205614 | 275                   |            | Apr 7 2020      | 5.15          |               | 7.70          |               |                            | 2.55                       |                             | -6.58                      | 38                          | 32.85                    | 86.45%      |
| Clay                                  | 20N08E24DDA1         | 110ALVM      | 36.349194 | -90.159328 | 276                   | 110        | Apr 7 2020      | 5.6           |               |               | 7.07          |                            |                            | 1.47                        | -4.75                      | 56                          | 50.40                    | 90.00%      |
| Clay                                  | 20N09E09ABC1         | 112TRRC      | 36.385062 | -90.111763 | 279                   |            | Apr 7 2020      | 4.24          |               | 7.60          |               |                            | 3.36                       |                             | -7.87                      | 86                          | 81.76                    | 95.07%      |
| Clay                                  | 20N09E33DDC1         | 110ALVM      | 36.317841 | -90.107873 | 270                   |            | Apr 6 2020      | 5.6           |               | 6.10          |               |                            | 0.50                       |                             | -3.73                      | 105                         | 99.40                    | 94.67%      |
| Clay                                  | 21N03E15CBC1         | 110ALVM      | 36.462500 | -90.748056 | 292                   | 90         | Apr 13 2020     | 9.03          |               | 12.40         |               |                            | 3.37                       |                             | -3.84                      | 25                          | 15.97                    | 63.88%      |
| Clay                                  | 21N03E36CDD1         | 112TRRC      | 36.412897 | -90.708047 | 290                   |            | Apr 27 2020     | 15.25         |               | 20.30         |               |                            | 5.05                       |                             | -4.09                      | 55                          | 39.75                    | 72.27%      |
| Clay                                  | 21N04E09BDC1         | 112TRRC      | 36.474505 | -90.648171 | 291                   | 95         | Apr 14 2020     | 13.03         |               | 12.50         |               |                            | -0.53                      |                             |                            | 55                          | 41.97                    | 76.31%      |
| Clay                                  | 21N05E17AB81         | 110ALVM      | 36.465408 | -90.558028 | 298                   | 105        | Apr 14 2020     | 21.39         | 22.64         |               | 22.73         | 1.25                       |                            | 1.34                        | 2.91                       | 88.00                       | 66.61                    | 75.69%      |
| Clay                                  | 21N05E22BAB1         | 110ALVM      | 36.451171 | -90.525666 | 288                   | 105        | Apr 14 2020     | 5.08          |               | 8.10          |               |                            | 3.02                       |                             | -3.85                      | 89                          | 83.92                    | 94.29%      |
| Clay                                  | 21N06E22B8B1         | 110ALVM      | 36.434700 | -90.435547 | 290                   | 130        | Apr 8 2020      | 19.25         | 20.79         | 20.70         | 16.87         | 1.54                       | 1.45                       | -2.38                       |                            | 107.49                      | 88.24                    | 82.09%      |
| Clay                                  | 21N07E01DDC1         | 112TRRC      | 36.476448 | -90.268713 | 303                   | 90         | Apr 8 2020      | 16.78         |               | 24.2          |               |                            | 7.42                       |                             | -12.42                     | 97                          | 80.22                    | 82.70%      |
| Clay                                  | 21N08E03CDB1         | 112TRRC      | 36.480059 | -90.204822 | 308                   |            | Apr 27 2020     | 13.25         |               | 20.00         |               |                            | 6.75                       |                             | -6.65                      | 22                          | 8.75                     | 39.77%      |
| Clay                                  | 21N08E18CCC1         | 110ALVM      | 36.447472 | -90.263981 | 324                   | 110        | Apr 8 2020      | 35.72         | 41.20         | 41.20         | 31.66         | 5.48                       | 5.48                       | -4.06                       |                            | 111.90                      | 76.18                    | 68.08%      |
| Clay                                  | 21N09E31BDA1         | 112TRRC      | 36.413116 | -90.147597 | 284                   | 100        | Apr 7 2020      | 1.61          |               | 4.30          |               |                            | 2.69                       |                             | -7.83                      | 71                          | 69.39                    | 97.73%      |
| Wells in Decline: 0 4 4 4 25          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | Average % Saturated: 81.99% |                          |             |
| Total Wells: 8 29 8 26                |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | Min % Saturated: 39.77%     |                          |             |
| Average Change: 1.63 2.61 -0.47 -4.44 |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | Max % Saturated: 97.73%     |                          |             |





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|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Craighead         | 13N01E01BDC1         | 110ALVM      | 35.786361 | -90.941500 | 250                   |            | Apr 8 2020      | 71.22         |               |               |               |                            |                            |                             | -1.33                      | 93                     | 21.78                    | 23.42%      |
| Craighead         | 13N01E23DAA1         | 112TRRC      | 35.743167 | -90.947692 | 242                   | 118        | Apr 21 2020     | 71.45         |               |               | 71.35         |                            |                            | -0.10                       | -1.06                      | 90                     | 18.55                    | 20.61%      |
| Craighead         | 13N03E35AAA1         | 110ALVM      | 35.724800 | -91.270129 | 249                   | 110        | Apr 10 2020     | 6.84          |               |               |               |                            |                            |                             |                            | 115.49                 | 108.65                   | 94.08%      |
| Craighead         | 13N04E12ABB1         | 110ALVM      | 35.776581 | -90.615389 | 231                   | 110        | Apr 9 2020      | 21.48         | 23.42         | 25.80         | 23.00         | 1.94                       | 4.32                       | 1.52                        | -1.68                      | 109.03                 | 87.55                    | 80.30%      |
| Craighead         | 13N04E15DBA1         | 110ALVM      | 35.755910 | -90.649277 |                       | 130        | Apr 21 2020     | 23.21         |               |               |               |                            |                            |                             | -1.4                       | 80.98                  | 57.77                    | 71.34%      |
| Craighead         | 13N04E26BCC1         | 112TRRC      | 35.727855 | -90.641499 | 225                   | 100        | Apr 9 2020      | 24.29         |               | 26.30         |               | 2.01                       |                            |                             | -2.12                      | 78.79                  | 54.50                    | 69.17%      |
| Craighead         | 13N05E02CCC1         | 112TRRC      | 35.780076 | -90.533996 | 230                   | 120        | Apr 9 2020      | 9.31          |               | 18.00         |               | 8.69                       |                            |                             | -6.83                      | 107.70                 | 98.39                    | 91.36%      |
| Craighead         | 13N05E06DCC1         | 112TRRC      | 35.777700 | -90.597531 | 229                   | 110        | Apr 9 2020      | 17.55         |               | 27.00         |               | 9.45                       |                            |                             |                            | 111.44                 | 93.89                    | 84.25%      |
| Craighead         | 13N05E24BAC1         | 110ALVM      | 35.747577 | -90.512607 | 225                   | 120        | Apr 9 2020      | 5.96          |               | 13.00         |               | 7.04                       |                            |                             | -7.42                      | 102.66                 | 96.70                    | 94.19%      |
| Craighead         | 13N06E21AAA1         | 112TRRC      | 35.747299 | -90.450383 | 221                   | 150        | Apr 9 2020      | 6.44          |               |               |               |                            |                            |                             | -3.87                      | 102.82                 | 96.38                    | 93.74%      |
| Craighead         | 13N07E02CAB1         | 110ALVM      | 35.778409 | -90.317044 | 226                   | 120        | Apr 14 2020     | 2.93          |               | 6.40          |               | 3.47                       |                            |                             | -8.25                      | 121.64                 | 118.71                   | 97.59%      |
| Craighead         | 13N07E05ABB1         | 112TRRC      | 35.787853 | -90.366213 | 225                   | 100        | Apr 9 2020      | 5.7           |               | 12.10         |               | 6.40                       |                            |                             | -6.2                       | 109.24                 | 103.54                   | 94.78%      |
| Craighead         | 14N01E03ACB1         | 112TRRC      | 35.879518 | -90.971231 | 249                   | 96         | Apr 8 2020      | 56.85         |               | 55.50         |               | -1.35                      |                            |                             | 0.32                       | 105.57                 | 48.72                    | 46.15%      |
| Craighead         | 14N01E10BAB1         | 110ALVM      | 35.867852 | -90.974565 | 246                   | 96         | Apr 8 2020      | 56.53         |               | 58.00         |               | 1.47                       |                            |                             | -1.59                      | 105.11                 | 48.58                    | 46.22%      |
| Craighead         | 14N01E18CAB1         | 110ALVM      | 35.846700 | -91.027467 | 248                   |            | Apr 14 2020     | 84.85         |               |               |               |                            |                            |                             | -2.45                      | 114                    | 29.15                    | 25.57%      |
| Craighead         | 14N01E21BB2          | 110ALVM      | 35.839475 | -90.999444 | 253                   |            | Apr 22 2020     | 60.75         |               |               |               |                            |                            |                             | -3.79                      | 102                    | 41.25                    | 40.44%      |
| Craighead         | 14N02E22AAA1         | 112TRRC      | 35.872322 | -91.087544 | 255                   | 132        | Apr 8 2020      | 79.61         |               | 75.00         |               | -4.61                      |                            |                             | -3.49                      | 119.27                 | 39.66                    | 33.25%      |
| Craighead         | 14N05E36BAD1         | 39.51        | 35.804892 | -90.508606 |                       | 150        | Apr 9 2020      | 39.81         | 40.40         |               |               | 0.59                       |                            |                             | -2.83                      | 105.00                 | 65.19                    | 62.09%      |
| Craighead         | 14N06E06BAA1         | 112TRRC      | 35.876185 | -90.492884 | 240                   | 120        | Apr 10 2020     | 18.97         |               | 21.40         |               | 2.43                       |                            |                             | 3.5                        | 101.65                 | 82.68                    | 81.34%      |
| Craighead         | 14N07E14DDC1         | 112TRRC      | 35.831431 | -90.309550 | 230                   | 120        | Apr 8 2020      | 4.19          |               | 13.40         |               | 9.21                       |                            |                             | -8.92                      | 117                    | 112.81                   | 96.42%      |
| Craighead         | 15N06E04BAD1         | 110ALVM      | 35.962293 | -90.451772 | 239                   | 104        | Apr 10 2020     | 8.73          |               | 18.00         |               | 9.27                       |                            |                             | -6.49                      | 77.87                  | 69.14                    | 88.79%      |
| Craighead         | 15N06E20DD1          | 110ALVM      | 35.907008 | -90.460875 | 234                   |            | Apr 10 2020     | 6.84          | 8.55          |               |               | 1.71                       |                            | 0.82                        | -3.51                      | 87.20                  | 80.36                    | 92.16%      |
| Craighead         | 15N07E35DCB1         | 112TRRC      | 35.878129 | -90.308711 | 231                   | 120        | Apr 8 2020      | 6.46          |               | 13.90         |               | 7.44                       |                            |                             | -9.2                       | 113.84                 | 107.38                   | 94.33%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 0                          | 2                          | 1                           | 19                         | Average % Saturated:   |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 3                          | 14                         | 3                           | 21                         | Min % Saturated:       |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 1.41                       | 4.66                       | 0.75                        | -3.74                      | Max % Saturated:       |                          |             |

Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft)        | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|----------------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Crittenden        | 05N07E04CC1          | 110ALVM      | 35.074436 | -90.355783 | 200.00                | 124        | Apr 21 2020     | 15.55         | 24.10         | 18.70                | 13.56         | 8.55                       | 2.34                       | 3.17                        | -6.95                      | 115                    | 99.45                    | 86.48%      |
| Crittenden        | 05N07E28CBA1         | 110ALVM      | 35.022589 | -90.361069 | 201                   | 120        | Apr 6 2020      | 10.39         | 12.73         | 12.73                | 13.56         | 2.34                       | 8.31                       | 3.17                        | -8.01                      | 133.78                 | 123.39                   | 92.23%      |
| Crittenden        | 05N07E348AB1         | 110ALVM      | 35.016497 | -90.341628 | 203                   | 100        | Apr 6 2020      | 7.18          | 8.41          | 14.25                | 13.54         | 1.23                       | 7.07                       | 6.36                        | -10.57                     | 136.18                 | 129.00                   | 94.73%      |
| Crittenden        | 05N07E34CDD1         | 110ALVM      | 35.009069 | -90.333592 | 205                   | 110        | Apr 6 2020      | 8.59          | 1.95          | 1.95                 |               | -6.64                      |                            |                             | -10.46                     | 138.00                 | 129.41                   | 93.78%      |
| Crittenden        | 06N07E14ABA1         | 110ALVM      | 35.146758 | -90.316209 | 211                   | 110        | Apr 21 2020     | 17.28         | 27.80         |                      |               | 10.52                      |                            |                             |                            | 125.00                 | 107.72                   | 86.18%      |
| Crittenden        | 07N06E19CC1          | 110ALVM      | 35.216097 | -90.501472 | 210.00                | 121        | Apr 21 2020     | 43.66         | 45.85         |                      |               | 2.19                       |                            |                             | 3.51                       | 141                    | 97.34                    | 69.04%      |
| Crittenden        | 07N06E24DCC1         | 110ALVM      | 35.210450 | -90.416947 | 210                   |            | Apr 21 2020     | 40.69         | 39.40         |                      |               | -1.29                      |                            |                             | -1.69                      | 136                    | 95.31                    | 70.08%      |
| Crittenden        | 07N07E05DAD1         | 110ALVM      | 35.251199 | -90.358155 | 215                   | 132        | Apr 8 2020      | 29.4          | 30.60         | 32.10                | 30.12         | 1.20                       | 2.70                       | 0.72                        | -12.88                     | 143                    | 113.60                   | 79.44%      |
| Crittenden        | 07N07E31CCC1         | 110ALVM      | 35.178306 | -90.399714 | 207                   | 110        | Apr 9 2020      | 33.79         | 36.14         | 37.10                | 34.12         | 2.35                       | 3.31                       | 0.33                        | -1.95                      | 136.61                 | 102.82                   | 75.27%      |
| Crittenden        | 07N08E04BBD1         | 110ALVM      | 35.255969 | -90.240928 | 224                   | 120        | Apr 10 2020     | 16.08         | 19.10         |                      |               | 3.02                       |                            |                             | -2.65                      | 138                    | 121.92                   | 88.35%      |
| Crittenden        | 08N06E01DCC1         | 110ALVM      | 35.336425 | -90.410736 | 215                   | 120        | Apr 8 2020      | 30.6          | 33.00         |                      |               | 2.40                       |                            |                             | -2.56                      | 123.00                 | 92.40                    | 75.12%      |
| Crittenden        | 08N06E26BBA1         | 110ALVM      | 35.293611 | -90.431111 | 215                   | 120        | Apr 8 2020      | 30.89         | 32.49         |                      |               | 1.60                       |                            |                             | -2.25                      | 124.00                 | 93.11                    | 75.09%      |
| Crittenden        | 08N07E32DAA1         | 110ALVM      | 35.270092 | -90.362150 | 215                   | 110        | Apr 8 2020      | 24.81         | 25.00         |                      |               | 0.19                       |                            |                             | -6.69                      | 138.20                 | 113.39                   | 82.05%      |
| Crittenden        | 08N07E34BD1          | 110ALVM      | 35.336336 | -90.271652 | 220                   | 110        | Apr 10 2020     | 23.99         | 26.75         |                      |               | 2.76                       |                            |                             | -4.9                       | 133.00                 | 109.01                   | 81.96%      |
| Crittenden        | 08N07E35B8C1         | 100ALVM      | 35.275000 | -90.325833 | 222                   |            | Apr 10 2020     | 29.89         | 32.35         | 33.17                | 31.34         | 2.46                       | 3.28                       | 1.45                        | -1.49                      | 145                    | 115.11                   | 79.39%      |
| Crittenden        | 08N08E06ABB1         | 110ALVM      | 35.350919 | -90.278986 |                       | 120        | Apr 10 2020     | 27.01         |               |                      |               |                            |                            |                             | -2.97                      | 131                    | 103.99                   | 79.38%      |
| Crittenden        | 09N05E29DA1          | 110ALVM      | 35.373275 | -90.493250 | 213                   |            | Apr 21 2020     | 34.52         |               |                      |               |                            |                            |                             | 4.62                       | 118                    | 83.48                    | 70.75%      |
| Crittenden        | 09N06E30ADD1         | 110ALVM      | 35.376656 | -90.484167 | 214                   |            | Apr 7 2020      | 31.33         | 29.50         |                      |               | -1.83                      |                            |                             | 0.23                       | 118.00                 | 86.67                    | 73.45%      |
| Crittenden        | 09N07E02CDB1         | 110ALVM      | 35.424122 | -90.323381 | 225                   | 130        | Apr 14 2020     | 29.1          | 31.40         |                      |               | 2.30                       |                            |                             | 2.92                       | 126.00                 | 96.90                    | 76.90%      |
| Crittenden        | 09N07E10DDA1         | 110ALVM      | 35.413217 | -90.323511 | 221                   | 60         | Apr 14 2020     | 25.87         | 28.53         | 30.04                | 29.05         | 2.66                       | 4.17                       | 3.18                        | -2.36                      | 124.88                 | 99.01                    | 79.28%      |
| Crittenden        | 09N07E20DCC1         | 110ALVM      | 35.382222 | -90.366111 | 213                   |            | Apr 8 2020      | 28.51         | 30.65         | 30.44                |               | 2.14                       | 1.93                       |                             | -2.14                      | 118.00                 | 89.49                    | 75.84%      |
| Crittenden        | 09N07E30CCD1         | 110ALVM      | 35.367253 | -90.390967 | 215                   |            | Apr 21 2020     | 33.63         | 34.20         |                      |               | 0.57                       |                            |                             | -0.25                      | 116                    | 82.37                    | 71.01%      |
| Crittenden        | 09N07E31BAB1         | 110ALVM      | 35.366625 | -90.390714 | 221                   | 110        | Apr 8 2020      | 32.19         | 32.96         |                      | 33.83         | 0.77                       |                            | 1.64                        |                            | 124.70                 | 92.51                    | 74.19%      |
| Crittenden        | 09N08E17ABA1         | 110ALVM      | 35.408794 | -90.254967 | 224                   | 120        | Apr 10 2020     | 20.18         | 23.40         |                      |               | 3.22                       |                            |                             |                            | 139.00                 | 118.82                   | 85.48%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 | 3             | 0             | Average % Saturated: |               |                            | 79.81%                     |                             |                            |                        |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 | 22            | 7             | Min % Saturated:     |               |                            | 69.04%                     |                             |                            |                        |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 | 1.94          | 4.40          | Max % Saturated:     |               |                            | 94.73%                     |                             |                            |                        |                          |             |



| County | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|--------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Cross  | 06N02E11B0B1         | 110ALVM      | 35.159534 | -90.859004 | 200                   |            | Apr 8 2020      | 69.53         |               | 69.50         |               |                            | -0.03                      |                             | -14.89                     | 152.00                 | 82.47                    | 54.26%      |
| Cross  | 06N05E05AAA1         | 110ALVM      | 35.178423 | -90.575661 | 205                   | 130        | Apr 15 2020     | 42.15         |               | 42.00         |               |                            | -0.15                      |                             | 2.78                       | 148.00                 | 105.85                   | 71.52%      |
| Cross  | 07N01E06ACC1         | 110ALVM      | 35.263194 | -91.026250 |                       |            | Apr 6 2020      | 79.29         |               |               |               |                            |                            |                             | -1.78                      | 141                    | 61.71                    | 43.77%      |
| Cross  | 07N01E11AAA1         | 110ALVM      | 35.250347 | -90.951469 | 217                   | 120        | Apr 6 2020      | 83.53         | 85.13         | 83.61         | 78.92         | 1.60                       | 0.08                       | -4.61                       | -1.68                      | 146                    | 62.47                    | 42.79%      |
| Cross  | 07N02E02CDD1         | 110ALVM      | 35.252222 | -90.853611 | 225                   | 149.9      | Apr 8 2020      | 86.49         | 87.10         | 86.55         | 83.33         | 0.61                       | 0.06                       | -3.16                       |                            | 109                    | 22.51                    | 20.65%      |
| Cross  | 07N02E29CC1          | 110ALVM      | 35.195089 | -90.864560 |                       |            | Apr 14 2020     | 89.71         |               | 75.00         |               |                            | -14.71                     |                             | 2.55                       | 150                    | 60.29                    | 40.19%      |
| Cross  | 07N02E29DDC1         | 110ALVM      | 35.193914 | -90.902547 | 220                   | 100        | Apr 8 2020      | 76.9          | 77.70         | 76.85         | 73.13         | 0.80                       | -0.37                      | -0.65                       | -1.44                      | 151                    | 74.10                    | 49.07%      |
| Cross  | 07N03E32DC1          | 110ALVM      | 35.179247 | -90.802856 | 251                   |            | Apr 8 2020      | 100.98        | 104.67        | 103.99        | 97.07         | 3.69                       | 3.01                       | -3.91                       |                            | 153                    | 52.02                    | 34.00%      |
| Cross  | 07N04E03BDA1         | 110ALVM      | 35.262866 | -90.657054 | 205                   |            | Apr 15 2020     | 32.66         |               | 31.80         |               |                            | -0.86                      |                             | 1.33                       | 69.00                  | 36.34                    | 52.67%      |
| Cross  | 07N05E02AAB1         | 110ALVM      | 35.266754 | -90.517604 | 210                   |            | Apr 15 2020     | 45.23         |               | 43.70         |               |                            | -1.53                      |                             | 4.73                       | 141.00                 | 95.77                    | 67.92%      |
| Cross  | 07N05E16EAC1         | 110ALVM      | 35.232866 | -90.564550 | 210                   |            | Apr 7 2020      | 32.14         |               | 36.00         |               |                            | 3.86                       |                             | 1.09                       | 157.00                 | 124.86                   | 79.53%      |
| Cross  | 07N05E25ABA1         | 110ALVM      | 35.208019 | -90.512442 | 205                   | 140        | Apr 9 2020      | 34.51         | 36.80         | 39.68         | 38.50         | 2.29                       | 5.17                       | -2.44                       | -2.44                      | 143                    | 108.49                   | 75.87%      |
| Cross  | 08N01E02CA1          | 110ALVM      | 35.345569 | -90.970049 | 230                   |            | Apr 14 2020     | 100.55        |               | 93            |               |                            | -7.55                      |                             | -0.57                      | 150                    | 49.45                    | 32.97%      |
| Cross  | 08N01E16DBB1         | 112TRRC      | 35.316339 | -90.994339 | 225                   | 140        | Apr 8 2020      | 93.58         |               | 90.50         |               |                            | -3.08                      |                             | -3.13                      | 148.00                 | 54.42                    | 36.77%      |
| Cross  | 08N01E17CAD1         | 110ALVM      | 35.314530 | -91.012898 | 220                   |            | Apr 8 2020      | 86.45         |               | 79.50         |               |                            | -6.95                      |                             | -1.28                      | 145                    | 58.55                    | 40.38%      |
| Cross  | 08N02E17AAB1         | 112TRRC      | 35.323142 | -90.898450 | 225                   |            | Apr 8 2020      | 92.69         |               | 99.50         |               |                            | 6.81                       |                             | -0.91                      | 137.00                 | 44.31                    | 32.34%      |
| Cross  | 08N05E32ADD1         | 110ALVM      | 35.275458 | -90.577903 | 204                   |            | Apr 7 2020      | 21.2          | 20.83         | 31.81         | 29.38         | -0.37                      | 10.61                      | 8.18                        | -3.97                      | 138                    | 116.80                   | 84.64%      |
| Cross  | 09N01E04ACD1         | 112TRRC      | 35.438111 | -90.987000 | 225                   | 140        | Apr 14 2020     | 101.31        |               | 94.20         |               |                            | -7.11                      | -1                          |                            | 148.00                 | 46.69                    | 31.55%      |
| Cross  | 09N01E36AAB1         | 112TRRC      | 35.365363 | -90.934840 | 225                   | 160        | Apr 14 2020     | 101.62        |               | 96.00         |               |                            | -5.62                      | 1                           |                            | 147.00                 | 45.38                    | 30.87%      |
| Cross  | 09N02E20AAA1         | 112TRRC      | 35.400640 | -90.895117 | 230                   | 154        | Apr 9 2020      | 102.03        |               | 98.30         |               |                            | -3.73                      | -29.59                      |                            | 150.00                 | 47.97                    | 31.98%      |
| Cross  | 09N05E32BCB1         | 110ALVM      | 35.364252 | -90.590385 | 210                   |            | Apr 15 2020     | 31.52         |               | 30.00         |               |                            | -1.52                      | 4.33                        |                            | 104.00                 | 72.48                    | 69.69%      |
| Cross  | 09N05E32BDB1         | 110ALVM      | 35.364036 | -90.586697 | 210                   |            | Apr 7 2020      | 24.2          | 25.94         | 29.15         | 30.30         | 1.74                       | 4.95                       | 6.10                        |                            | 121.00                 | 96.80                    | 80.00%      |
| Desha  | 07501E19ABA1         | 110ALVM      | 34.075861 | -91.049250 | 154                   | 120        | Apr 28 2020     | 6.6           | 6.08          | 10.50         |               | -0.52                      | 3.90                       |                             | -15.28                     | 96.40                  | 89.80                    | 93.15%      |
| Desha  | 08503W33ABD1         | 110ALVM      | 33.967478 | -91.393939 | 165.04                | 60         | Apr 9 2020      | 3.81          | 8.00          | 8.21          | 5.35          | 4.19                       | 4.40                       | 1.54                        |                            | 147.00                 | 143.19                   | 97.41%      |
| Desha  | 09501W08BDA1         | 110ALVM      | 33.935439 | -91.209481 | 156                   | 100        | Apr 2 2020      | 18.56         |               |               |               |                            |                            |                             |                            | 137.00                 | 118.44                   | 86.45%      |
| Desha  | 09502W26DDC1         | 110ALVM      | 33.882381 | -91.258233 | 149.27                | 97         | May 1 2020      | 26.96         | 31.54         | 33.82         | 26.57         | 4.58                       | 6.86                       | -0.39                       |                            | 138.80                 | 111.84                   | 80.58%      |
| Desha  | 09503W05BAC1         | 110ALVM      | 33.951213 | -91.418454 | 161                   |            | Apr 2 2020      | 41.25         |               |               |               |                            |                            |                             |                            | 144.00                 | 102.75                   | 71.35%      |
| Desha  | 09503W13BAB1         | 110ALVM      | 33.916800 | -91.322872 | 156                   |            | Apr 9 2020      | 38.88         |               |               |               |                            |                            | 4.6                         |                            | 130.00                 | 91.12                    | 70.09%      |
| Desha  | 09503W17DCB1         | 110ALVM      | 33.913397 | -91.415739 | 155.08                | 126        | Apr 14 2020     | 37.68         | 37.61         | 38.22         | 34.56         | -0.07                      | 0.54                       | -3.12                       |                            | 137.00                 | 99.32                    | 72.50%      |
| Desha  | 10501W23CDA1         | 110ALVM      | 33.884828 | -91.175669 | 151                   |            | Apr 2 2020      | 24.31         |               |               |               |                            |                            |                             |                            | 140.00                 | 115.69                   | 82.64%      |
| Desha  | 10502W20ADA1         | 110ALVM      | 33.821111 | -91.306944 | 148                   | 93.8       | Apr 14 2020     | 44.66         | 44.83         | 42.32         | 40.05         | 0.17                       | -2.34                      | -4.61                       | 0.12                       | 126.26                 | 81.60                    | 64.63%      |
| Desha  | 10504W03BAB1         | 110ALVM      | 33.869058 | -91.496571 | 166                   | 100        | Apr 13 2020     | 41.13         |               |               |               |                            |                            | -0.65                       | -143.00                    | 101.87                 | 71.24%                   |             |
| Desha  | 10504W12CCB1         | 110ALVM      | 33.846667 | -91.465000 | 155                   |            | Apr 13 2020     | 37.76         | 38.17         | 38.00         |               | 0.41                       | 0.24                       | -0.43                       |                            | 136.00                 | 98.24                    | 72.24%      |
| Desha  | 11502W15ADD1         | 110ALVM      | 33.746218 | -91.276505 | 148                   |            | Apr 8 2020      | 36.42         |               |               |               |                            |                            |                             |                            | 112.00                 | 75.58                    | 67.48%      |
| Desha  | 11503W16CBA1         | 110ALVM      | 33.744274 | -91.409287 | 155                   |            | Apr 8 2020      | 42.19         |               |               |               |                            |                            |                             |                            | 117.00                 | 74.81                    | 63.94%      |
| Desha  | 11503W31BBA1         | 110ALVM      | 33.707839 | -91.447528 | 148                   | 100        | Apr 7 2020      | 33.91         |               | 35.99         |               |                            |                            | 2.08                        | -0.77                      | 113.00                 | 79.09                    | 69.99%      |
| Desha  | 13502W27CAC1         | 110ALVM      | 33.539997 | -91.292989 | 133                   | 120        | Apr 6 2020      | 33.59         | 32.83         | 33.95         | 30.06         | -0.76                      | 0.36                       | -3.53                       | -0.51                      | 89.00                  | 55.41                    | 62.26%      |
| Desha  | 13503W11CAB1         | 110ALVM      | 33.584278 | -91.378174 | 142                   | 86         | Apr 2 2020      | 59.42         |               |               |               |                            |                            |                             |                            | 93.00                  | 33.58                    | 36.11%      |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |

| County | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|--------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Cross  | 06N02E11B0B1         | 110ALVM      | 35.159534 | -90.859004 | 200                   |            | Apr 8 2020      | 69.53         |               | 69.50         |               |                            | -0.03                      |                             | -14.89                     | 152.00                 | 82.47                    | 54.26%      |
| Cross  | 06N05E05AAA1         | 110ALVM      | 35.178423 | -90.575661 | 205                   | 130        | Apr 15 2020     | 42.15         |               | 42.00         |               |                            | -0.15                      |                             | 2.78                       | 148.00                 | 105.85                   | 71.52%      |
| Cross  | 07N01E06ACC1         | 110ALVM      | 35.263194 | -91.026250 |                       |            | Apr 6 2020      | 79.29         |               |               |               |                            |                            |                             | -1.78                      | 141                    | 61.71                    | 43.77%      |
| Cross  | 07N01E11AAA1         | 110ALVM      | 35.250347 | -90.951469 | 217                   | 120        | Apr 6 2020      | 83.53         | 85.13         | 83.61         | 78.92         | 1.60                       | 0.08                       | -4.61                       | -1.68                      | 146                    | 62.47                    | 42.79%      |
| Cross  | 07N02E02CDD1         | 110ALVM      | 35.252222 | -90.853611 | 225                   | 149.9      | Apr 8 2020      | 86.49         | 87.10         | 86.55         | 83.33         | 0.61                       | 0.06                       | -3.16                       |                            | 109                    | 22.51                    | 20.65%      |
| Cross  | 07N02E29CC1          | 110ALVM      | 35.195089 | -90.864560 |                       |            | Apr 14 2020     | 89.71         |               | 75.00         |               |                            | -14.71                     |                             | 2.55                       | 150                    | 60.29                    | 40.19%      |
| Cross  | 07N02E29DDC1         | 110ALVM      | 35.193914 | -90.902547 | 220                   | 100        | Apr 8 2020      | 76.9          | 77.70         | 76.85         | 73.13         | 0.80                       | -0.37                      | -3.77                       | -0.65                      | 151                    | 74.10                    | 49.07%      |
| Cross  | 07N03E32DC1          | 110ALVM      | 35.179247 | -90.802856 | 251                   |            | Apr 8 2020      | 100.98        | 104.67        | 103.99        | 97.07         | 3.69                       | 3.01                       | -3.91                       | -1.44                      | 153                    | 52.02                    | 34.00%      |
| Cross  | 07N04E03BDA1         | 110ALVM      | 35.262866 | -90.657054 | 205                   |            | Apr 15 2020     | 32.66         |               | 31.80         |               |                            | -0.86                      |                             | 1.33                       | 69.00                  | 36.34                    | 52.67%      |
| Cross  | 07N05E02AAB1         | 110ALVM      | 35.266754 | -90.517604 | 210                   |            | Apr 15 2020     | 45.23         |               | 43.70         |               |                            | -1.53                      |                             | 4.73                       | 141.00                 | 95.77                    | 67.92%      |
| Cross  | 07N05E16EAC1         | 110ALVM      | 35.232866 | -90.564550 | 210                   |            | Apr 7 2020      | 32.14         |               | 36.00         |               |                            | 3.86                       |                             | 1.09                       | 157.00                 | 124.86                   | 79.53%      |
| Cross  | 07N05E25ABA1         | 110ALVM      | 35.208019 | -90.512442 | 205                   | 140        | Apr 9 2020      | 34.51         | 36.80         | 39.68         | 38.50         | 2.29                       | 5.17                       | 3.99                        | -2.44                      | 143                    | 108.49                   | 75.87%      |
| Cross  | 08N01E02CA1          | 110ALVM      | 35.345569 | -90.970049 | 230                   |            | Apr 14 2020     | 100.55        |               | 93            |               |                            | -7.55                      |                             | -0.57                      | 150                    | 49.45                    | 32.97%      |
| Cross  | 08N01E16DBB1         | 112TRRC      | 35.316339 | -90.994339 | 225                   | 140        | Apr 8 2020      | 93.58         |               | 90.50         |               |                            | -3.08                      |                             | -3.13                      | 148.00                 | 54.42                    | 36.77%      |
| Cross  | 08N01E17CAD1         | 110ALVM      | 35.314530 | -91.012898 | 220                   |            | Apr 8 2020      | 86.45         |               | 79.50         |               |                            | -6.95                      |                             | -1.28                      | 145                    | 58.55                    | 40.38%      |
| Cross  | 08N02E17AAB1         | 112TRRC      | 35.323142 | -90.898450 | 225                   |            | Apr 8 2020      | 92.69         |               | 99.50         |               |                            | 6.81                       |                             | -0.91                      | 137.00                 | 44.31                    | 32.34%      |
| Cross  | 08N05E32ADD1         | 110ALVM      | 35.275458 | -90.577903 | 204                   |            | Apr 7 2020      | 21.2          | 20.83         | 31.81         | 29.38         | -0.37                      | 10.61                      | 8.18                        | -3.97                      | 138                    | 116.80                   | 84.64%      |
| Cross  | 09N01E04ACD1         | 112TRRC      | 35.438111 | -90.987000 | 225                   | 140        | Apr 14 2020     | 101.31        |               | 94.20         |               |                            | -7.11                      |                             | -1                         | 148.00                 | 46.69                    | 31.55%      |
| Cross  | 09N01E36AAB1         | 112TRRC      | 35.365363 | -90.934840 | 225                   | 160        | Apr 14 2020     | 101.62        |               | 96.00         |               |                            | -5.62                      |                             | 1                          | 147.00                 | 45.38                    | 30.87%      |
| Cross  | 09N02E20AAA1         | 112TRRC      | 35.400640 | -90.895117 | 230                   | 154        | Apr 9 2020      | 102.03        |               | 98.30         |               |                            | -3.73                      |                             | -29.59                     | 150.00                 | 47.97                    | 31.98%      |
| Cross  | 09N05E32BCB1         | 110ALVM      | 35.364252 | -90.590385 | 210                   |            | Apr 15 2020     | 31.52         |               | 30.00         |               |                            | -1.52                      |                             | 4.33                       | 104.00                 | 72.48                    | 69.69%      |
| Cross  | 09N05E32BDB1         | 110ALVM      | 35.364036 | -90.586697 | 210                   |            | Apr 7 2020      | 24.2          | 25.94         | 29.15         | 30.30         | 1.74                       | 4.95                       | 6.10                        |                            | 121.00                 | 96.80                    | 80.00%      |
| Desha  | 07501E19ABA1         | 110ALVM      | 34.075861 | -91.049250 | 154                   | 120        | Apr 28 2020     | 6.6           | 6.08          | 10.50         |               | -0.52                      | 3.90                       |                             | -15.28                     | 96.40                  | 89.80                    | 93.15%      |
| Desha  | 08503W33ABD1         | 110ALVM      | 33.967478 | -91.393939 | 165.04                | 60         | Apr 9 2020      | 3.81          | 8.00          | 8.21          | 5.35          | 4.19                       | 4.40                       | 1.54                        |                            | 147.00                 | 143.19                   | 97.41%      |
| Desha  | 09501W08BDA1         | 110ALVM      | 33.935439 | -91.209481 | 156                   | 100        | Apr 2 2020      | 18.56         |               |               |               |                            |                            |                             |                            | 137.00                 | 118.44                   | 86.45%      |
| Desha  | 09502W26DDC1         | 110ALVM      | 33.882381 | -91.258233 | 149.27                | 97         | May 1 2020      | 26.96         | 31.54         | 33.82         | 26.57         | 4.58                       | 6.86                       | -0.39                       |                            | 138.80                 | 111.84                   | 80.58%      |
| Desha  | 09503W05BAC1         | 110ALVM      | 33.951213 | -91.418454 | 161                   |            | Apr 2 2020      | 41.25         |               |               |               |                            |                            |                             |                            | 144.00                 | 102.75                   | 71.35%      |
| Desha  | 09503W13BAB1         | 110ALVM      | 33.916800 | -91.322872 | 156                   |            | Apr 9 2020      | 38.88         |               |               |               |                            |                            |                             | 4.6                        | 130.00                 | 91.12                    | 70.09%      |
| Desha  | 09503W17DCB1         | 110ALVM      | 33.913397 | -91.415739 | 155.08                | 126        | Apr 14 2020     | 37.68         | 37.61         | 38.22         | 34.56         | -0.07                      | 0.54                       | -3.12                       |                            | 137.00                 | 99.32                    | 72.50%      |
| Desha  | 10501W23CDA1         | 110ALVM      | 33.884828 | -91.175669 | 151                   |            | Apr 2 2020      | 24.31         |               |               |               |                            |                            |                             |                            | 140.00                 | 115.69                   | 82.64%      |
| Desha  | 10502W20ADA1         | 110ALVM      | 33.821111 | -91.306944 | 148                   | 93.8       | Apr 14 2020     | 44.66         | 44.83         | 42.32         | 40.05         | 0.17                       | -2.34                      | -4.61                       | 0.12                       | 126.26                 | 81.60                    | 64.63%      |
| Desha  | 10504W03BAB1         | 110ALVM      | 33.869058 | -91.496571 | 166                   | 100        | Apr 13 2020     | 41.13         |               |               |               |                            |                            |                             | -0.65                      | 143.00                 | 101.87                   | 71.24%      |
| Desha  | 10504W12CCB1         | 110ALVM      | 33.846667 | -91.465000 | 155                   |            | Apr 13 2020     | 37.76         | 38.17         | 38.00         |               | 0.41                       | 0.24                       | -0.43                       |                            | 136.00                 | 98.24                    | 72.24%      |
| Desha  | 11502W15ADD1         | 110ALVM      | 33.746218 | -91.276505 | 148                   |            | Apr 8 2020      | 36.42         |               |               |               |                            |                            |                             |                            | 112.00                 | 75.58                    | 67.48%      |
| Desha  | 11503W16CBA1         | 110ALVM      | 33.744274 | -91.409287 | 155                   |            | Apr 8 2020      | 42.19         |               |               |               |                            |                            |                             |                            | 117.00                 | 74.81                    | 63.94%      |
| Desha  | 11503W31BBA1         | 110ALVM      | 33.707839 | -91.447528 | 148                   | 100        | Apr 7 2020      | 33.91         |               | 35.99         |               |                            |                            | 2.08                        | -0.77                      | 113.00                 | 79.09                    | 69.99%      |
| Desha  | 13502W27CAC1         | 110ALVM      | 33.539997 | -91.292989 | 133                   | 120        | Apr 6 2020      | 33.59         | 32.83         | 33.95         | 30.06         | -0.76                      | 0.36                       | -3.53                       | -0.51                      | 89.00                  | 55.41                    | 62.26%      |
| Desha  | 13503W11CAB1         | 110ALVM      | 33.584278 | -91.378174 | 142                   | 86         | Apr 2 2020      | 59.42         |               |               |               |                            |                            |                             |                            | 93.00                  | 33.58                    | 36.11%      |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|        |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             | </                         |                        |                          |             |

Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft)   | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |        |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|-----------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|--------|
| Drew              | 11S04W08DBA1         | 11OALVM      | 33.758883 | -91.526722 | 160                   | 70         | Apr 8 2020      | 27.15         | 27.61         | 32.31         | 24.31           |                            |                            | -2.84                       |                            | 124.00                 | 96.85                    | 78.10%      |        |
| Drew              | 11S04W35CDD1         | 11OALVM      | 33.695556 | -91.478333 | 154                   | 93.7       | Apr 13 2020     | 26.34         |               | 32.31         | 24.94           | 1.27                       | 5.97                       | -1.40                       | -0.55                      | 114                    | 87.66                    | 76.89%      |        |
| Drew              | 11S05W08CCC1         | 11OALVM      | 33.762911 | -91.643656 | 185                   | 153        | Apr 8 2020      | 38.78         | 38.82         |               | 36.37           | 0.04                       |                            | -2.41                       | -0.01                      | 143.00                 | 104.22                   | 72.88%      |        |
| Drew              | 12S04W03AB81         | 11OALVM      | 33.692756 | -91.496147 | 155                   |            | Apr 7 2020      | 23.58         | 25.21         | 29.60         | 22.20           | 1.63                       | 6.02                       | -1.38                       | -1.3                       | 114.00                 | 90.42                    | 79.32%      |        |
| Drew              | 12S04W25DB81         | 11OALVM      | 33.628103 | -91.460964 | 149                   | 90         | Apr 7 2020      | 37.04         | 35.67         |               |                 | -1.37                      |                            |                             |                            | 104.00                 | 66.96                    | 64.38%      |        |
| Drew              | 13S04W09ACD1         | 11OALVM      | 33.589814 | -91.513294 | 145                   | 90         | Apr 7 2020      | 29.16         | 27.81         |               |                 | -1.35                      |                            |                             |                            | 100.60                 | 71.44                    | 71.01%      |        |
| Drew              | 13S04W32BAD1         | 11OALVM      | 33.525089 | -91.532772 | 134                   |            | Apr 7 2020      | 14.09         |               |               |                 |                            |                            |                             |                            | 87                     | 72.91                    | 83.80%      |        |
| Drew              | 13S04W33BAA1         | 11OALVM      | 33.534914 | -91.517347 | 138                   | 130        | Apr 6 2020      | 15.16         | 19.38         | 23.25         | 17.27           | 4.22                       | 8.09                       | 2.11                        |                            | 89.00                  | 73.84                    | 82.97%      |        |
| Drew              | 14S04W03ADD1         | 11OALVM      | 33.511903 | -91.493486 | 141                   | 100        | Apr 6 2020      | 23.06         | 31.46         |               |                 | 8.40                       |                            |                             | -3.76                      | 88.00                  | 64.94                    | 73.80%      |        |
| Drew              | 14S04W05CBA1         | 11OALVM      | 33.526061 | -91.559931 | 131                   | 90         | Apr 6 2020      | 11.38         | 13.21         |               |                 | 1.83                       |                            |                             |                            | 86.50                  | 75.12                    | 86.84%      |        |
| Drew              | 14S04W05CBC1         | 11OALVM      | 33.510944 | -91.538528 | 131                   | 90         | Apr 7 2020      | 11.07         | 14.21         |               |                 | 3.14                       |                            |                             |                            | 85.00                  | 73.93                    | 86.98%      |        |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | 2 0 4                      |                             | 9 3 5                      |                        | Average % Saturated:     |             | 77.91% |
|                   |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | 1.98 6.69 -1.18            |                             | 4 4                        |                        | Min % Saturated:         |             | 64.38% |
|                   |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | -0.76 -2.25 -3.12          |                             | 15.88 0.23 -3.58           |                        | Max % Saturated:         |             | 86.98% |
| Greene            | 16N03E03BA1          | 11OALVM      | 36.054408 | -90.754403 | 260                   | 100        | Apr 23 2020     | 35.65         | 33.40         | 34.89         | 32.53           | -2.25                      | -0.76                      | -3.12                       | 15.88                      | 124.36                 | 88.71                    | 71.33%      |        |
| Greene            | 16N03E16DDD1         | 11OALVM      | 36.013682 | -90.763170 | 258                   | 100        | Apr 7 2020      | 34.76         |               | 37.00         |                 | 2.24                       |                            |                             | 0.23                       | 113.52                 | 78.76                    | 69.38%      |        |
| Greene            | 16N03E20CDA1         | 11OALVM      | 35.999167 | -90.795000 |                       | 150        | Apr 7 2020      | 34.89         |               | 37.50         |                 | 2.61                       |                            |                             |                            | 109.32                 | 74.43                    | 68.08%      |        |
| Greene            | 16N06E218AA1         | 112TRC       | 36.008681 | -90.451494 | 249                   | 130        | Apr 20 2020     | 20.1          |               | 32.40         |                 | 12.30                      |                            |                             | -13.81                     | 80.35                  | 60.25                    | 74.99%      |        |
| Greene            | 16N06E22DA1          | 11OALVM      | 36.001250 | -90.427969 | 243                   |            | Apr 17 2020     | 13.02         |               |               |                 |                            |                            |                             |                            | 74                     | 60.98                    | 82.41%      |        |
| Greene            | 17N03E02BDB1         | 11OALVM      | 36.142211 | -90.737042 | 266                   | 115        | Apr 10 2020     | 33.99         |               |               |                 |                            |                            |                             | -1.19                      | 122                    | 88.01                    | 72.14%      |        |
| Greene            | 17N03E02DCC1         | 11OALVM      | 36.138661 | -90.732492 | 267                   | 100        | Apr 10 2020     | 33.98         |               | 38.30         |                 | 4.32                       |                            |                             | -3.68                      | 135.60                 | 101.62                   | 74.94%      |        |
| Greene            | 17N03E32CDC1         | 11OALVM      | 36.054792 | -90.793171 |                       | 100        | Apr 7 2020      | 34.35         |               | 36.10         |                 | 1.75                       |                            |                             | -3.38                      | 118.47                 | 84.12                    | 71.01%      |        |
| Greene            | 17N03E35CB1          | 11OALVM      | 36.063125 | -90.743725 | 259                   | 100        | Apr 7 2020      | 36.32         |               | 39.60         |                 | 3.28                       |                            |                             | -3.91                      | 121.87                 | 85.55                    | 70.20%      |        |
| Greene            | 17N04E28DA1          | 11OALVM      | 36.075278 | -90.654722 | 319                   | 121.2      | Apr 7 2020      | 93.2          | 88.80         | 90.89         | 88.53           | -4.40                      | -2.31                      | -4.67                       | 6.02                       | 97.10                  | 3.90                     | 4.02%       |        |
| Greene            | 17N04E30CDC1         | 11OALVM      | 36.069564 | -90.705217 | 265                   | 100        | Apr 7 2020      | 42.35         |               |               | 39.42           |                            | -2.93                      |                             | -2.29                      | 127.00                 | 84.65                    | 66.65%      |        |
| Greene            | 17N06E02AD1          | 11OALVM      | 36.136953 | -90.402603 | 258                   |            | Apr 17 2020     | 20.99         |               |               |                 |                            |                            |                             |                            | 110                    | 89.01                    | 80.92%      |        |
| Greene            | 17N06E08AC1          | 11OALVM      | 36.120809 | -90.465319 | 284                   |            | Apr 27 2020     | 3             |               |               |                 |                            |                            |                             | -8.2                       | 134                    | 131.00                   | 97.76%      |        |
| Greene            | 17N06E11ADC1         | 11OALVM      | 36.118175 | -90.406539 | 255                   |            | Apr 17 2020     | 28.37         |               |               |                 |                            |                            |                             |                            | 106                    | 77.63                    | 73.24%      |        |
| Greene            | 17N06E11DA1          | 11OALVM      | 36.118175 | -90.406539 | 255                   |            | Apr 17 2020     | 28.01         |               |               |                 |                            |                            |                             |                            | 106                    | 77.99                    | 73.58%      |        |
| Greene            | 17N06E15AB1          | 112TRC       | 36.108678 | -90.429549 | 268                   | 168        | Apr 27 2020     | 33.1          |               | 35.20         |                 | 2.10                       |                            |                             | -5                         | 106.31                 | 73.21                    | 68.86%      |        |
| Greene            | 17N07E018BA1         | 11OALVM      | 36.142288 | -90.290100 | 248                   | 100        | Apr 13 2020     | 3.65          |               | 4.60          |                 | 0.95                       |                            |                             | -1.93                      | 125.17                 | 121.52                   | 97.08%      |        |
| Greene            | 17N07E03CCC1         | 112TRC       | 36.127083 | -90.329139 | 246                   | 87         | Apr 20 2020     | 7.02          |               | 4.60          |                 | -2.42                      |                            |                             | 0.01                       | 116                    | 108.98                   | 93.95%      |        |
| Greene            | 17N07E18AB81         | 11OALVM      | 36.110689 | -90.376314 | 245                   |            | Apr 13 2020     | 1.24          |               |               | 6.89            |                            | 5.65                       |                             | 1.05                       | 101                    | 99.76                    | 98.77%      |        |
| Greene            | 17N07E28CBA1         | 11OALVM      | 36.073333 | -90.345833 | 245                   | 100        | Apr 13 2020     | 4.23          |               | 4.30          |                 | 0.07                       |                            |                             | -1.98                      | 113.59                 | 109.36                   | 96.28%      |        |
| Greene            | 18N03E24ACA1         | 11OALVM      | 36.188678 | -90.704557 | 271                   | 120        | Apr 20 2020     | 33.4          |               | 35.60         |                 | 2.20                       |                            |                             | -1.13                      | 135.13                 | 101.73                   | 75.28%      |        |
| Greene            | 18N04E04AAC1         | 11OALVM      | 36.236619 | -90.646589 | 273                   | 127        | Apr 9 2020      | 32.86         |               |               |                 |                            |                            |                             | -0.58                      | 128.00                 | 95.14                    | 74.33%      |        |
| Greene            | 18N06E26CD2          | 11OALVM      | 36.158231 | -90.403750 | 264                   |            | Apr 17 2020     | 15.33         |               |               |                 |                            |                            |                             |                            | 119                    | 103.67                   | 87.12%      |        |
| Greene            | 18N06E26CDD1         | 112TRC       | 36.158400 | -90.403689 | 272                   |            | Apr 13 2020     | 15.42         |               |               |                 |                            |                            |                             | -14.46                     | 119                    | 103.58                   | 87.04%      |        |
| Greene            | 18N07E05DAB1         | 11OALVM      | 36.220967 | -90.340633 | 275                   | 180        | Apr 20 2020     | 11.89         |               | 14.50         |                 | 2.61                       |                            |                             | -10.97                     | 114.02                 | 102.13                   | 89.57%      |        |
| Greene            | 18N07E17BAB1         | 112TRC       | 36.200769 | -90.351347 | 262                   | 100        | Apr 7 2020      | 13            |               | 9.30          |                 | -3.70                      |                            |                             | -6.69                      | 111.02                 | 98.02                    | 88.29%      |        |
| Greene            | 18N07E20BBA1         | 11OALVM      | 36.186214 | -90.353675 | 257                   |            | Apr 23 2020     | 5.89          | 8.50          | 9.95          | 2.08            | 2.61                       | 4.06                       | -3.81                       | -12.48                     | 113.12                 | 107.23                   | 94.79%      |        |
| Greene            | 19N03E26AD1          | 11OALVM      | 36.266867 | -90.716231 | 281                   | 100        | Apr 9 2020      | 27.88         | 33.62         | 30.50         | 28.51           | 5.74                       | 2.62                       | 0.63                        | -9.43                      | 143.03                 | 115.15                   | 80.51%      |        |
| Greene            | 19N03E33DD1          | 11OALVM      | 36.238419 | -90.753147 | 276                   | 100        | Apr 10 2020     | 35.16         | 37.70         |               |                 | 2.54                       |                            |                             | -1.45                      | 143.34                 | 108.18                   | 75.47%      |        |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | 2 4 4                      |                             | 19 6 24                    |                        | Average % Saturated:     |             | 77.86% |
|                   |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | 0.42 1.91 -1.38            |                             | 4 18 -3.46                 |                        | Min % Saturated:         |             | 4.02%  |
|                   |                      |              |           |            |                       |            |                 |               | Total Wells:  |               | Average Change: |                            | -0.76 -2.25 -3.12          |                             | 15.88 0.23 -3.58           |                        | Max % Saturated:         |             | 86.98% |

NATURAL RESOURCES  
DIVISION

| County       | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft)      | Saturated Thickness (ft)    | % Saturated             |        |
|--------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|-------------------------|--------|
| Independence | 11N04W22B8A          | 110ALVM      | 35.569167 | -91.418333 |                       | 51         | Apr 10 2020     | 0.75          | 6.80          |               |               |                            | 6.05                       |                             | -3.7                       | 121.23                      | 120.48                      | 99.38%                  |        |
|              | 12N04W14DD1          | 110ALVM      | 35.658172 | -91.376739 | 231                   | 60         | Apr 6 2020      | 12.5          | 16.26         | 22.53         | 16.54         | 3.76                       | 10.03                      | 4.04                        | -9.45                      | 60                          | 47.50                       | 79.17%                  |        |
|              | 12N04W34CBB1         | 110ALVM      | 35.622250 | -91.420139 | 231                   |            | Apr 6 2020      | 10.01         | 14.23         | 17.62         | 13.64         | 4.22                       | 7.61                       | 3.63                        | -8.89                      | 57                          | 46.99                       | 82.44%                  |        |
|              | 12N04W35CCB          | 110ALVM      | 35.619503 | -91.395400 | 238                   | 50         | Apr 6 2020      | 5.99          |               | 3.1           |               |                            | -2.89                      |                             |                            | 57                          | 51.01                       | 89.49%                  |        |
|              | 12N05W36AAA1         | 110ALVM      | 35.627233 | -91.474228 | 236                   |            | Apr 6 2020      | 14.05         | 16.46         | 20.12         |               | 2.41                       | 6.07                       |                             | -7.43                      | 132.91                      | 118.86                      | 89.43%                  |        |
|              | 14N03W14CB2          | 110ALVM      | 35.851389 | -91.283333 | 230                   |            | Apr 9 2020      | 2.4           |               | 2.1           |               | 0.45                       | -0.30                      |                             | -3.75                      | 103.12                      | 100.72                      | 97.67%                  |        |
| Independence | 14N03W14DBB1         | 110ALVM      | 35.851667 | -91.277894 | 230                   | 65         | Apr 9 2020      | 0.8           | 1.25          | 1.58          | 0.50          |                            | 0.78                       | -0.30                       |                            | 44                          | 43.20                       | 98.18%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 0                          | 2                          | 1                           | 5                          | Average % Saturated: 90.82% | 90.82%                      | 79.17%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 4                          | 7                          | 3                           | 5                          | Min % Saturated: 79.17%     | Max % Saturated: 99.38%     | 99.38%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 2.71                       | 3.91                       | 2.46                        | -6.64                      |                             |                             |                         |        |
| Jackson      | 09N02W32CB81         | 110ALVM      | 35.364386 | -91.229942 | 220                   | 117        | Apr 7 2020      | 28.46         | 29.88         | 31.71         | 26.95         | 1.42                       | 3.25                       | -1.51                       | -11.03                     | 135                         | 106.54                      | 78.92%                  |        |
|              | 10N01W32DDC1         | 110ALVM      | 35.444667 | -91.112778 |                       | 114        | Apr 9 2020      | 46.76         |               |               |               |                            |                            |                             | -1.74                      | 142                         | 95.24                       | 67.07%                  |        |
|              | 10N02W29AB81         | 112TRRC      | 35.474639 | -91.219961 | 227                   | 110        | Apr 10 2020     | 25.99         | 27.06         | 27.50         |               | 1.07                       | 1.51                       |                             | -1.1                       | 144                         | 118.01                      | 81.95%                  |        |
|              | 11N01W11CB81         | 110ALVM      | 35.597222 | -91.074444 |                       | 129.4      | Jun 5 2020      | 56.08         | 57.77         | 57.48         |               | 1.69                       | 1.40                       |                             |                            | 150                         | 93.92                       | 62.61%                  |        |
|              | 11N01W26AAD1         | 112TRRC      | 35.558269 | -91.056447 | 227                   | 100        | Apr 10 2020     | 72.38         |               | 72.70         | 68.95         |                            | 0.32                       | -3.43                       | -2.9                       | 138.36                      | 65.98                       | 47.69%                  |        |
|              | 11N03W05CAB1         | 110ALVM      | 35.615357 | -91.335685 | 225                   |            | Apr 13 2020     | 5.08          |               | 8             | 9.1           |                            | 2.92                       | 4.02                        | -11.43                     | 128.83                      | 123.75                      | 96.06%                  |        |
|              | 11N03W06DAB1         | 110ALVM      | 35.615314 | -91.335694 | 223                   | 100        | Apr 10 2020     | 6.41          | 8.52          | 8.01          | 20.80         | 2.11                       | 1.60                       | 14.39                       |                            | 68                          | 61.59                       | 90.57%                  |        |
|              | 12N01W11BCB1         | 112TRRC      | 35.690911 | -91.071234 | 233                   | 110        | Apr 13 2020     | 39.81         |               | 42.00         |               |                            | 2.19                       |                             | -1.49                      | 121.33                      | 81.52                       | 67.19%                  |        |
|              | 12N04W10H8C          | 110ALVM      | 35.685278 | -91.399167 | 234.78                | 60         | Apr 6 2020      | 13.27         |               | 24.70         |               | 11.43                      |                            |                             | -10.73                     | 124.27                      | 111.00                      | 89.32%                  |        |
|              | 13N01W20AAA1         | 110ALVM      | 35.753928 | -91.107631 | 242                   | 147        | Apr 21 2020     | 40.64         | 42.49         | 42.20         | 40.16         | 1.85                       | 1.56                       | -0.48                       | -1.42                      | 119                         | 78.36                       | 65.85%                  |        |
|              | 14N01W09AAA1         | 110ALVM      | 35.872322 | -91.087544 | 251                   | 125        | Apr 22 2020     | 45.11         | 46.28         | 47.38         | 42.70         | 1.17                       | 2.27                       | -2.41                       | 0.46                       | 97                          | 51.89                       | 53.49%                  |        |
|              | 14N02W21DAD1         | 110ALVM      | 35.834739 | -91.196531 | 243                   |            | Apr 8 2020      | 23.67         |               |               |               |                            |                            |                             |                            | 75                          | 51.33                       | 68.44%                  |        |
|              | 14N02W22B8C1         | 112TRRC      | 35.840631 | -91.195961 | 250                   | 94         | Apr 13 2020     | 23.19         | 27.10         |               |               |                            | 3.91                       |                             | -4.07                      | 114.11                      | 90.92                       | 79.68%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               |                            | 0                          | 0                           | 4                          | 9                           | Average % Saturated: 72.99% | 72.99%                  | 47.69% |
|              |                      |              |           |            |                       |            |                 |               |               |               |               |                            | 6                          | 11                          | 6                          | 10                          | Min % Saturated: 47.69%     | Max % Saturated: 96.06% | 96.06% |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 1.55                       | 2.94                       | 1.76                        | -4.55                      |                             |                             |                         |        |
| Jefferson    | 03S09W14CAC1         | 110ALVM      | 34.448753 | -91.954400 | 223                   |            | Apr 17 2020     | 45.9          |               |               |               |                            |                            |                             |                            | 122                         | 76.10                       | 62.38%                  |        |
|              | 03S09W22AAA1         | 110ALVM      | 34.444342 | -91.957897 | 218                   | 100        | Apr 17 2020     | 45.01         |               |               |               |                            |                            |                             |                            | 122                         | 76.99                       | 63.11%                  |        |
|              | 03S09W29CBD1         | 110ALVM      | 34.421336 | -92.006478 | 216                   | 110        | Apr 17 2020     | 25.1          |               | 28.93         | 24.79         |                            | 3.83                       | -0.31                       | -2.96                      | 111.00                      | 85.90                       | 77.39%                  |        |
|              | 03S09W36ACC1         | 110ALVM      | 34.407874 | -91.932082 | 214                   |            | Apr 20 2020     | 31.1          |               |               |               |                            |                            |                             |                            | 121.00                      | 89.90                       | 74.30%                  |        |
|              | 03S10W35B8C1         | 110ALVM      | 34.413639 | -92.066700 | 215                   | 70         | Apr 15 2020     | 17.3          |               |               |               |                            |                            |                             | -10.89                     | 107.90                      | 90.60                       | 83.97%                  |        |
|              | 04S07W35DDB1         | 110ALVM      | 34.309561 | -91.729481 | 185                   | 80         | Apr 17 2020     | 32.24         |               |               |               |                            |                            |                             | 0.29                       | 109.60                      | 77.36                       | 70.58%                  |        |
|              | 05S06W31BAD1         | 110ALVM      | 34.224722 | -91.698333 | 188                   |            | Apr 14 2020     | 9.19          |               |               |               |                            |                            |                             |                            | 112.00                      | 102.81                      | 91.79%                  |        |
|              | 05S07W29DD1          | 110ALVM      | 34.236256 | -91.781633 | 195                   | 110        | Apr 14 2020     | 13.09         |               |               |               |                            |                            |                             | -3.87                      | 113.00                      | 99.91                       | 88.42%                  |        |
|              | 06S05W15BCA1         | 110ALVM      | 34.173042 | -91.545833 | 177.14                | 120.2      | Apr 6 2020      | 11.89         |               | 16.91         | 12.14         |                            | 5.02                       | 0.25                        |                            | 132.00                      | 120.11                      | 90.99%                  |        |
|              | 06S06W23AAD1         | 110ALVM      | 34.168539 | -91.620056 | 189.01                | 107        | Apr 14 2020     | 10.2          | 14.81         | 19.30         | 11.93         | 4.61                       | 9.10                       | 1.73                        | -5.72                      | 122.00                      | 111.80                      | 91.64%                  |        |
|              | 06S07W02BCA1         | 110ALVM      | 34.215098 | -91.744019 | 102                   | 110        | Apr 14 2020     | 12.07         |               |               |               |                            |                            |                             | -3.73                      | 106.00                      | 93.93                       | 88.61%                  |        |
|              | 06S07W14BAA1         | 110ALVM      | 34.190267 | -91.740481 | 199                   | 110        | Apr 14 2020     | 7.63          | 16.50         | 15.95         | 7.62          | 8.87                       | 8.32                       | -0.01                       | -7.49                      | 111.00                      | 103.37                      | 93.13%                  |        |
|              | 07S07W16BA41         | 110ALVM      | 34.123511 | -91.807889 | 188                   | 95         | Apr 9 2020      | 19.37         |               |               |               |                            |                            |                             | -5.55                      | 126.50                      | 107.13                      | 84.69%                  |        |
|              | 07S08W06BAA1         | 110ALVM      | 34.149592 | -91.946461 | 202.31                | 100        | Apr 9 2020      | 12.91         | 15.29         | 20.58         | 17.59         | 2.38                       | 7.67                       | 4.68                        | -3.06                      | 111.00                      | 98.09                       | 88.37%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               |                            | 0                          | 0                           | 2                          | 8                           | Average % Saturated: 82.10% | 82.10%                  | 62.38% |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 3                          | 5                          | 5                           | 9                          | Min % Saturated: 62.38%     | Max % Saturated: 93.13%     | 93.13%                  |        |
|              |                      |              |           |            |                       |            |                 |               |               |               |               | 5.29                       | 6.79                       | 1.27                        | -4.78                      |                             |                             |                         |        |



Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft)      | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|--------------------------|-------------|
| Lawrence          | 15N01E26DDA1         | 110ALVM      | 35.900531 | -90.944261 | 251                   | 100        | Apr 22 2020     | 56.41         |               | 55.42         | 52.84         |                            | -0.99                      | -3.57                       | -2.42                      | 110.95                      | 54.54                    | 49.16%      |
| Lawrence          | 15N01E32BAA1         | 112TRRC      | 35.897778 | -91.007500 | 254                   | 133.5      | Jun 3 2020      | 57.46         |               | 58.78         | 54.17         |                            | 1.32                       | -3.29                       |                            | 120                         | 62.54                    | 52.12%      |
| Lawrence          | 15N01W35CBB1         | 110ALVM      | 35.893375 | -91.065647 | 250                   |            | Apr 22 2020     | 49.63         | 50.78         | 52.25         | 46.99         | 1.15                       | 2.62                       | -2.64                       | -0.82                      | 113.34                      | 63.71                    | 56.21%      |
| Lawrence          | 16N01W30DDC1         | 112TRRC      | 35.993592 | -91.123128 | 255                   | 105        | Apr 8 2020      | 11.05         |               | 20            | 16.3          |                            | 8.95                       | 5.25                        | -12.53                     | 113.59                      | 102.54                   | 90.27%      |
| Lawrence          | 17N01E02BBA1         | 112TRRC      | 36.150346 | -90.952065 | 260                   | 90         | Apr 9 2020      | 14.13         |               | 18.50         |               |                            | 4.37                       |                             | -2.13                      | 113.74                      | 119.61                   | 89.43%      |
| Lawrence          | 17N01W36AAB1         | 112TRRC      | 36.076459 | -91.032900 | 257                   | 85         | Apr 9 2020      | 10.94         |               |               |               |                            |                            |                             | -3.7                       | 125.40                      | 114.46                   | 91.28%      |
| Lawrence          | 17N02E04DCA1         | 112TRRC      | 36.132846 | -90.873451 | 270                   | 110        | Apr 9 2020      | 45.15         |               |               |               |                            |                            |                             | -2.35                      | 145.12                      | 99.97                    | 68.89%      |
| Lawrence          | 17N02E25CBB1         | 110ALVM      | 36.073125 | -90.830116 | 265                   | 100        | Apr 7 2020      | 44.24         |               | 41.20         |               |                            | -3.04                      |                             | -1.9                       | 132.21                      | 87.97                    | 66.54%      |
|                   |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                             |                          |             |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 0                          | 2                          | 3                           | 7                          | Average % Saturated: 70.49% |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 1                          | 6                          | 4                           | 7                          | Min % Saturated: 49.16%     |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 1.15                       | 2.21                       | -1.06                       | -3.69                      | Max % Saturated: 91.28%     |                          |             |
| Lee               | 01N01E04AAB1         | 110ALVM      | 34.732875 | -91.004285 | 175                   | 140        | Apr 27 2020     | 32.4          |               | 48.00         |               |                            | 15.60                      |                             |                            | 141.00                      | 108.60                   | 77.02%      |
| Lee               | 01N01E09CCC1         | 112TRRC      | 34.704265 | -91.015119 | 182                   | 140        | Apr 7 2020      | 28.14         |               | 39.50         |               |                            | 11.36                      |                             |                            | 141.00                      | 112.86                   | 80.04%      |
| Lee               | 01N01E24CBB1         | 112TRRC      | 34.675932 | -90.958172 | 185                   | 140        | Apr 7 2020      | 9.06          |               | 19.30         |               |                            | 10.24                      |                             |                            | 141.00                      | 131.94                   | 93.57%      |
| Lee               | 01N02E11BAB1         | 112TRRC      | 34.715376 | -90.869003 | 202                   | 140        | Apr 13 2020     | 17.58         |               | 45.00         |               |                            | 27.42                      |                             |                            | 149.00                      | 131.42                   | 88.20%      |
| Lee               | 01N02E12ABB1         | 112TRRC      | 34.716111 | -90.845556 | 206                   | 140        | Apr 13 2020     | 17.94         | 30.76         | 38.00         |               | 12.82                      | 20.06                      |                             |                            | 150.00                      | 132.06                   | 88.04%      |
| Lee               | 01N02E22CA1          | 110ALVM      | 34.677071 | -90.888087 | 202                   |            | Apr 9 2020      | 16.55         |               |               |               |                            |                            |                             |                            | 143.00                      | 126.45                   | 88.43%      |
| Lee               | 01N02E33CBB1         | 110ALVM      | 34.658250 | -90.909667 | 186                   | 140        | Apr 7 2020      | 6.33          |               | 15.00         |               |                            | 8.67                       |                             | -12.69                     | 142.00                      | 135.67                   | 95.54%      |
| Lee               | 01N02E33CB1          | 110ALVM      | 34.647599 | -90.909282 | 185                   | 140        | Apr 7 2020      | 6.12          |               | 13.00         |               |                            | 6.88                       |                             | -13.23                     | 142.00                      | 135.88                   | 95.69%      |
| Lee               | 01N03E27ADD1         | 112TRRC      | 34.664543 | -90.768167 | 204                   | 120        | Apr 9 2020      | 3.43          |               |               |               |                            |                            |                             | -17.79                     | 148.00                      | 144.57                   | 97.68%      |
| Lee               | 01N03E35BBA1         | 110ALVM      | 34.657019 | -90.764017 | 202                   | 120        | Apr 9 2020      | 7.15          | 9.58          | 18.10         | 5.42          | 2.43                       | 10.95                      | -1.73                       | -18.77                     | 138                         | 130.85                   | 94.82%      |
| Lee               | 02N01E18AD1          | 110ALVM      | 34.784652 | -91.032675 | 185                   |            | Apr 27 2020     | 49.13         |               | 35.00         |               |                            | -3.05                      |                             |                            | 142                         | 92.87                    | 65.40%      |
| Lee               | 02N01E21BAA1         | 112TRRC      | 34.775930 | -91.001508 | 185                   | 140        | Apr 15 2020     | 38.05         |               |               |               |                            |                            |                             |                            | 142.00                      | 103.95                   | 73.20%      |
| Lee               | 02N01E23AAA1         | 112TRRC      | 34.775614 | -90.972019 | 200                   | 147        | Apr 13 2020     | 55.51         |               |               |               |                            |                            |                             | -2.61                      | 154                         | 98.49                    | 63.95%      |
| Lee               | 02N01W12BAA1         | 110ALVM      | 34.807850 | -91.058208 | 185                   | 95         | Apr 15 2020     | 49.68         | 45.69         |               |               | 3.61                       | -3.99                      | -0.31                       | -0.31                      | 143                         | 93.32                    | 65.26%      |
| Lee               | 02N01E29AA1          | 110ALVM      | 34.762050 | -91.018692 | 194.00                | 130        | Apr 15 2020     | 51.57         | 55.18         |               |               |                            |                            |                             |                            | 142                         | 90.43                    | 63.68%      |
| Lee               | 02N02E08ADC1         | 110ALVM      | 34.802039 | -90.894097 | 201                   | 120        | Apr 14 2020     | 48.2          | 49.82         | 44.60         | 44.44         | 1.62                       | -3.60                      | -3.76                       | 0.93                       | 154                         | 105.80                   | 68.70%      |
| Lee               | 02N02E36DDC1         | 112TRRC      | 34.732042 | -90.839003 | 205                   | 140        | Apr 13 2020     | 17.13         |               | 36.50         |               |                            | 19.37                      |                             |                            | 149.00                      | 131.87                   | 88.50%      |
| Lee               | 02N03E08AAD1         | 110ALVM      | 34.802969 | -90.810508 | 211                   | 100        | Apr 13 2020     | 38.6          |               |               |               |                            |                            |                             |                            | 158                         | 119.40                   | 75.57%      |
| Lee               | 02N03E09DD1          | 112TRRC      | 34.789819 | -90.785390 | 220                   | 120        | Apr 13 2020     | 34.83         |               | 51.00         |               |                            | 16.17                      |                             |                            | 157.00                      | 122.17                   | 77.82%      |
| Lee               | 02N03E29CAD1         | 112TRRC      | 34.750098 | -90.812891 | 215                   | 140        | Apr 27 2020     | 39            |               | 59.00         |               |                            | 20.00                      |                             |                            | 158.00                      | 119.00                   | 75.32%      |
| Lee               | 02N04E15DAC1         | 110ALVM      | 34.776869 | -90.663997 | 192                   | 60         | Apr 13 2020     | 12.11         | 4.86          | 20.05         | 18.57         | -7.25                      | 7.94                       | 6.46                        |                            | 132                         | 119.89                   | 90.83%      |
| Lee               | 03N01E03CBB1         | 112TRRC      | 34.899583 | -90.956278 | 205                   | 140        | Apr 6 2020      | 72.04         |               |               |               |                            |                            |                             |                            | 153                         | 80.96                    | 52.92%      |
| Lee               | 03N01E10BBB1         | 110ALVM      | 34.894234 | -90.996369 | 205                   | 140        | Apr 27 2020     | 74.67         |               | 69.51         | 64.44         |                            | 0.88                       | -4.19                       |                            | 153                         | 78.33                    | 51.20%      |
| Lee               | 03N01E15CBB1         | 110ALVM      | 34.868333 | -90.956389 | 205                   | 152.3      | Apr 6 2020      | 68.63         |               | 71.00         |               | 2.91                       |                            |                             |                            | 150                         | 81.37                    | 54.25%      |
| Lee               | 03N01E32BCC1         | 112TRRC      | 34.830929 | -91.030675 | 200                   | 140        | Apr 15 2020     | 68.09         |               | 59.50         |               |                            | 13.87                      |                             |                            | 157.00                      | 88.91                    | 56.63%      |
| Lee               | 03N02E12CDC1         | 112TRRC      | 34.877595 | -90.848170 | 210                   | 140        | Apr 27 2020     | 45.63         | 51.93         | 52.30         |               | 3.24                       | 3.61                       | 2.48                        |                            | 156                         | 110.37                   | 70.75%      |
| Lee               | 03N02E13BBA1         | 110ALVM      | 34.877056 | -90.852033 | 212                   | 65         | Apr 15 2020     | 48.69         |               |               |               |                            |                            |                             |                            | 156                         | 107.31                   | 68.79%      |
| Lee               | 03N02E12CBB1         | 112TRRC      | 34.853151 | -90.907894 | 209                   | 140        | Apr 27 2020     | 47.51         |               |               |               |                            |                            |                             |                            | 153.00                      | 105.49                   | 68.95%      |
| Lee               | 03N02E27BA3          | 110ALVM      | 34.844401 | -90.884504 | 140                   |            | Apr 27 2020     | 51.34         |               |               |               |                            |                            |                             | -6.08                      | 151                         | 99.66                    | 66.00%      |
| Lee               | 03N02E29DAD1         | 110ALVM      | 34.837117 | -90.908272 | 205                   | 135        | Apr 15 2020     | 48.91         |               | 59.00         |               |                            | 11.00                      |                             |                            | 149                         | 100.09                   | 67.17%      |
| Lee               | 03N03E05CDD1         | 112TRRC      | 34.890928 | -90.810390 | 204                   | 110        | Apr 27 2020     | 48            |               | 28.50         |               |                            | 13.27                      |                             |                            | 159.00                      | 111.00                   | 69.81%      |
| Lee               | 03N04E07CBB1         | 110ALVM      | 34.879261 | -90.720110 | 200                   | 140        | Apr 14 2020     | 15.23         |               | 13.10         | 13.71         | -0.16                      | 4.83                       | 5.44                        | -4.84                      | 169.00                      | 153.77                   | 90.99%      |
| Lee               | 03N05E14DDA1         | 110ALVM      | 34.863356 | -90.534236 | 193                   | 120        | Apr 6 2020      | 8.27          | 8.11          |               |               |                            |                            |                             |                            | 142                         | 133.73                   | 94.18%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 2                          | 2                          | 5                           | 8                          | Average % Saturated: 76.33% |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 7                          | 21                         | 8                           | 9                          | Min % Saturated: 51.20%     |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 2.33                       | 10.40                      | -0.67                       | -7.76                      | Max % Saturated: 97.68%     |                          |             |

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Hydrologic Data, 2020, 2019, 2015, 2010

| County  | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft)     | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |        |
|---------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|-------------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|--------|
| Lincoln | 07506W03CCA2         | 110ALVM      | 34.137631 | -91.687411 |                       | 110        | Apr 9 2020      | 9.98              |               |               |               |                            |                            |                             | -8.22                      | 114.30                 | 104.32                   | 91.27%      |        |
| Lincoln | 07507W36CBD1         | 110ALVM      | 34.069600 | -91.757800 | 183                   | 123        | Apr 22 2020     | 36.5              | 37.80         |               |               | 1.30                       |                            |                             | -1.1                       | 116.20                 | 79.70                    | 68.59%      |        |
| Lincoln | 08504W06ABD1         | 110ALVM      | 34.060297 | -91.521228 | 171                   | 95         | Apr 22 2020     | 19                | 15.00         |               |               | -4.00                      |                            |                             | 2.2                        | 101.50                 | 82.50                    | 81.28%      |        |
| Lincoln | 08504W29ABC1         | 110ALVM      | 34.005514 | -91.508664 | 176                   | 100        | Apr 22 2020     | 47.7              | 49.50         |               |               | 1.80                       |                            |                             | -0.1                       | 154.00                 | 106.30                   | 69.03%      |        |
| Lincoln | 08505W12AAD1         | 110ALVM      | 34.045808 | -91.538800 | 165                   | 83         | Apr 22 2020     | 18.2              | 14.70         |               |               | -3.50                      |                            |                             | -0.5                       | 109.90                 | 91.70                    | 83.44%      |        |
| Lincoln | 08505W21DCD1         | 110ALVM      | 34.007601 | -91.592626 | 169                   | 120        | Apr 22 2020     | 31                | 34.60         |               |               | 3.60                       |                            |                             | -1.7                       | 129.70                 | 98.70                    | 76.10%      |        |
| Lincoln | 08505W32DCC1         | 110ALVM      | 33.977619 | -91.613531 | 172                   | 100        | Apr 22 2020     | 47.8              | 48.80         |               |               | 1.00                       |                            |                             | -0.1                       | 137.30                 | 89.50                    | 65.19%      |        |
| Lincoln | 08507W05DDD1         | 110ALVM      | 34.050225 | -91.817422 | 190                   | 97         | Apr 9 2020      | 28.33             | 29.42         |               | 29.50         | 1.09                       |                            | 1.17                        | -0.33                      | 130.00                 | 101.67                   | 78.21%      |        |
| Lincoln | 09504W06CBB1 G-7     | 110ALVM      | 33.953269 | -91.561481 | 168                   |            | Apr 22 2020     | 48.3              | 47            |               | 44.00         | -1.30                      |                            | -4.30                       | 1.55                       | 150                    | 101.70                   | 67.80%      |        |
| Lincoln | 09505W14ABC1         | 110ALVM      | 33.931394 | -91.577522 | 172.5                 | 98         | Apr 13 2020     | 43.54             | 46.07         | 45.83         | 38.49         | 2.53                       | 2.29                       | -5.05                       | 0.34                       | 148.00                 | 104.46                   | 70.58%      |        |
| Lincoln | 09505W17BCB1         | 110ALVM      | 33.930997 | -91.638875 | 171                   | 97         | Apr 14 2020     | 42.21             | 42.77         | 41.60         | 42.29         | 0.56                       | -0.61                      | 0.08                        | -0.22                      | 133.00                 | 90.79                    | 68.26%      |        |
| Lincoln | 09505W19CCC1         | 110ALVM      | 33.907850 | -91.664700 | 171                   | 110        | Apr 14 2020     | 38.46             | 36.30         |               |               | -2.16                      |                            |                             | 1.46                       | 131.40                 | 92.94                    | 70.73%      |        |
| Lincoln | 09506W04BCD1         | 110ALVM      | 33.972606 | -91.729397 | 181                   | 62.6       | Apr 14 2020     | 43.56             | 44.50         | 45.57         | 39.43         | 0.94                       | 2.01                       | -4.13                       | -3.33                      | 119.00                 | 75.44                    | 63.39%      |        |
| Lincoln | 10505W05BCB1         | 110ALVM      | 33.874444 | -91.642500 | 172                   | 127        | Apr 13 2020     | 29.05             | 29.35         | 30.06         | 24.52         | 0.30                       | 1.01                       | -4.53                       | -0.28                      | 133                    | 103.95                   | 78.16%      |        |
| Lincoln | 10505W06DCC1         | 110ALVM      | 33.865361 | -91.652211 | 175                   | 65         | Apr 14 2020     | 29.32             | 29.58         | 30.00         | 26.16         | 0.26                       | 0.68                       | -3.16                       |                            | 133.00                 | 103.68                   | 77.95%      |        |
|         |                      |              |           |            |                       |            |                 | Wells in Decline: |               | 4             | 1             | 5                          | 10                         | Average % Saturated:        |                            |                        |                          |             | 74.00% |
|         |                      |              |           |            |                       |            |                 | Total Wells:      |               | 14            | 5             | 7                          | 14                         | Min % Saturated:            |                            |                        |                          |             | 63.39% |
|         |                      |              |           |            |                       |            |                 | Average Change:   |               | 0.17          | 1.08          | -2.85                      | -0.74                      | Max % Saturated:            |                            |                        |                          |             | 91.27% |

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| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Loneke            | 01N07W04DD1          | 110ALVM      | 34.732489 | -91.754131 | 221.00                | 182        | Apr 30 2020     | 138.09        | 137.43        |               |               | -0.66                      |                            |                             | -0.79                      | 140                    | 1.91                     | 1.36%       |
| Loneke            | 01N07W09DA1          | 110ALVM      | 34.719931 | -91.753450 | 226.00                | 180        | Apr 30 2020     | 133.9         | 134.53        |               |               | 0.63                       |                            |                             | -1.5                       | 136                    | 2.10                     | 1.54%       |
| Loneke            | 01N07W18CD1          | 110ALVM      | 34.703169 | -91.803400 | 229                   |            | Apr 30 2020     | 128.09        |               |               |               |                            |                            |                             |                            | 136                    | 7.91                     | 5.82%       |
| Loneke            | 01N07W27AAD1         | 110ALVM      | 34.684300 | -91.736222 | 220                   |            | Apr 10 2020     | 131.23        | 132.86        | 132.50        |               | 1.63                       | 1.27                       |                             | -21.95                     | 137.00                 | 5.77                     | 4.21%       |
| Loneke            | 01N08W03DDA1         | 112TRRC      | 34.734350 | -91.844289 | 232                   | 160        | Apr 21 2020     | 139.26        |               |               |               |                            |                            |                             | -1.06                      | 201.00                 | 61.74                    | 30.72%      |
| Loneke            | 01N08W13AAD1         | 110ALVM      | 34.714631 | -91.808731 | 225                   |            | Apr 30 2020     | 140.17        | 141.56        |               |               | 1.39                       |                            |                             | -0.89                      | 132                    | -8.17                    | na          |
| Loneke            | 01N09W13DAB1         | 110ALVM      | 34.709769 | -91.921392 | 226                   | 150        | Apr 10 2020     | 81.89         | 86.78         | 86.32         | 86.82         | 4.89                       | 4.43                       | 4.93                        | -0.86                      | 98.00                  | 16.11                    | 16.44%      |
| Loneke            | 01N09W258AA1         | 110ALVM      | 34.688931 | -91.926931 | 228                   | 120        | Apr 17 2020     | 82            |               |               |               |                            |                            |                             | -0.99                      | 111                    | 29.00                    | 26.13%      |
| Loneke            | 01N10W15CDA1         | 110ALVM      | 34.709983 | -92.070431 | 240                   | 100        | Apr 7 2020      | 16.15         |               |               |               | 3.94                       | 1.42                       | -1.16                       | -2.59                      | 124.00                 | 107.85                   | 86.98%      |
| Loneke            | 01S06W31AB81         | 110ALVM      | 34.583164 | -91.692078 | 200                   | 120        | Apr 16 2020     | 79.59         |               |               |               |                            |                            |                             | -1.12                      | 117                    | 37.41                    | 31.97%      |
| Loneke            | 01S06W32BB81         | 110ALVM      | 34.583850 | -91.682781 | 201                   |            | Apr 21 2020     | 80.52         |               |               |               |                            |                            |                             | 0.35                       | 118.00                 | 37.48                    | 31.76%      |
| Loneke            | 01S08W24CDD1         | 110ALVM      | 34.601567 | -91.820103 | 210                   | 127        | Apr 10 2020     | 83.18         | 85.13         | 84.85         | 82.56         | 1.95                       | 1.67                       | -0.62                       | -1.63                      | 115                    | 31.82                    | 27.67%      |
| Loneke            | 01S09W02DDD1         | 110ALVM      | 34.649081 | -91.939325 | 230                   |            | Apr 17 2020     | 80.42         |               |               |               |                            |                            |                             | -1.67                      | 118.00                 | 37.58                    | 31.85%      |
| Loneke            | 01S09W36CCC2         | 110ALVM      | 34.576450 | -91.938569 | 221.89                |            | Apr 16 2020     | 61.66         | 63.31         | 64.71         | 61.48         | 1.65                       | 3.05                       | -0.18                       | -0.68                      | 115.00                 | 53.34                    | 46.38%      |
| Loneke            | 01S10W01ACB1         | 110ALVM      | 34.657456 | -92.037489 | 236                   | 98         | Apr 15 2020     | 39.42         | 44.58         | 43.41         | 44.34         | 5.16                       | 3.99                       | 4.92                        | -2.39                      | 120.00                 | 80.58                    | 67.15%      |
| Loneke            | 01S10W11CAB1         | 110ALVM      | 34.644722 | -92.060278 | 235                   | 105.5      | Apr 17 2020     | 24.79         |               | 29.92         |               |                            | 5.13                       |                             | -3.65                      | 117                    | 92.21                    | 78.81%      |
| Loneke            | 02N07W07DAA1         | 112TRRC      | 34.812575 | -91.785619 | 232                   |            | Apr 21 2020     | 137.82        |               |               |               |                            |                            |                             | -2.28                      | 145.00                 | 7.18                     | 4.95%       |
| Loneke            | 02N07W10AB1          | 110ALVM      | 34.816700 | -91.732461 | 233                   |            | Apr 20 2020     | 135.19        |               |               |               |                            |                            |                             | -2.57                      | 146                    | 10.81                    | 7.40%       |
| Loneke            | 02N07W16BAB1         | 110ALVM      | 34.804222 | -91.760972 | 240                   | 184        | Apr 9 2020      | 143.81        |               | 144.02        |               |                            | 0.21                       |                             | -3.25                      | 146.00                 | 2.19                     | 1.50%       |
| Loneke            | 02N08W10BA1          | 112MRVAA     | 34.820461 | -91.847769 | 242                   |            | Apr 21 2020     | 130.75        |               |               |               |                            |                            |                             | -1.93                      | 157                    | 26.25                    | 16.72%      |
| Loneke            | 02N08W10BB81         | 110ALVM      | 34.820361 | -91.858850 | 243                   |            | Apr 27 2020     | 130.84        |               |               |               |                            |                            |                             | -2.29                      | 158                    | 27.16                    | 17.19%      |
| Loneke            | 02N08W12CB2          | 110ALVM      | 34.813250 | -91.821431 | 242                   |            | Apr 21 2020     | 135.95        |               |               |               |                            |                            |                             | 3.92                       | 159                    | 23.05                    | 14.50%      |
| Loneke            | 02N08W16ABC1         | 110ALVM      | 34.801800 | -91.853781 | 230                   | 170        | Apr 14 2020     | 126.99        | 134.37        | 127.35        | 124.94        | 7.38                       | 0.36                       | -2.05                       | -0.36                      | 143                    | 16.01                    | 11.20%      |
| Loneke            | 02N08W26CCC1         | 110ALVM      | 34.779381 | -91.821431 | 233.28                |            | Apr 21 2020     | 135.13        |               |               |               |                            |                            |                             |                            | 130                    | -5.13                    | na          |
| Loneke            | 02N10W23BCA1         | 110ALVM      | 34.790347 | -92.056153 | 242                   | 95         | Apr 7 2020      | 15.72         | 12.45         | 12.45         |               |                            | -3.27                      |                             | -0.25                      | 132.00                 | 116.28                   | 88.09%      |
| Loneke            | 02S08W34DB81         | 110ALVM      | 34.500822 | -91.863819 | 214                   | 150        | Apr 15 2020     | 61.76         | 63.65         | 67.00         | 66.44         | 1.89                       | 5.24                       | 4.68                        | 0.33                       | 119.00                 | 57.24                    | 48.10%      |
| Loneke            | 02S09W22AAA1         | 110ALVM      | 34.531811 | -91.957500 | 228                   |            | Apr 15 2020     | 62.85         |               |               |               |                            |                            |                             | -1.68                      | 119.00                 | 56.15                    | 47.18%      |
| Loneke            | 02S09W30CDD1         | 110ALVM      | 34.503983 | -92.021114 | 226                   | 80         | Apr 15 2020     | 38.61         |               | 39.85         |               |                            | 1.24                       |                             | 0.49                       | 115.00                 | 76.39                    | 66.43%      |
| Loneke            | 02S09W35AB1          | 110ALVM      | 34.502881 | -91.948200 | 217                   | 100        | Apr 16 2020     | 53.56         |               |               |               |                            |                            |                             | -5.49                      | 116                    | 62.44                    | 53.83%      |
| Loneke            | 03N07W088DB1         | 110ALVM      | 34.901839 | -91.777300 | 250                   | 125        | Apr 13 2020     | 103.29        | 99.37         |               | 97.62         | -3.92                      |                            | -5.67                       |                            | 162.00                 | 58.71                    | 36.24%      |
| Loneke            | 03N07W29ADA1         | 110ALVM      | 34.857925 | -91.766222 | 234                   | 120        | Apr 9 2020      | 98.3          | 98.95         | 92.62         |               | 0.65                       |                            | -5.68                       | -0.85                      | 152.70                 | 54.40                    | 35.63%      |
| Loneke            | 03N07W29CDD1         | 110ALVM      | 34.848781 | -91.780700 | 232                   | 157        | Apr 9 2020      | 101.88        |               |               |               |                            |                            |                             | 0.42                       | 147.00                 | 45.12                    | 30.69%      |
| Loneke            | 03N08W03BAA1         | 110ALVM      | 34.921817 | -91.848200 | 260                   | 162        | Feb 25 2020     | 105.55        | 105.54        | 98.72         |               | -0.01                      | -6.83                      |                             | -0.49                      | 194.00                 | 88.45                    | 45.59%      |
| Loneke            | 03N08W03CCC1         | 110ALVM      | 34.908294 | -91.856444 | 260                   | 162        | Apr 14 2020     | 112.72        | 112.26        | 106.58        |               | -0.46                      | -6.14                      |                             |                            | 180.00                 | 67.28                    | 37.38%      |
| Loneke            | 03N08W08ABA1         | 110ALVM      | 34.907494 | -91.879964 | 258                   | 150        | Feb 26 2020     | 103.1         | 102.68        | 96.49         |               | -0.42                      | -6.61                      |                             |                            | 194.00                 | 90.90                    | 46.86%      |
| Loneke            | 03N08W10ACB1         | 110ALVM      | 34.904069 | -91.847983 | 250                   | 150        | Feb 26 2020     | 99.86         | 99.26         | 94.43         |               | -0.60                      | -5.43                      |                             |                            | 180.00                 | 80.14                    | 44.52%      |
| Loneke            | 03N08W10ADD1         | 110ALVM      | 34.900294 | -91.839661 | 250                   | 165        | Apr 14 2020     | 100.77        | 107.06        | 97.02         |               | 6.29                       | -3.75                      |                             | -0.72                      | 182.00                 | 81.23                    | 44.63%      |
| Loneke            | 03N08W11ACA1         | 110ALVM      | 34.903533 | -91.826183 | 256                   | 144        | Apr 14 2020     | 109.93        | 109.42        | 103.73        |               | -0.51                      | -6.20                      |                             | -0.3                       | 172.00                 | 62.07                    | 36.09%      |
| Loneke            | 03N08W26CDC1         | 112TRRC      | 34.849717 | -91.835489 | 235                   | 226        | Apr 20 2020     | 112.71        |               |               |               |                            |                            |                             | -2.82                      | 170                    | 57.29                    | 33.70%      |
| Loneke            | 03N08W29BB81         | 110ALVM      | 34.863083 | -91.892447 | 249                   | 152.2      | Feb 26 2020     | 114.89        | 115.08        |               |               | 0.19                       |                            | -2.03                       |                            | 188.00                 | 73.11                    | 38.89%      |
| Loneke            | 03N08W29BCC1         | 110ALVM      | 34.856947 | -91.892611 | 249                   | 150        | Feb 26 2020     | 150.03        |               | 130.06        |               |                            | -19.97                     |                             | 7.14                       | 188.00                 | 37.97                    | 20.20%      |
| Loneke            | 03N08W32AB81         | 110ALVM      | 34.849475 | -91.881117 | 250                   | 154        | Apr 14 2020     | 121.89        | 122.69        | 118.65        |               | 0.80                       | -3.24                      |                             | -2.07                      | 189.20                 | 67.31                    | 35.58%      |
| Loneke            | 03N08W34DD2          | 112MRVAA     | 34.835000 | -91.842900 | 244                   |            | Apr 20 2020     | 138.18        |               |               |               |                            |                            |                             | 6.76                       | 169                    | 30.82                    | 18.24%      |
| Loneke            | 04N08W158CB2         | 110ALVM      | 34.975811 | -91.855903 | 225                   | 104        | Apr 10 2020     | 33.52         |               | 35.65         | 33.41         |                            | 2.13                       |                             | -0.58                      | 144.00                 | 110.48                   | 76.72%      |
| Loneke            | 04N08W28CCC1         | 110ALVM      | 34.937381 | -91.873697 | 240                   | 137        | Apr 8 2020      | 66.85         | 66.94         |               | 62.12         | 0.09                       |                            | -4.73                       | -0.85                      | 178.00                 | 111.15                   | 62.44%      |
| Loneke            | 04N08W32ABD1         | 110ALVM      | 34.932944 | -91.861472 | 258.00                | 138        | Apr 13 2020     | 94.79         | 94.45         |               | 89.34         | -0.34                      |                            | -5.45                       |                            | 184.00                 | 89.21                    | 48.48%      |
| Loneke            | 04N08W33ADD1         | 110ALVM      | 34.929528 | -91.857083 | 265.00                | 180        | Apr 13 2020     | 107.39        | 107.22        |               | 101.25        | -0.17                      |                            | -6.14                       |                            | 184.00                 | 76.61                    | 41.64%      |
| Loneke            | 04N08W36DB81         | 110ALVM      | 34.927925 | -91.820672 | 259                   | 130        | Feb 25 2020     | 98.44         | 98.40         |               | 92.12         | -0.04                      |                            | -6.32                       |                            | 184.00                 | 85.56                    | 46.50%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 | 10            | 1             | 20            | 31            | Average % Saturated:       | 1.36%                      |                             |                            |                        |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 | 25            | 11            | 25            | 38            | Min % Saturated:           | 1.35                       |                             |                            |                        |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 | 1.26          | 2.31          | -3.29         | -1.35         | Max % Saturated:           | 88.09%                     |                             |                            |                        |                          |             |



| County               | Local Well ID Number | Aquifer Code | Latitude  | Longitude   | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft)        | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft)    | % Saturated |        |
|----------------------|----------------------|--------------|-----------|-------------|-----------------------|------------|-----------------|---------------|----------------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|-----------------------------|-------------|--------|
| Mississippi          | 10N08E22ABA2         | 11OALVM      | 35.480803 | -90.220044  | 224                   | 100        | Apr 14 2020     | 21.93         | 24.09                | 27.93         | 24.09         | 2.16                       | 6.00                       | 2.16                        | -1.81                      | 153                    | 131.07                      | 85.67%      |        |
| Mississippi          | 11N09E34BBB1         | 11OALVM      | 35.538258 | -90.120881  | 235                   | 94         | Apr 14 2020     | 13.6          | 17.59                | 19.20         | 14.07         | 3.99                       | 5.60                       | 0.47                        | -6.45                      | 190.78                 | 177.18                      | 92.87%      |        |
| Mississippi          | 11N10E09BCB1         | 11OALVM      | 35.591747 | -90.033978  | 236                   | 110        | Apr 8 2020      | 12.56         |                      |               |               |                            |                            |                             | -5.12                      | 149.00                 | 136.44                      | 91.57%      |        |
| Mississippi          | 12N08E08CBC1         | 11OALVM      | 35.679739 | -90.266458  | 225                   | 120        | Apr 6 2020      | 5.66          | 7.24                 | 9.10          | 5.42          | 1.58                       | 3.44                       | -0.24                       | -6.58                      | 134.35                 | 128.69                      | 95.79%      |        |
| Mississippi          | 12N08E28DDb1         | 11OALVM      | 35.618691 | -90.235096  | 225                   | 120        | Apr 6 2020      | 13.14         |                      |               |               |                            |                            |                             | -9.14                      | 138.00                 | 124.86                      | 90.48%      |        |
| Mississippi          | 12N09E12ABc1         | 11OALVM      | 35.681745 | -90.080369  | 232                   | 120        | Apr 7 2020      | 9.71          |                      |               |               |                            |                            |                             | -21.31                     | 151.00                 | 141.29                      | 93.57%      |        |
| Mississippi          | 12N10E04CAa1         | 11OALVM      | 35.690078 | -90.026756  | 235                   | 120        | Apr 7 2020      | 4.98          |                      |               |               |                            |                            |                             | -18.64                     | 150.00                 | 145.02                      | 96.68%      |        |
| Mississippi          | 12N10E21DBA1         | 11OALVM      | 35.645079 | -90.022867  | 236                   | 110        | Apr 7 2020      | 11.75         |                      |               |               |                            |                            |                             | -9.82                      | 146.00                 | 134.25                      | 91.95%      |        |
| Mississippi          | 13N08E24ABB1         | 11OALVM      | 35.741188 | -90.186762  | 230                   | 120        | Apr 8 2020      | 4.74          |                      |               |               |                            |                            |                             | -9.89                      | 148.00                 | 143.26                      | 96.80%      |        |
| Mississippi          | 13N09E30CCD1         | 11OALVM      | 35.713281 | -90.174619  | 230                   | 100        | Apr 7 2020      | 7.71          |                      | 10.60         | 6.28          |                            | 2.89                       | -1.43                       | -11.89                     | 148.24                 | 140.53                      | 94.80%      |        |
| Mississippi          | 13N10E34DBB1         | 11OALVM      | 33.573772 | -91.320839  | 235                   | 100        | Apr 2 2020      | 49.85         |                      |               |               |                            |                            |                             | -6.06                      |                        | 93                          | 43.15       | 46.40% |
| Mississippi          | 14N08E12DAB1         | 11OALVM      | 35.851158 | -90.181094  | 235                   | 110        | Apr 7 2020      | 2.89          |                      | 3.85          |               | 0.96                       |                            |                             |                            | 166.10                 | 163.21                      | 98.26%      |        |
| Mississippi          | 14N08E20DAa1         | 112TRRC      | 35.822575 | -90.249542  | 225                   | 120        | Apr 8 2020      | 2.23          |                      |               |               |                            |                            |                             | -5.29                      | 134.00                 | 131.77                      | 98.34%      |        |
| Mississippi          | 14N11E33CAA1         | 11OALVM      | 35.800909 | -90.209818  | 240                   | 120        | Apr 7 2020      | 3.07          |                      |               |               |                            |                            |                             | -12.19                     | 150.00                 | 146.93                      | 97.95%      |        |
| Mississippi          | 15N08E08DBC2         | 11OALVM      | 35.934611 | -90.257311  | 236                   | 120        | Apr 8 2020      | 8.37          | 7.17                 | 10.47         |               | -1.20                      | 2.10                       | 2.10                        | -6.97                      | 179                    | 170.63                      | 95.32%      |        |
| Mississippi          | 15N10E21BBD1         | 11OALVM      | 35.912344 | -90.031325  | 239                   | 100        | Apr 6 2020      | 6.44          |                      |               |               |                            |                            |                             | -7.84                      | 122                    | 115.56                      | 94.72%      |        |
| Mississippi          | 15N12E01BCD1         | 11OALVM      | 35.951185 | -89.767026  | 258                   | 100        | Apr 8 2020      | 4.92          |                      | 4.93          |               | -1.64                      |                            |                             | -12.21                     | 138.00                 | 131.43                      | 96.49%      |        |
| Mississippi          | 16N10E28BBD1         | 11OALVM      | 35.985036 | -90.032231  | 238                   | 120        | Apr 8 2020      | 6.57          | 8.79                 | 9.73          | 4.93          | -0.50                      | 0.44                       | 0.44                        | -6.79                      | 151                    | 141.71                      | 93.85%      |        |
| Mississippi          | 16N11E23AAD1         | 11OALVM      | 35.996325 | -89.875378  | 255                   |            | Apr 8 2020      | 9.29          |                      |               |               |                            |                            |                             |                            |                        |                             | 93.85%      |        |
| Wells in Decline: 2  |                      |              |           |             |                       |            |                 |               | Total Wells: 3       |               | 0             |                            | 3                          |                             | 17                         |                        | Average % Saturated: 92.08% |             |        |
| Average Change: 1.21 |                      |              |           |             |                       |            |                 |               | Average Change: 4.48 |               | 0.35          |                            | -9.29                      |                             | Min % Saturated: 46.40%    |                        | Max % Saturated: 98.34%     |             |        |
| Monroe               | 01N01W15DBC1         | 11OALVM      | 34.694167 | -91.095000  | 185                   | 126.5      | Apr 23 2020     | 52.19         | 54.09                | 54.00         | 51.88         | 1.90                       | 1.81                       | -0.31                       |                            | 149                    | 96.81                       | 64.97%      |        |
| Monroe               | 01N02W12CBC1         | 112TRRC      | 34.711750 | -91.175528  | 182                   | 110        | Apr 7 2020      | 43.25         | 45.12                | 44.18         | 41.13         | 1.87                       | 0.93                       | -2.12                       | -0.79                      | 142                    | 98.75                       | 69.54%      |        |
| Monroe               | 01N03W23BAC1         | 11OALVM      | 34.690096 | -91.295403  | 170                   | 100        | Apr 23 2020     | 11.25         |                      | 18.00         |               |                            | 6.75                       |                             |                            | 119.93                 | 108.68                      | 90.62%      |        |
| Monroe               | 01N03W24BBB1         | 11OALVM      | 34.693114 | -91.280719  | 185                   | 125        | Apr 7 2020      | 21.63         |                      |               |               |                            |                            |                             | -2.03                      | 131                    | 109.37                      | 83.49%      |        |
| Monroe               | 01N04W33BBB2         | 112TRRC      | 34.666533 | -91.446811  | 218                   | 140        | Apr 9 2020      | 95.17         |                      | 106.65        | 97.39         |                            | 11.48                      | 2.22                        |                            | 154.16                 | 58.99                       | 38.27%      |        |
| Monroe               | 01S01W16DB           | 112TRRC      | 34.604265 | -91.1109009 | 175                   | 100        | Apr 10 2020     | 21.96         |                      | 20.00         |               | -1.96                      |                            |                             | -2.09                      | 145.37                 | 123.41                      | 84.89%      |        |
| Monroe               | 01S01W18DCD1         | 11OALVM      | 34.604933 | -91.147000  | 178                   | 110        | Apr 10 2020     | 23.67         | 25.38                | 25.15         | 22.25         | 1.71                       | 1.48                       | -1.42                       | -1.17                      | 147                    | 123.33                      | 83.90%      |        |
| Monroe               | 01S02E09CB81         | 11OALVM      | 34.621869 | -90.509461  | 185                   | 110        | Apr 14 2020     | 8.11          |                      |               |               |                            |                            |                             |                            | 142.79                 | 134.68                      | 94.32%      |        |
| Monroe               | 01S02W20BBB1         | 11OALVM      | 34.603528 | -91.248917  | 170                   | 100        | Apr 10 2020     | 3.39          | 4.98                 | 11.50         | 11.71         | 1.59                       | 8.11                       | 8.32                        | -6.16                      | 138.87                 | 135.48                      | 97.56%      |        |
| Monroe               | 01S03W20BBB1         | 11OALVM      | 34.593969 | -91.354925  | 210                   | 140        | Apr 9 2020      | 68.38         |                      | 79.50         | 73.54         |                            | 11.12                      | 5.16                        | -10.14                     | 149                    | 80.62                       | 54.11%      |        |
| Monroe               | 01S04W01BAB1         | 11OALVM      | 34.651628 | -91.387981  | 210                   | 160        | Apr 9 2020      | 72.09         | 74.16                | 76.00         | 73.30         | 2.07                       | 3.91                       | 1.21                        | -1.47                      | 154.67                 | 82.58                       | 53.39%      |        |
| Monroe               | 02N01W19ADD1         | 112TRRC      | 34.773430 | -91.137345  | 188                   | 80         | Apr 8 2020      | 59.35         |                      | 52.00         |               |                            | -7.35                      |                             |                            | 148.91                 | 89.56                       | 60.14%      |        |
| Monroe               | 02N01W19BBA1         | 11OALVM      | 34.779225 | -91.153461  | 191                   | 75         | Apr 6 2020      | 56.82         |                      |               |               |                            |                            | 0.22                        |                            | 152                    | 95.18                       | 62.62%      |        |
| Monroe               | 02N03W35BCA1         | 112TRRC      | 34.748707 | -91.295960  | 188                   | 100        | Apr 23 2020     | 24.55         |                      | 37.00         |               | 12.45                      |                            |                             |                            | 133.60                 | 109.05                      | 81.62%      |        |
| Monroe               | 02S01W01BCD1         | 11OALVM      | 34.551488 | -91.069007  | 176                   | 100        | Apr 10 2020     | 17.77         |                      | 20.00         |               | 2.23                       |                            |                             | -2.46                      | 145.90                 | 128.13                      | 87.82%      |        |
| Monroe               | 02S02W11DAC1         | 11OALVM      | 34.535825 | -91.183494  | 164                   | 110        | Apr 10 2020     | 2.53          | 3.11                 | 9.00          | 9.14          | 0.58                       | 6.47                       | 6.61                        | -4.94                      | 128                    | 125.47                      | 98.02%      |        |
| Monroe               | 03N01W06DBA1         | 11OALVM      | 34.903150 | -91.139567  | 120                   | 120        | Apr 6 2020      | 45.71         |                      |               |               |                            |                            |                             | -1.43                      | 147                    | 101.29                      | 68.90%      |        |
| Monroe               | 03N02W31ADC1         | 112TRRC      | 34.832856 | -91.246444  | 190                   | 95         | Apr 6 2020      | 38.07         | 39.78                | 40.28         | 36.87         | 1.71                       | 2.21                       | -1.20                       | -0.51                      | 131                    | 92.93                       | 70.94%      |        |
| Monroe               | 03N03W36AA1          | 11OALVM      | 34.839303 | -91.263058  | 176                   | 120        | Apr 6 2020      | 18.29         | 18.49                | 21.30         | 16.39         | 0.20                       | 3.01                       | -1.90                       | -1.58                      | 131                    | 112.71                      | 86.04%      |        |
| Monroe               | 04N02W01BCC1         | 112TRRC      | 34.991481 | -91.167902  | 175                   | 100        | Apr 8 2020      | 40.45         |                      | 37.00         |               | -3.45                      |                            |                             |                            | 118.45                 | 78.00                       | 65.85%      |        |
| Monroe               | 04N02W05BBB1         | 112TRRC      | 35.000467 | -91.219522  | 188                   | 100        | Apr 7 2020      | 13.6          |                      | 18.00         |               | 4.40                       |                            |                             |                            | 95.94                  | 82.34                       | 85.82%      |        |
| Monroe               | 04N02W27CDD3         | 112TRRC      | 34.927839 | -91.197147  | 200                   | 181        | Apr 8 2020      | 45.31         | 46.94                | 46.85         | 44.13         | 1.63                       | 1.54                       | -1.18                       |                            | 151.28                 | 105.97                      | 70.05%      |        |
| Monroe               | 04N02W28DD03         | 112TRRC      | 34.926403 | -91.205744  | 192                   | 137        | Apr 8 2020      | 32.37         |                      | 30.49         |               | -1.88                      |                            |                             |                            | 142.10                 | 109.73                      | 77.22%      |        |
| Monroe               | 04N02W30BBB1         | 11OALVM      | 34.941078 | -91.256864  | 185.16                | 119        | Apr 8 2020      | 7.27          |                      |               |               | 4.05                       |                            |                             | -6.1                       | 97                     | 89.73                       | 92.51%      |        |
| Wells in Decline: 0  |                      |              |           |             |                       |            |                 |               | Total Wells: 3       |               | 3             |                            | 7                          |                             | 13                         |                        | Average % Saturated: 75.94% |             |        |
| Average Change: 1.47 |                      |              |           |             |                       |            |                 |               | Average Change: 3.62 |               | 1.35          |                            | -2.90                      |                             | Min % Saturated: 38.27%    |                        | Max % Saturated: 98.02%     |             |        |

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| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft)        | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|----------------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Phillips          | 01S01E20DD81         | 112TRC       | 34.591488 | -91.016229 | 185                   | 114        | Apr 10 2020     | 18.02         | 37.00         | 28.0                 | 20            | 18.98                      | 9.98                       | 1.98                        |                            | 154.59                 | 136.57                   | 88.34%      |
| Phillips          | 01S02E32BCC1         | 112TRC       | 34.563989 | -90.924004 | 200                   | 120        | Apr 14 2020     | 31.35         | 40.42         | 47.50                |               | 9.07                       | 16.15                      |                             |                            | 180.13                 | 148.78                   | 82.60%      |
| Phillips          | 01S03E02ADD1         | 112TRC       | 34.637321 | -90.753167 | 200                   | 120        | Apr 9 2020      | 6.68          | 11.00         | 17.00                |               | 4.32                       | 10.32                      |                             |                            | 129.80                 | 123.12                   | 94.85%      |
| Phillips          | 01S03E02CBB1         | 112TRC       | 34.635833 | -90.767778 | 202                   | 95         | Apr 9 2020      | 6.21          | 10.01         |                      |               | 3.80                       |                            |                             |                            | 139                    | 132.79                   | 95.53%      |
| Phillips          | 01S03E10ABB1         | 112TRC       | 34.628155 | -90.776223 | 205                   | 120        | Apr 29 2020     | 7             | 10.16         | 19.50                |               | 3.16                       | 12.50                      |                             |                            | 140.80                 | 133.80                   | 95.03%      |
| Phillips          | 01S03E20BD01         | 112TRC       | 34.592600 | -90.812891 | 210                   | 120        | Apr 22 2020     | 12.4          | 16.50         |                      |               | 4.10                       |                            |                             |                            | 151.00                 | 138.60                   | 91.79%      |
| Phillips          | 01S04E05DCD1         | 112TRC       | 34.633989 | -90.697609 | 230                   | 120        | Apr 22 2020     | 38            | 42.33         | 49.10                | 42.16         | 4.33                       | 11.10                      | 4.16                        |                            | 146.90                 | 108.90                   | 74.13%      |
| Phillips          | 02S01E23CA1          | 112TRC       | 34.501139 | -90.978483 | 177                   | 120        | Apr 14 2020     | 10.28         | 15.86         | 19.50                |               | 5.58                       | 9.22                       |                             | -8.75                      | 148                    | 137.72                   | 93.05%      |
| Phillips          | 02S02E29DDD1         | 112TRC       | 34.483712 | -90.912337 | 180                   | 125        | Apr 14 2020     | 14.27         | 19.58         | 25.50                |               | 5.31                       | 11.23                      |                             |                            | 150.65                 | 136.38                   | 90.53%      |
| Phillips          | 02S02E33ACC1         | 112TRC       | 34.467932 | -90.901453 | 177                   | 120        | Apr 27 2020     | 16.8          |               | 23.50                |               |                            | 6.70                       |                             |                            | 151.42                 | 134.62                   | 88.91%      |
| Phillips          | 02S03E15ACD1         | 110ALVM      | 34.519433 | -90.772633 |                       | 112        | Apr 15 2020     | 4.95          | 8.99          |                      |               | 4.04                       |                            |                             | -9                         | 150.65                 | 145.70                   | 96.71%      |
| Phillips          | 02S03E34BCD1         | 110ALVM      | 34.474546 | -90.781500 | 179                   | 120        | Apr 15 2020     | 14.58         | 18.92         | 21                   | 6.55          | 4.34                       | 6.42                       | -8.03                       |                            | 122.44                 | 107.86                   | 88.09%      |
| Phillips          | 02S04E27AAC1         | 112TRC       | 34.492103 | -90.666969 | 175                   | 175        | Apr 22 2020     | 4.7           | 6.59          |                      |               | 1.89                       |                            |                             |                            | 85.78                  | 81.08                    | 94.52%      |
| Phillips          | 03S03E04DAA1         | 110ALVM      | 34.459589 | -90.786092 | 171                   | 36         | Apr 15 2020     | 12.89         | 19.03         | 21.50                | 18.44         | 6.14                       | 8.61                       | 5.55                        | -5.64                      | 116                    | 103.11                   | 88.89%      |
| Phillips          | 03S04E02CAA1         | 110ALVM      | 34.458992 | -90.655107 |                       | 120        | Apr 15 2020     | 6.09          | 8.08          |                      |               | 1.99                       |                            |                             |                            | 121.81                 | 115.72                   | 95.00%      |
| Phillips          | 04S01E01AAD1         | 112TRC       | 34.377324 | -90.950113 | 156                   | 120        | Apr 15 2020     | 9.02          | 11.33         | 15.00                |               | 2.31                       | 5.98                       |                             |                            | 121.49                 | 112.47                   | 92.58%      |
| Phillips          | 04S01E14CDD1         | 112TRC       | 34.337325 | -90.977057 | 155                   | 120        | Apr 27 2020     | 5.01          | 7.83          | 15.00                |               | 2.82                       | 9.99                       |                             |                            | 117.42                 | 112.41                   | 95.73%      |
| Phillips          | 04S01E23CCA1         | 110ALVM      | 34.325361 | -90.981283 | 156                   |            | Apr 15 2020     | 7.08          |               | 13.05                | 9.90          |                            | 5.97                       | 2.82                        | -2.65                      | 117                    | 109.92                   | 93.95%      |
| Phillips          | 04S01E29CDC1         | 110ALVM      | 34.312324 | -91.030114 | 150                   | 120        | Apr 14 2020     | 3.2           |               | 5.50                 |               | 3.00                       | 2.30                       |                             |                            | 112.00                 | 108.80                   | 97.14%      |
| Phillips          | 04S02E01D8B1         | 112TRC       | 34.372325 | -90.848166 | 163                   |            | Apr 27 2020     | 12.5          | 15.50         | 16.20                |               |                            | 3.70                       |                             |                            | 118.73                 | 106.23                   | 89.47%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               | 0             | Average % Saturated: |               |                            |                            |                             | 4                          | 91.34%                 |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               | 17            | Min % Saturated:     |               |                            |                            |                             | 5                          | 74.13%                 |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               | 5.01          | Max % Saturated:     |               |                            |                            |                             | -6.51                      | 97.14%                 |                          |             |



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Hydrologic Data, 2020, 2019, 2015, 2010

| County               | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft)               | 2010 DTW (ft)          | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|----------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|-----------------------------|------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Poinsett             | 10N01E02AAA          | 112TRC       | 35.534803 | -90.948452 | 235                   | 140        | Apr 14 2020     | 108.76        |               | 102.00                      |                        |                            | -6.76                      |                             | -21.44                     | 149.00                 | 40.24                    | 27.01%      |
| Poinsett             | 10N01E14CC1          | 110ALVM      | 35.486129 | -90.970502 | 231                   | 150        | Apr 7 2020      | 100.38        |               | 100.70                      | 95.01                  |                            | 0.32                       | -5.37                       | -1.65                      | 150                    | 49.62                    | 33.08%      |
| Poinsett             | 10N01E16CCB1         | 110ALVM      | 35.489408 | -91.001486 | 225                   | 120        | Apr 13 2020     | 81.4          |               | 81.00                       | 79.20                  |                            | -0.40                      | -2.20                       | -1.18                      | 141                    | 59.60                    | 42.27%      |
| Poinsett             | 10N01E32CB81         | 112TRRC      | 35.449167 | -91.014719 | 222                   | 120        | Apr 9 2020      | 78.77         |               | 80.00                       |                        |                            | 1.23                       |                             | -3.29                      | 145.00                 | 66.23                    | 45.68%      |
| Poinsett             | 10N01E33ACB1         | 112TRRC      | 35.464306 | -90.992889 | 220                   | 153        | Apr 26 2020     | 86            |               | 90.00                       |                        |                            | 4.00                       |                             |                            | 143.32                 | 57.32                    | 40.00%      |
| Poinsett             | 10N02E138CC1         | 112TRRC      | 35.496811 | -90.840636 | 237                   | 167        | Apr 13 2020     | 112.25        |               | 105.75                      |                        |                            |                            | -6.50                       |                            | 130                    | 17.75                    | 13.65%      |
| Poinsett             | 10N02E15CAA1         | 110ALVM      | 35.494526 | -90.869283 | 237                   | 160        | May 5 2020      | 114.37        |               | 119.00                      |                        |                            | 4.63                       |                             | -3.22                      | 146.91                 | 32.54                    | 22.15%      |
| Poinsett             | 10N02E20BAB1         | 112TRRC      | 35.485082 | -90.905117 | 231.89                | 155        | May 5 2020      | 112.55        |               | 110.00                      |                        |                            | -2.55                      |                             | -7.6                       | 148.19                 | 35.64                    | 24.05%      |
| Poinsett             | 10N02E348BB1         | 110ALVM      | 35.457167 | -90.875361 | 236                   | 155.9      | Apr 15 2020     | 108.98        |               | 107.59                      | 101.89                 |                            | -1.39                      | -7.09                       | -1.15                      | 149.59                 | 40.61                    | 27.15%      |
| Poinsett             | 10N03E198CB1         | 110ALVM      | 35.484804 | -90.818726 | 239                   |            | May 5 2020      | 109.1         |               | 107.00                      |                        |                            | -2.10                      |                             | -14.08                     | 143.26                 | 34.16                    | 23.85%      |
| Poinsett             | 10N03E208B1          | 110ALVM      | 35.485764 | -90.799608 | 239                   |            | Apr 23 2020     | 86.81         |               |                             |                        |                            |                            |                             |                            | 134                    | 47.19                    | 35.22%      |
| Poinsett             | 10N03E20CC1          | 110ALVM      | 35.477806 | -90.802547 | 239                   |            | Apr 23 2020     | 106.43        |               |                             |                        |                            |                            |                             |                            | 138                    | 31.57                    | 22.88%      |
| Poinsett             | 10N03E21CD1          | 110ALVM      | 35.478269 | -90.777689 | 239                   |            | Apr 23 2020     | 103           |               |                             |                        |                            |                            |                             |                            | 134                    | 31.00                    | 23.13%      |
| Poinsett             | 10N04E358BA1         | 112TRRC      | 35.462583 | -90.642054 | 215                   | 100        | Apr 16 2020     | 13.78         | 10.51         | 14.00                       |                        | 3.74                       | 0.22                       |                             | -4.65                      | 112.48                 | 98.70                    | 87.75%      |
| Poinsett             | 10N06E11AA1          | 110ALVM      | 35.510858 | -90.412817 | 212                   | 108        | Apr 17 2020     | 6.77          |               | 30.00                       |                        |                            | 5.49                       |                             | -7.6                       | 98                     | 91.23                    | 93.09%      |
| Poinsett             | 10N07E28CB1          | 110ALVM      | 35.459250 | -90.357878 | 215                   | 105        | Apr 15 2020     | 24.51         |               | 86.88                       | 81.40                  | 1.67                       | 1.79                       | -3.81                       | -4.46                      | 110.59                 | 86.08                    | 77.84%      |
| Poinsett             | 11N01E17DDC1         | 112TRRC      | 35.577025 | -91.004287 | 230                   | 100        | Apr 21 2020     | 85.21         |               | 87.00                       |                        |                            | -0.75                      |                             | -2.35                      | 142.52                 | 57.31                    | 40.21%      |
| Poinsett             | 11N01E126AA1         | 110ALVM      | 35.561203 | -90.948144 | 236                   | 140        | Apr 14 2020     | 106.67        | 105.92        | 97.87                       |                        |                            | -8.80                      |                             | -1.67                      | 143                    | 36.33                    | 25.41%      |
| Poinsett             | 11N02E25DA1          | 110ALVM      | 35.579067 | -90.823367 | 243                   |            | Apr 27 2020     | 119.19        |               |                             |                        |                            |                            |                             |                            | 129                    | 9.81                     | 7.60%       |
| Poinsett             | 11N02E308BB1         | 112TRRC      | 35.564525 | -90.927896 | 239                   | 140        | May 5 2020      | 115.2         |               | 111.00                      |                        | 4.35                       | -4.20                      |                             | 1.03                       | 144.81                 | 29.61                    | 20.45%      |
| Poinsett             | 11N02E368B1 A-2      | 110ALVM      | 35.540019 | -90.840550 | 239.00                | 150        | May 5 2020      | 117.5         | 121.85        |                             |                        | 0.25                       |                            | -9.5                        | -9.5                       | 141                    | 23.50                    | 16.67%      |
| Poinsett             | 11N03E19CD1 A-11     | 110ALVM      | 35.570175 | -90.811569 | 243.00                |            | Apr 28 2020     | 116.16        | 116.41        |                             |                        |                            |                            | -1.73                       | -1.73                      | 127                    | 10.84                    | 8.54%       |
| Poinsett             | 11N03E20DCD1         | 112TRRC      | 35.564736 | -90.788831 | 244                   |            | Apr 27 2020     | 113.9         |               |                             |                        | 0.68                       |                            |                             | -2.08                      | 114                    | 0.10                     | 0.09%       |
| Poinsett             | 11N03E26DA1 A-1      | 110ALVM      | 35.557039 | -90.840350 | 240.00                | 160        | May 5 2020      | 117.3         | 117.98        |                             |                        |                            |                            |                             |                            | 140                    | 22.70                    | 16.21%      |
| Poinsett             | 11N03E30AB2 PO-5b WU | 110ALVM      | 35.564472 | -90.811342 | 243                   |            | Apr 27 2020     | 115.64        |               |                             |                        |                            |                            |                             |                            | 127                    | 11.36                    | 8.94%       |
| Poinsett             | 11N03E30DDC1         | 112TRRC      | 35.557328 | -90.802108 | 242                   |            | Apr 30 2020     | 126.31        |               |                             |                        |                            |                            |                             |                            | 121                    | -5.31                    | na          |
| Poinsett             | 11N04E13DDA1         | 110ALVM      | 35.580636 | -90.608720 | 210                   | 112        | Apr 15 2020     | 12.61         |               | 15.00                       |                        | 2.39                       | 2.39                       |                             | 0.28                       | 67.97                  | 55.36                    | 81.45%      |
| Poinsett             | 11N05E268DB1         | 110ALVM      | 35.555081 | -90.537051 | 213                   |            | Apr 15 2020     | 4.05          |               | 13.00                       |                        | 8.95                       | 8.95                       |                             | -7.46                      | 91.95                  | 87.90                    | 95.60%      |
| Poinsett             | 11N06E348BC1         | 110ALVM      | 35.540000 | -90.446111 | 211                   | 115.2      | Jun 5 2020      | 13.1          |               | 10.92                       | 16.70                  |                            | -2.18                      | 3.60                        |                            | 93                     | 79.90                    | 85.91%      |
| Poinsett             | 11N07E18CAB1         | 110ALVM      | 35.576297 | -90.389258 | 217                   | 125        | Apr 16 2020     | 10.89         |               | 13.80                       | 13.86                  | 2.51                       | 2.91                       | 2.97                        | -2.39                      | 102.40                 | 91.51                    | 89.36%      |
| Poinsett             | 11N07E22ADD1         | 110ALVM      | 35.563611 | -90.322778 | 218                   | 127        | Apr 14 2020     | 20.4          | 22.91         |                             |                        |                            | 3.46                       | 3.02                        | -5.2                       | 115.90                 | 95.50                    | 82.40%      |
| Poinsett             | 12N01E07CDA1         | 110ALVM      | 35.681581 | -91.028125 | 236                   | 120        | Apr 21 2020     | 53.62         | 54.93         | 57.08                       | 56.64                  | 1.31                       |                            |                             |                            | 124                    | 70.38                    | 56.76%      |
| Poinsett             | 12N01E22DAB1         | 112TRRC      | 35.656190 | -90.969286 | 235                   | 115        | Apr 21 2020     | 78.55         |               | 80.00                       |                        |                            | 1.45                       |                             | -3.93                      | 117.00                 | 38.45                    | 32.87%      |
| Poinsett             | 12N05E16ABA1         | 112TRRC      | 35.675758 | -90.559274 | 221                   | 140        | Apr 15 2020     | 4.88          |               | 14.00                       |                        |                            | 9.12                       |                             | -7.22                      | 86.23                  | 81.35                    | 94.34%      |
| Poinsett             | 12N07E048AA1         | 110ALVM      | 35.700542 | -90.349914 | 223                   | 59.5       | Apr 9 2020      | 4.39          | 2.09          | 5.84                        | 2.71                   | -2.30                      | 1.45                       | -1.68                       | -3.26                      | 113                    | 108.61                   | 96.12%      |
| Poinsett             | 12N07E10CB1          | 110ALVM      | 35.678889 | -90.345278 | 228                   | 100        | Apr 15 2020     | 3.28          |               | 10.00                       |                        |                            | 6.72                       |                             | -4.42                      | 116                    | 112.72                   | 97.17%      |
| Poinsett             | 12N07E25CCD1         | 110ALVM      | 35.627819 | -90.300550 | 226                   | 107.2      | Apr 13 2020     | 13.25         |               | 17.63                       | 16.45                  |                            | 4.38                       | 3.20                        | -6.91                      | 124                    | 110.75                   | 89.31%      |
| Wells in Decline: 2  |                      |              |           |            |                       |            |                 | 8             | 25            | Average % Saturated: 46.78% |                        |                            |                            |                             |                            |                        |                          |             |
| Total Wells: 9       |                      |              |           |            |                       |            |                 | 24            | 10            | 27                          | Min % Saturated: 0.09% |                            |                            |                             |                            |                        |                          |             |
| Average Change: 1.27 |                      |              |           |            |                       |            |                 | 1.26          | -1.39         | Max % Saturated: 97.17%     |                        |                            |                            |                             |                            |                        |                          |             |





| County  | Local Well ID Number         | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |
|---------|------------------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|
| Prairie | 01N05W02B81                  | 110ALVM      | 34.743989 | -91.514481 | 218.00                | 150        | Apr 24 2020     | 129.62        | 123.65        | 119.07        | 118.84        | 0.28                       | 0.16                       | -0.07                       | -1.18                      | 145                    | 15.38                    | 10.61%      |
| Prairie | 01N06W05CCB1                 | 110ALVM      | 34.731381 | -91.680300 | 220                   | 148        | Apr 14 2020     | 118.91        | 119.19        | 119.90        | 98.03         | 1.29                       | 0.79                       | 1.42                        | -1.18                      | 157.04                 | 38.13                    | 24.28%      |
| Prairie | 01S04W28BDB1                 | 110ALVM      | 34.589633 | -91.441592 | 205                   | 112        | Apr 9 2020      | 96.61         | 97.90         | 97.40         | 98.03         | 1.29                       | 0.79                       | 1.42                        | -1.18                      | 137.33                 | 40.72                    | 29.65%      |
| Prairie | 01S05W31DDA1                 | 110ALVM      | 34.571339 | -91.575469 | 206                   | 120        | Apr 14 2020     | 99.03         | 100.17        | 96.80         | 104.77        | 1.14                       | -2.23                      | 5.74                        | -0.03                      | 137.31                 | 38.28                    | 27.88%      |
| Prairie | 01S06W12BAB1                 | 110ALVM      | 34.640556 | -91.603611 | 228                   | 139.5      | Apr 14 2020     | 115.96        | 116.56        | 117.84        | 119.77        | 0.60                       | 1.88                       | 3.81                        | 0.17                       | 156.88                 | 40.92                    | 26.08%      |
| Prairie | 02N04W02BCB1                 | 110ALVM      | 34.821197 | -91.405169 | 188                   | 140        | Apr 9 2020      | 12.18         |               |               | 19.97         |                            |                            | 7.79                        | 0.17                       | 109                    | 96.82                    | 88.83%      |
| Prairie | 02N05W24BCA3                 | 110ALVM      | 34.783056 | -91.493611 | 225                   | 130        | Apr 16 2020     | 88.35         | 89.30         | 91.32         | 88.27         | 0.95                       | 2.97                       | -0.08                       |                            | 144                    | 55.65                    | 38.65%      |
| Prairie | 02N05W24CCB1                 | 110ALVM      | 34.777911 | -91.496569 | 225.00                | 140        | Apr 24 2020     | 98.45         | 99.57         |               |               | 1.12                       |                            |                             |                            | 144                    | 45.55                    | 31.63%      |
| Prairie | 02N05W29DDB2                 | 110ALVM      | 34.762561 | -91.552431 | 228                   | 135        | Apr 16 2020     | 120.89        |               | 125.71        | 119.36        |                            | 4.82                       | -1.53                       |                            | 139.29                 | 18.40                    | 13.21%      |
| Prairie | 02N05W35SDB1                 | 110ALVM      | 34.750711 | -91.506689 | 220.00                | 165        | Apr 24 2020     | 112.47        | 112.28        |               |               | -0.19                      |                            |                             |                            | 145                    | 32.53                    | 22.43%      |
| Prairie | 02N06W28BCC1 near Hazen      | 110ALVM      | 34.781333 | -91.640944 | 235                   |            | Apr 14 2020     | 114.52        | 114.35        |               | 115.10        | -0.17                      | 0.58                       | 0.01                        | 0.01                       | 153.00                 | 38.48                    | 25.15%      |
| Prairie | 02N06W24CAA1                 | 110ALVM      | 34.780833 | -91.597500 | 233                   | 136        | Apr 16 2020     | 117.22        | 118.45        | 118.53        | 120.20        | 1.23                       | 1.31                       | 2.98                        | -0.99                      | 148                    | 30.78                    | 20.80%      |
| Prairie | 03N05W03BDD2                 | 110ALVM      | 34.912239 | -91.520931 | 207                   | 110        | Apr 9 2020      | 61.93         | 62.31         |               | 60.22         | 0.38                       | 4.37                       | -1.71                       |                            | 108                    | 46.07                    | 42.66%      |
| Prairie | 03N05W20CCC1                 | 110ALVM      | 34.862422 | -91.565653 | 212                   | 165        | Apr 16 2020     | 73.12         |               |               |               |                            |                            |                             |                            | 124.00                 | 50.88                    | 41.03%      |
| Prairie | 03N06W06BDA1                 | 110ALVM      | 34.914711 | -91.682211 | 226                   |            | Apr 24 2020     | 84.24         |               |               |               |                            |                            |                             |                            | 134                    | 49.76                    | 37.13%      |
| Prairie | 03N06W10CB1                  | 110ALVM      | 34.896608 | -91.635400 | 216.00                | 120        | Apr 24 2020     | 77.59         | 75.17         |               |               | -2.42                      |                            |                             |                            | 113                    | 35.41                    | 31.34%      |
| Prairie | 03N06W24DB1                  | 110ALVM      | 34.872681 | -91.602981 | 215                   |            | Apr 24 2020     | 80.96         |               |               |               |                            |                            |                             |                            | 117                    | 36.04                    | 30.80%      |
| Prairie | 04N04W07ADC1                 | 110ALVM      | 34.980642 | -91.459186 | 195                   | 110        | Apr 9 2020      | 16.29         | 17.60         | 24.80         | 15.89         | 1.31                       | 8.51                       | -0.40                       | -3.74                      | 92                     | 75.71                    | 82.29%      |
| Prairie | 04N05W07CDC1                 | 110ALVM      | 34.978506 | -91.578033 | 212                   | 120        | Apr 9 2020      | 77.81         |               | 77.80         | 76.59         | -0.01                      | -1.22                      | -1.6                        | -1.6                       | 112                    | 34.19                    | 30.53%      |
| Prairie | 04N05W31DDC1                 | 110ALVM      | 34.920461 | -91.568286 | 206                   | 104        | Apr 9 2020      | 80.97         | 78.69         | 79.38         | 77.23         | -2.28                      | -1.59                      | -3.74                       |                            | 111                    | 30.03                    | 27.05%      |
| Prairie | 04N05W05CCC1                 | 110ALVM      | 34.992711 | -91.671656 | 206                   | 100        | Apr 9 2020      | 61.72         |               | 61.82         |               |                            | 0.10                       |                             | -0.82                      | 113                    | 51.28                    | 45.38%      |
| Prairie | 04N07W03DCB1                 | 110ALVM      | 34.995028 | -91.736800 | 255                   | 100        | Apr 10 2020     | 89.62         |               | 89.46         | 86.16         |                            | -0.16                      | -3.46                       | 0.2                        | 155                    | 65.38                    | 42.18%      |
| Prairie | 04N07W20DDB1                 | 110ALVM      | 34.952564 | -91.768686 | 255                   | 160        | Apr 14 2020     | 105.72        |               | 102.01        |               |                            | -3.71                      | -3.71                       | -3.71                      | 174.50                 | 68.78                    | 39.42%      |
| Prairie | 04N07W28BBA1                 | 110ALVM      | 34.950147 | -91.762467 | 258                   | 110        | Apr 10 2020     | 100.02        |               | 98.30         | 96.52         |                            | -1.72                      | -3.50                       | 0.06                       | 182.73                 | 82.71                    | 45.26%      |
| Prairie | 05N05W14DCD1                 | 110ALVM      | 35.035144 | -91.558422 | 205                   | 120        | Apr 28 2020     | 31.56         |               |               | 29.56         |                            |                            | -2.00                       |                            | 92                     | 60.44                    | 65.70%      |
| Prairie | 05N05W24DD1                  | 110ALVM      | 35.033858 | -91.487800 | 190.68                |            | Apr 28 2020     | 7.01          |               |               |               |                            |                            |                             |                            | 93                     | 85.99                    | 92.46%      |
| Prairie | 05N05W27AB1 PR-51 WU 110ALVM |              | 35.030214 | -91.527825 | 196                   |            | Apr 9 2020      | 26.6          |               |               |               |                            |                            |                             |                            | 95                     | 68.40                    | 72.00%      |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |
|         |                              |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                        |                          |             |

| County            | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft)      | Saturated Thickness (ft) | % Saturated |
|-------------------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|--------------------------|-------------|
| Randolph          | 18N01E11CCC1         | 110ALVM      | 36.208897 | -90.953825 |                       | 120        | Apr 9 2020      | 14.82         | 17.00         |               |               | 2.18                       |                            |                             | -3.72                      | 29.00                       | 14.18                    | 48.90%      |
| Randolph          | 18N01E16ABA1         | 110ALVM      | 36.208411 | -90.976683 |                       | 100        | Apr 9 2020      | 9.33          | 14.50         |               |               | 5.17                       |                            |                             | -5.21                      | 25.00                       | 15.67                    | 62.68%      |
| Randolph          | 18N01E21CD1          | 110ALVM      | 36.179750 | -90.981231 |                       | 75         | Apr 9 2020      | 11.17         | 18.00         |               |               | 6.83                       |                            |                             | -4.83                      | 25                          | 13.83                    | 55.32%      |
| Randolph          | 18N01E34AC1          | 110ALVM      | 36.161858 | -90.958092 | 266                   |            | Apr 9 2020      | 16.29         | 18.17         | 20.50         | 15.62         | 1.88                       | 4.21                       | -0.67                       | -0.59                      | 54.00                       | 37.71                    | 69.83%      |
| Randolph          | 18N02E03DAD1         | 112TRRC      | 36.228219 | -90.844569 | 280                   | 120        | Apr 9 2020      | 23.75         |               |               |               |                            |                            |                             | -6.08                      | 86.00                       | 62.25                    | 72.38%      |
| Randolph          | 18N02E22DCD1         | 110ALVM      | 36.179383 | -90.854542 | 273                   | 110        | Apr 9 2020      | 40.4          | 42.71         |               |               | 2.31                       | -1.55                      |                             | -2.08                      | 110                         | 69.60                    | 63.27%      |
| Randolph          | 18N02E27BA1          | 110ALVM      | 36.179161 | -90.856750 | 110                   |            | Apr 9 2020      | 39.25         | 36.00         |               |               | 3.25                       |                            |                             | -1.96                      | 116.00                      | 76.75                    | 66.16%      |
| Randolph          | 18N02E30BA1          | 110ALVM      | 36.178679 | -90.900438 | 276.33                |            | Apr 9 2020      | 35.12         |               |               |               |                            |                            |                             |                            | 93.00                       | 57.88                    | 62.24%      |
| Randolph          | 20N02E01ADD1         | 110ALVM      | 36.406725 | -90.803164 | 280                   |            | Apr 13 2020     | 6.30          | 7.69          | 17.06         | 8.31          | 1.39                       | 10.76                      | 2.01                        | -7.51                      | 25                          | 18.70                    | 74.80%      |
| Randolph          | 20N02E36BA1          | 110ALVM      | 36.338611 | -90.815000 | 273                   |            | Apr 9 2020      | 14.04         |               |               |               | 1.91                       |                            |                             |                            | 36                          | 21.96                    | 61.00%      |
| Randolph          | 20N03E20DCD1         | 110ALVM      | 36.357764 | -90.773006 | 278                   | 109        | Apr 9 2020      | 6.08          |               |               |               |                            |                            |                             | -7.96                      | 141.05                      | 134.97                   | 95.69%      |
| Randolph          | 20N03E28BA1          | 110ALVM      | 36.353758 | -90.760547 | 276                   | 99         | Apr 13 2020     | 6.9           | 8.76          | 13.17         | 8.26          | 1.86                       | 6.27                       | 1.36                        | -4.72                      | 137.24                      | 130.34                   | 94.97%      |
| Randolph          | 20N03E30DDA1         | 110ALVM      | 36.348989 | -90.777847 | 288                   | 100        | Apr 13 2020     | 13.96         | 20.00         |               |               | 6.04                       |                            |                             |                            | 41                          | 27.04                    | 65.95%      |
|                   |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                             |                          |             |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 0                          | 1                          | 2                           | 10                         | Average % Saturated: 68.71% |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 4                          | 9                          | 4                           | 11                         | Min % Saturated: 48.90%     |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 1.86                       | 4.51                       | 0.29                        | -3.89                      | Max % Saturated: 95.69%     |                          |             |
|                   |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            |                             |                          |             |
| St. Francis       | 04N02E27AA1          | 112TRRC      | 34.935203 | -90.875528 | 207                   | 140        | Apr 16 2020     | 50.61         |               |               |               |                            |                            |                             |                            | 155                         | 104.39                   | 67.35%      |
| St. Francis       | 05N05E33BC1          | 110ALVM      | 35.000744 | -90.584656 |                       | 120        | Apr 16 2020     | 27.55         |               |               |               |                            |                            |                             |                            | 138                         | 110.45                   | 80.04%      |
| St. Francis       | 04N01E27CB1          | 110ALVM      | 34.931006 | -90.995622 | 209                   |            | Apr 16 2020     | 81.36         |               |               | 74            |                            |                            | -7.36                       |                            | 151                         | 69.64                    | 46.12%      |
| St. Francis       | 04N01W17CBC1         | 110ALVM      | 34.959722 | -91.133611 | 200                   | 127.7      | Jun 11 2020     | 63.38         | 64.68         |               |               | 1.30                       |                            |                             |                            | 140                         | 76.62                    | 54.73%      |
| St. Francis       | 04N01W20BB1          | 110ALVM      | 34.954769 | -91.133703 |                       | 140        | Apr 16 2020     | 62.37         |               |               |               |                            |                            |                             |                            | 140                         | 77.63                    | 55.45%      |
| St. Francis       | 04N01W25DBD1         | 110ALVM      | 34.95247  | -91.096244 | 208                   | 130        | Apr 16 2020     | 75.35         | 75.17         | 71.06         |               |                            | -0.18                      | -4.29                       |                            | 146                         | 70.65                    | 48.39%      |
| St. Francis       | 04N01W28CDD1         | 110ALVM      | 34.931264 | -91.047972 |                       | 140        | Apr 16 2020     | 85.67         |               |               |               | 1.72                       |                            |                             | -0.32                      | 152                         | 66.33                    | 43.64%      |
| St. Francis       | 04N01W28CDD1         | 110ALVM      | 34.926461 | -91.109319 | 350                   | 140        | Apr 6 2020      | 74.69         | 76.41         |               |               |                            |                            |                             |                            | 154                         | 79.31                    | 51.50%      |
| St. Francis       | 04N02E11AD1          | 112TRRC      | 34.973372 | -90.853533 | 211                   | 150        | Apr 16 2020     | 53.46         |               |               |               |                            |                            |                             |                            | 154                         | 100.54                   | 65.29%      |
| St. Francis       | 04N02E16DCA1         | 110ALVM      | 34.954253 | -90.893131 | 210                   |            | Apr 16 2020     | 55.43         |               |               |               |                            |                            |                             |                            | 150                         | 94.57                    | 63.05%      |
| St. Francis       | 04N03E21AD1          | 110ALVM      | 34.939736 | -90.782036 |                       | 204        | Apr 14 2020     | 53.19         |               |               |               |                            |                            | -10.16                      |                            | 177                         | 123.81                   | 69.95%      |
| St. Francis       | 04N10E20DA1          | 110ALVM      | 34.946197 | -91.013583 | 204                   |            | Apr 16 2020     | 76.15         |               |               |               |                            |                            |                             |                            | 149                         | 72.85                    | 48.89%      |
| St. Francis       | 05N01E06CDA1         | 110ALVM      | 34.933336 | -90.924356 | 206                   |            | Apr 16 2020     | 64.25         |               |               |               |                            |                            |                             |                            | 152                         | 87.75                    | 57.73%      |
| St. Francis       | 05N01E15BCB1         | 110ALVM      | 35.080303 | -91.032744 | 208                   |            | Apr 16 2020     | 80.37         |               |               |               |                            |                            |                             |                            | 140                         | 59.63                    | 42.59%      |
| St. Francis       | 05N01E15BCB1         | 110ALVM      | 35.050714 | -90.995114 | 209                   | 94.1       | Apr 8 2020      | 72.9          | 73.48         | 74.60         | 69.50         | 0.58                       | 1.70                       | -3.40                       | -2.23                      | 142.00                      | 69.10                    | 48.66%      |
| St. Francis       | 05N01E27HBA1         | 110ALVM      | 35.026592 | -90.91328  | 219                   | 153        | Apr 8 2020      | 75.77         | 76.58         |               |               | 0.81                       |                            | -2.06                       |                            | 144.55                      | 68.78                    | 47.58%      |
| St. Francis       | 05N02E20ADC1         | 110ALVM      | 35.032472 | -90.910322 |                       | 79         | Apr 14 2020     | 61.4          | 61.78         |               |               | 0.38                       |                            | -0.67                       |                            | 140                         | 78.60                    | 56.14%      |
| St. Francis       | 05N02E25AAB1         | 110ALVM      | 35.023150 | -90.855792 | 218                   |            | Apr 16 2020     | 56.23         |               |               |               |                            |                            |                             |                            | 157                         | 100.77                   | 64.18%      |
| St. Francis       | 05N02E26CD1          | 112TRRC      | 35.008886 | -90.870339 |                       | 140        | Apr 16 2020     | 55.56         |               |               |               | -0.47                      |                            |                             |                            | 154                         | 98.44                    | 63.92%      |
| St. Francis       | 05N03E20AA2          | 110ALVM      | 35.037308 | -90.800231 | 221                   | 153.45     | Apr 14 2020     | 101.97        | 101.50        |               |               |                            |                            |                             |                            | 194.00                      | 92.03                    | 47.44%      |
| St. Francis       | 05N03E31AB2          | 110ALVM      | 35.008386 | -90.826317 | 221                   |            | Apr 16 2020     | 54.78         |               |               |               | 2.23                       |                            |                             | -1.97                      | 159                         | 104.22                   | 65.55%      |
| St. Francis       | 05N05E19DCA1         | 110ALVM      | 35.024325 | -90.608431 | 203                   | 110        | Apr 6 2020      | 27.37         | 29.60         |               |               |                            |                            |                             |                            | 140                         | 112.63                   | 80.45%      |
| St. Francis       | 05N06E05BBB1         | 110ALVM      | 35.084867 | -90.489925 | 195                   | 120        | Apr 16 2020     | 42.78         |               |               |               |                            |                            |                             |                            | 133                         | 90.22                    | 67.83%      |
| St. Francis       | 05N06E34CAB1         | 110ALVM      | 35.007103 | -90.449131 | 200                   | 110        | Apr 6 2020      | 20.58         | 22.14         | 26.15         | 25.16         | 1.56                       | 5.57                       | 4.58                        | -4.79                      | 136.00                      | 115.42                   | 84.87%      |
| St. Francis       | 06N01E33AD1          | 110ALVM      | 35.098692 | -90.995258 | 210.00                | 146        | Apr 16 2020     | 76.32         | 68.40         |               |               | -7.92                      |                            |                             |                            | 140                         | 63.68                    | 45.49%      |
| St. Francis       | 06N02E15BD1          | 110ALVM      | 35.144975 | -90.879808 | 214.64                | 75         | Apr 8 2020      | 66.27         | 66.95         | 65.80         | 62.31         | 0.68                       | -0.47                      | -3.96                       |                            | 143                         | 76.73                    | 53.66%      |
| St. Francis       | 06N02E16CC1          | 112TRRC      | 35.135914 | -90.900950 | 210                   | 120        | Apr 16 2020     | 74.29         |               |               |               |                            |                            |                             |                            | 150                         | 75.71                    | 50.47%      |
| St. Francis       | 06N02E24AA1          | 110ALVM      | 35.131997 | -90.834006 | 232                   | 147        | Apr 8 2020      | 83.87         |               |               | 73.14         |                            |                            | -10.73                      | 4.6                        | 173                         | 89.13                    | 51.52%      |
| St. Francis       | 06N03E17CA1          | 110ALVM      | 35.136594 | -90.802783 | 258                   | 176        | Apr 16 2020     | 115.62        |               |               |               |                            |                            |                             |                            | 193                         | 77.38                    | 40.09%      |
| St. Francis       | 06N06E17DDC1         | 110ALVM      | 35.130356 | -90.476156 | 202                   | 118        | Apr 16 2020     | 37.86         |               |               |               |                            |                            |                             |                            | 136                         | 98.14                    | 72.16%      |
| St. Francis       | 06N06E20ABB2         | 110ALVM      | 35.129739 | -90.478111 | 200                   | 150        | Apr 9 2020      | 36.13         | 36.85         | 37.10         | 37.54         | 0.72                       | 0.97                       | 1.41                        |                            | 136                         | 99.87                    | 73.43%      |
| Wells in Decline: |                      |              |           |            |                       |            |                 |               |               |               |               | 2                          | 2                          | 5                           | 7                          | Average % Saturated: 58.33% |                          |             |
| Total Wells:      |                      |              |           |            |                       |            |                 |               |               |               |               | 11                         | 5                          | 7                           | 8                          | Min % Saturated: 40.09%     |                          |             |
| Average Change:   |                      |              |           |            |                       |            |                 |               |               |               |               | 0.14                       | 1.52                       | -3.39                       | 2.20                       | Max % Saturated: 84.87%     |                          |             |

Mississippi River Valley Alluvial Aquifer  
Hydrologic Data, 2020, 2019, 2015, 2010

| County   | Local Well ID Number | Aquifer Code | Latitude  | Longitude  | Land Surface Altitude | Well Depth | 2020 Meas. Date | DTW 2020 (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('20 to '19) | 5 Year Change ('20 to '15) | 10 Year Change ('20 to '10) | Spring to Fall Change 2020 | Aquifer Thickness (ft) | Saturated Thickness (ft) | % Saturated |      |                  |  |  |
|----------|----------------------|--------------|-----------|------------|-----------------------|------------|-----------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|----------------------------|------------------------|--------------------------|-------------|------|------------------|--|--|
| White    | 05N07W10CCC1         | 110ALVM      | 35.066728 | -91.743333 | 203                   | 80         | Apr 10 2020     | 7.07          | 7.85          | 8.31          | 8.01          | 0.78                       | 1.24                       | 0.94                        | 0.66                       | 97.00                  | 89.93                    | 92.71%      |      |                  |  |  |
| White    | 06N06W13BA1          | 110ALVM      | 35.146501 | -91.600539 | 215                   | 118        | Apr 7 2020      | 81.94         |               |               |               |                            |                            |                             | 0.39                       | 112.00                 | 30.06                    | 26.84%      |      |                  |  |  |
| White    | 06N06W18B8C1         | 112TRRC      | 35.147592 | -91.697756 | 210                   |            | Apr 7 2020      | 7.02          | 7.52          | 10.25         | 9.83          | 0.50                       | 3.23                       | 2.81                        | -3.45                      | 15.00                  | 7.98                     | 53.20%      |      |                  |  |  |
| White    | 06N06W34AAB1         | 112TRRC      | 35.106547 | -91.631542 | 213                   | 117        | Apr 7 2020      | 57.94         |               |               | 59.69         |                            |                            | 1.75                        | -0.56                      | 117.00                 | 59.06                    | 50.48%      |      |                  |  |  |
| White    | 06N07W17DCC1         | 110ALVM      | 35.139575 | -91.776314 | 217                   | 90         | Apr 10 2020     | 5.43          | 6.62          | 9.50          | 12.37         | 1.19                       | 4.07                       | 6.94                        | -4.13                      | 51.00                  | 45.57                    | 89.35%      |      |                  |  |  |
| White    | 06N08W13ABA1         | 110ALVM      | 35.152147 | -91.806769 | 228                   | 60         | Apr 7 2020      | 4.4           | 5.15          | 7.04          |               | 0.75                       | 2.64                       |                             | -5.04                      | 50                     | 45.60                    | 91.20%      |      |                  |  |  |
| White    | 06N08W26DD1          | 110ALVM      | 35.111125 | -91.824764 | 230                   | 89         | Apr 10 2020     | 6.57          |               | 9.67          | 12.64         |                            | 3.10                       | 6.07                        | -5.93                      | 53.00                  | 46.43                    | 87.60%      |      |                  |  |  |
| White    | 07N05W32BAB1         | 110ALVM      | 35.193508 | -91.568386 | 213                   | 80         | Apr 7 2020      | 18.29         | 22.16         | 26.00         | 21.87         | 3.87                       | 7.71                       | 3.58                        | -14.8                      | 112                    | 93.71                    | 83.67%      |      |                  |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Wells in Decline:          |                            |                             |                            | Average % Saturated:   |                          |             |      | 71.88%           |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Total Wells:               |                            |                             |                            | 5                      |                          |             | 6    | Min % Saturated: |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Average Change:            |                            |                             |                            | 1.42                   |                          |             | 3.67 | 3.68             |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0.28                   |                          |             | 5.06 | 2.10             |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0.94                   |                          |             | 3.52 | -2.77            |  |  |
| Woodruff | 04N03W03AB1          | 110ALVM      | 35.005814 | -91.305519 | 185                   | 100        | Apr 8 2020      | 6.6           | 6.88          | 11.66         | 8.70          | 0.28                       |                            |                             | 4.07                       | 92                     | 85.40                    | 92.83%      |      |                  |  |  |
| Woodruff | 05N02W20DCB1         | 112TRRC      | 35.035500 | -91.232275 | 192                   | 108        | Apr 8 2020      | 11.18         | 12.12         | 14.70         | 8.41          | 0.94                       |                            |                             |                            | 96                     | 84.82                    | 88.35%      |      |                  |  |  |
| Woodruff | 05N02W33DCD1         | 110ALVM      | 35.004289 | -91.219525 | 184                   |            | Apr 8 2020      | 10.33         |               |               |               |                            |                            |                             |                            | 95                     | 84.67                    | 89.13%      |      |                  |  |  |
| Woodruff | 05N03W25DD1          | 112TRRC      | 35.025925 | -91.258737 | 190                   | 120        | Apr 22 2020     | 13.5          | 12.50         |               |               |                            | -1.00                      |                             | -0.1                       | 92.94                  | 79.44                    | 85.47%      |      |                  |  |  |
| Woodruff | 06N01W11CB1          | 110ALVM      | 35.152867 | -91.095122 | 220                   | 80         | Apr 22 2020     | 73.5          |               | 67.27         | 68.75         | 0.64                       | -0.63                      | 0.85                        | 0.2                        | 133.00                 | 59.50                    | 44.74%      |      |                  |  |  |
| Woodruff | 06N01W11AAB1         | 110ALVM      | 35.162222 | -91.065000 | 215                   | 150        | Apr 7 2020      | 67.9          | 68.54         |               |               |                            |                            |                             | -1.16                      | 137                    | 69.10                    | 50.44%      |      |                  |  |  |
| Woodruff | 06N01W27BCC1         | 110ALVM      | 35.111389 | -91.095556 |                       | 120        | Apr 8 2020      | 57.07         |               |               |               |                            |                            |                             | -1.6                       | 127                    | 69.93                    | 55.06%      |      |                  |  |  |
| Woodruff | 07N01W04ABB1         | 110ALVM      | 35.265389 | -91.102000 |                       | 120        | Apr 6 2020      | 63.06         |               |               |               |                            |                            |                             |                            | 136.00                 | 72.94                    | 53.63%      |      |                  |  |  |
| Woodruff | 07N01W04ACB1         | 110ALVM      | 35.261476 | -91.107344 | 212.27                | 125        | Apr 22 2020     | 66            | 67.00         | 59.55         |               | 1.00                       | -6.45                      | -0.3                        | 0.2                        | 127.56                 | 61.56                    | 48.26%      |      |                  |  |  |
| Woodruff | 07N03W31BBA1         | 112TRRC      | 35.197865 | -91.350961 | 190                   | 120        | Apr 22 2020     | 10.5          | 9.50          |               |               | -1.00                      |                            |                             | 0.2                        | 102.86                 | 92.36                    | 89.79%      |      |                  |  |  |
| Woodruff | 08N01W06DD1          | 110ALVM      | 35.341125 | -91.129078 | 218                   | 142        | Apr 7 2020      | 45.49         | 47.00         | 43.11         | 43.75         | 1.51                       | -2.38                      | -1.74                       | -0.08                      | 131                    | 85.51                    | 65.27%      |      |                  |  |  |
| Woodruff | 08N03W04BB1          | 110ALVM      | 35.357778 | -91.321944 | 221                   | 110.2      | Jun 5 2020      | 7.98          | 12.19         | 17.56         | 12.14         | 4.21                       | 9.58                       | 4.16                        |                            | 125                    | 117.02                   | 93.62%      |      |                  |  |  |
| Woodruff | 08N03W31AAD1         | 110ALVM      | 35.282030 | -91.341239 | 212                   | 110        | Apr 6 2020      | 16.29         | 20.87         | 17.34         |               | 4.58                       | 1.05                       |                             | -0.67                      | 122.00                 | 105.71                   | 86.65%      |      |                  |  |  |
| Woodruff | 09N03W28AB1          | 110ALVM      | 35.386195 | -91.312628 | 220.18                | 120        | Apr 7 2020      | 12.26         | 22.70         |               |               | 10.44                      |                            |                             | -11.24                     | 131.96                 | 119.70                   | 90.71%      |      |                  |  |  |
| Woodruff | 09N03W32ACA1         | 112TRRC      | 35.368140 | -91.326795 | 217                   | 120        | Apr 22 2020     | 21.5          | 22.50         |               |               | 1.00                       |                            |                             | 0.1                        | 125.78                 | 104.28                   | 82.91%      |      |                  |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Wells in Decline:          |                            |                             |                            | 0                      |                          |             | 4    | 3                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Total Wells:               |                            |                             |                            | 5                      |                          |             | 11   | 7                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               | Average Change:            |                            |                             |                            | 1.52                   |                          |             | 2.74 | -0.40            |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 11               |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 8                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |
|          |                      |              |           |            |                       |            |                 |               |               |               |               |                            |                            |                             |                            | 0                      |                          |             | 0    | 6                |  |  |





## **Appendix B**

### **Sparta/Memphis Aquifer Water Level Monitoring Data**







Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Arkansas              | 02S04W06CDB1         | 124SPRT      | 34.55321 | -91.48036 | 211                   | 840        | 148.89        | 151.73        | 154.59        | 147.9         | 2.84                       | 5.7                        | -0.99                       |
| Arkansas              | 02S04W23DAA1         | 124SPRT      | 34.51228 | -91.39848 | 208                   | 790        | 135.13        | 138.05        | 137.45        | 153.5         | 2.92                       | 2.32                       | 18.37                       |
| Arkansas              | 02S04W33BBB1         | 124SPRT      | 34.48948 | -91.45074 | 205                   | 781        | 147.91        | 154.3         | 153.2         | 165           | 6.39                       | 5.29                       | 17.09                       |
| Arkansas              | 02S05W16CBC1         | 124SPRT      | 34.52877 | -91.55519 | 213                   | 751        | 174.6         | 165.49        | 165.86        | 165.5         | -8.74                      | -9.1                       | -9.1                        |
| Arkansas              | 02S05W35AAB1         | 124SPRT      | 34.49166 | -91.50981 | 216                   | 761        | 162.12        | 165.49        | 182.23        | 139.6         | 3.37                       | 20.11                      | -22.52                      |
| Arkansas              | 03S03W18CCC2         | 124SPRT      | 34.43139 | -91.38083 | 196                   | 610        | 133.16        | 138           | 146.6         | 135.95        | 4.84                       | 13.44                      | 2.79                        |
| Arkansas              | 03S04W02CCB1         | 124SPRT      | 34.46322 | -91.41612 | 202                   | 721        | 141.81        | 145.2         | 145.78        | 142.4         | 3.39                       | 3.97                       | 0.59                        |
| Arkansas              | 03S04W33BAA1         | 124SPRT      | 34.40193 | -91.44417 | 201                   | 878        | 141.68        | 146.97        | 150.76        |               | 5.29                       | 9.08                       |                             |
| Arkansas              | 03S05W02AAB1         | 124SPRT      | 34.47839 | -91.50936 | 210                   | 801        | 161.51        | 162.27        | 175.2         | 148           | 0.76                       | 13.69                      |                             |
| Arkansas              | 03S05W13BDC1         | 124SPRT      | 34.44199 | -91.50127 | 212                   | 910        | 169.49        | 158.98        | 170.81        | 148           | -10.51                     | 1.32                       | -21.49                      |
| Arkansas              | 03S05W15CBB1         | 124SPRT      | 34.44256 | -91.54148 | 209                   | 760        | 156.91        | 163.4         | 167.96        | 161.9         | 6.49                       | 18.16                      | 4.99                        |
| Arkansas              | 03S05W18CAB1         | 124SPRT      | 34.44149 | -91.59019 | 196                   | 819        | 161.89        | 155.41        | 157.06        | 153.9         | -6.48                      | -4.83                      | -7.99                       |
| Arkansas              | 03S06W21ACB1         | 124SPRT      | 34.43169 | -91.65756 | 193                   | 660        | 147.05        | 151.72        | 150.9         | 150.2         |                            | 3.85                       | 3.15                        |
| Arkansas              | 04S01W28BAA1         | 124SPRT      | 34.32416 | -91.13001 | 190                   | 688        | 98.88         |               | 102.35        |               |                            | 3.47                       |                             |
| Arkansas              | 04S04W19CBB1         | 124SPRT      | 34.33437 | -91.49136 | 195                   | 1048       | 154.73        | 149.96        | 151.94        |               | -4.77                      | -2.79                      |                             |
| Arkansas              | 04S05W01BAA1         | 124SPRT      | 34.38951 | -91.49902 | 199                   | 929        | 149.8         | 153.28        | 167.96        | 162.3         | 3.48                       | 18.16                      | 12.5                        |
| Arkansas              | 04S05W15AAA1         | 124SPRT      | 34.35893 | -91.52591 | 200                   | 790.67     | 153.31        | 157.06        | 159.49        | 155.75        | 3.75                       | 6.18                       | 2.44                        |
| Arkansas              | 04S05W36DCC1         | 124SPRT      | 34.29778 | -91.50083 | 196                   | 880        | 148.38        | 151.72        | 154           | 153.7         | 3.34                       | 5.62                       | 5.32                        |
| Arkansas              | 05S01W17BAA1         | 124SPRT      | 34.26408 | -91.12926 | 176                   | 635        | 91.8          | 90.26         |               |               |                            | -1.54                      |                             |
| Arkansas              | 05S03W04ADB1         | 124SPRT      | 34.29282 | -91.33531 | 190                   | 768        | 126.55        |               | 130.6         | 130.6         |                            |                            | 4.05                        |
| Arkansas              | 05S04W26ACA1         | 124SPRT      | 34.23286 | -91.40951 | 186                   | 822        | 127.9         | 132.01        | 132           | 132           | 4.11                       | 4.11                       | 4.1                         |
| Arkansas              | 05S05W26CDD1         | 124SPRT      | 34.22326 | -91.52221 | 186                   | 795        | 28.31         | 34.8          | 34.75         | 34.75         | 6.49                       | 6.49                       | 6.44                        |
| Arkansas              | 05S05W36DAA1         | 124SPRT      | 34.21253 | -91.49629 | 180                   | 776        | 138.06        | 137.24        | 137.24        | 140           | -0.82                      | -0.82                      | 1.94                        |
| Arkansas              | 06S02W06ABB1         | 124SPRT      | 34.20775 | -91.27223 | 181                   | 760        | 108.52        | 114.26        | 114.26        |               | 5.74                       |                            |                             |
| Arkansas              | 06S02W17ADA1         | 124SPRT      | 34.17296 | -91.24809 | 185                   | 750        | 109.79        | 110.05        | 110.05        |               | 0.26                       |                            |                             |
| Arkansas              | 06S03W27BAA1         | 124SPRT      | 34.14978 | -91.33583 | 181                   | 665        | 108.06        | 115.31        | 115.31        | 115.1         | 7.25                       | 7.25                       | 7.04                        |
| Arkansas              | 07S02W28ABA1         | 124SPRT      | 34.06102 | -91.23639 | 181                   | 690        | 98.62         | 104.12        | 104.12        | 102.5         | 5.5                        | 5.5                        | 3.88                        |
| Arkansas              | 07S03W06ABC1         | 124SPRT      | 34.11719 | -91.37991 | 188                   | 720        | 135.39        | 126.09        | 126.09        | 122.5         | -9.3                       | -9.3                       | -12.89                      |
| No. Wells in Decline: |                      |              |          |           |                       |            | 3             | 6             | 6             | 21            | 15                         | 26                         | 21                          |
| Average Change:       |                      |              |          |           |                       |            | 1.67          | 4.37          | 0.94          |               |                            |                            |                             |
| Ashley                | 15S07W32CDD1         | 124SPRT      | 33.35494 | -91.85029 | 191                   | 799        | 134.4         | 138.5         |               |               |                            |                            | 4.1                         |
| Ashley                | 17S09W15ACC1         | 124SPRT      | 33.22602 | -92.02123 | 106                   | 600        | 19.53         | 22.05         | 19.94         |               |                            | 2.52                       | 0.41                        |
| No. Wells in Decline: |                      |              |          |           |                       |            | 0             | 0             | 0             | 0             | 0                          | 0                          | 0                           |
| Average Change:       |                      |              |          |           |                       |            | 0             | 1             | 2.52          | 2.26          |                            |                            |                             |



Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Bradley               | 15S11W31DDD1         | 124SPRT      | 33.36167 | -92.27250 | 129                   | 900        | 95.81         | 96.38         | 99.41         |               | 0.57                       | 3.6                        | 0                           |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 1                          | 1                          | 0                           |
| Clay                  | 19N08E34AA1          | 124SPRT      | 36.23340 | -90.19815 | 260                   | 166        | 6.95          |               |               |               |                            |                            |                             |
| Clay                  | 20N08E27BB1          | 124SPRT      | 36.34173 | -90.20927 | 279                   | 100        | 9.65          |               |               |               |                            |                            |                             |
| Clay                  | 20N09E19BC2          | 124SPRT      | 36.37395 | -90.15315 | 275                   | 100        | 4.06          |               |               |               |                            |                            |                             |
| Columbia              | 16S21W14CBB1         | 124SPRT      | 33.34705 | -93.25480 | 281                   | 498        | 186.28        | 194.26        | 217.01        | 200.66        | 7.98                       | 30.73                      | 14.38                       |
| Columbia              | 17S19W30ABB1         | 124SPRT      | 33.23503 | -93.11393 | 248                   | 501        | 202.94        | 211.44        | 215.65        | 212.3         | 8.5                        | 12.71                      | 9.36                        |
| Columbia              | 17S21W01BBC1         | 124SPRT      | 33.29530 | -93.23990 | 304                   | 548        | 247.58        | 254.06        | 247.47        | 260.3         | 6.48                       | -0.11                      | 12.72                       |
| Columbia              | 17S21W11DCC2         | 124SPRT      | 33.26904 | -93.24684 | 304                   | 428        | 264.62        | 267.37        | 266.69        | 279.8         | 2.75                       | 2.07                       | 15.18                       |
| Columbia              | 18S20W06DDC1         | 124SPRT      | 33.19518 | -93.21363 | 303                   | 502        | 306.99        | 298.96        | 320.4         | 280.01        | -8.03                      | 13.41                      | -26.98                      |
| Columbia              | 18S22W27DDD1         | 124SPRT      | 33.14294 | -93.36628 | 312                   | 516        | 129.14        | 129.32        |               | 131.7         | 0.18                       |                            | 2.56                        |
| Columbia              | 19S20W08DAB1         | 124SPRT      | 33.09944 | -93.19889 | 328                   | 680        | 254.84        | 253.1         | 257.89        |               | -1.74                      | 3.05                       |                             |
| Columbia              | 19S20W09CBD1         | 124SPRT      | 33.09872 | -93.19131 | 331                   | 495        | 247.48        | 243.12        | 261.48        | 262.4         | -4.36                      | 14                         | 14.92                       |
| Columbia              | 19S21W16DBB1         | 124SPRT      | 33.08811 | -93.29006 | 283                   | 383        | 168.6         | 170.12        | 172.27        | 172.1         | 1.52                       | 3.67                       | 3.5                         |
| Columbia              | 20S22W03DCC1         | 124SPRT      | 33.02734 | -93.37674 | 216                   | 230        | 49.21         |               | 52.51         | 104.27        |                            | 3.3                        | 55.06                       |
| Columbia              | 20S22W11ACD1         | 124SPRT      | 33.01922 | -93.35922 | 269                   | 275        | 104.79        |               | 107.5         | 106           |                            | 2.71                       | 1.21                        |
| No. Wells in Decline: |                      |              |          |           |                       |            |               |               |               |               | 3                          | 1                          | 1                           |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 9                          | 10                         | 10                          |
| Average Change:       |                      |              |          |           |                       |            |               |               |               |               | 1.48                       | 8.55                       | 10.19                       |
| Craighead             | 14N04E22CBD1         | 12405MP      | 35.82470 | -90.65583 | 256                   | 225        | 59.63         |               | 63.67         | 58.2          |                            | 4.04                       | -1.43                       |
| Craighead             | 14N04E28DBD1         | 12405MP      | 35.81026 | -90.66480 | 254                   | 210        | 58.96         |               | 65.08         | 60.9          |                            | 6.12                       | 1.94                        |
| Craighead             | 15N06E18ACA1         | 12405MP      | 35.92901 | -90.48283 | 243                   | 160        | 14.92         |               |               | 14.8          |                            |                            | -0.12                       |
| No. Wells in Decline: |                      |              |          |           |                       |            |               |               |               |               | 0                          | 0                          | 2                           |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 0                          | 2                          | 3                           |
| Average Change:       |                      |              |          |           |                       |            |               |               |               |               |                            | 5.08                       | 0.13                        |

Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County     | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft)             | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------------------|---------------|----------------------------|----------------------------|-----------------------------|
| Crittenden | 05N08E11CCA2         | 12405MP      | 35.06241 | -90.21673 | 211                   | 500        | 16.14         |               |                           | 23.05         |                            |                            | 6.91                        |
| Crittenden | 06N07E01DAD2         | 12405MP      | 35.16612 | -90.29401 | 209                   | 622        | 19.16         |               | 24.39                     | 23.6          |                            | 5.23                       | 4.44                        |
| Crittenden | 07N09E14BAC1         | 12405MP      | 35.23004 | -90.10784 | 216                   | 497        | 18.41         |               | 26.23                     | 28.2          |                            | 7.82                       | 9.79                        |
| Crittenden | 08N07E35BBC2         | 12405MP      | 35.27500 | -90.32583 | 222                   | 460        | 29.61         |               | 35.93                     |               |                            | 6.32                       |                             |
| Crittenden | 09N07E21BBB1         | 12405MP      | 35.39478 | -90.35851 | 216                   | 604        | 21.73         |               | 25.18                     |               |                            | 3.45                       |                             |
|            |                      |              |          |           |                       |            |               |               | No. Wells in Decline: 0 0 |               | 0                          | 0                          | 0                           |
|            |                      |              |          |           |                       |            |               |               | Total Wells: 0            |               | 0                          | 4                          | 3                           |
|            |                      |              |          |           |                       |            |               |               | Average Change:           |               | 5.71                       | 7.05                       |                             |
| Cross      | 06N04E06ACA1         | 12405MP      | 35.16786 | -90.71048 | 355                   | 828        | 194.7         |               | 197.06                    | 202           |                            | 2.36                       | 7.3                         |
| Cross      | 07N03E17CAD1         | 12405MP      | 35.22047 | -90.79508 | 248                   | 478        | 109.76        |               |                           | 116.9         |                            |                            | 7.14                        |
| Cross      | 07N05E04ADD1         | 12405MP      | 35.26059 | -90.55829 | 205                   | 462        | 30.63         |               | 35.03                     | 37.3          |                            | 4.4                        | 6.67                        |
| Cross      | 09N01E16CAC1         | 12405MP      | 35.40139 | -90.99743 | 234                   | 400        | 103.25        |               |                           | 87.7          |                            |                            | -15.55                      |
| Cross      | 09N01E25AAD1         | 12405MP      | 35.37898 | -90.93167 | 226                   | 200        | 97.34         |               |                           | 90.8          |                            |                            | -6.54                       |
|            |                      |              |          |           |                       |            |               |               | No. Wells in Decline: 0   |               | 0                          | 0                          | 2                           |
|            |                      |              |          |           |                       |            |               |               | Total Wells: 0            |               | 0                          | 2                          | 5                           |
|            |                      |              |          |           |                       |            |               |               | Average Change:           |               | 3.38                       | -0.20                      |                             |
| Dallas     | 07S14W30DCC1         | 124SPRT      | 34.07524 | -92.56663 | 335                   | 142        | 118.59        |               |                           | 118.95        |                            |                            | 0.36                        |
| Dallas     | 07S15W33DAC1         | 124SPRT      | 34.06735 | -92.63123 | 475                   | 80         | 20.93         | 21.15         | 25.53                     | 27.57         | 0.22                       | 4.6                        | 6.64                        |
| Dallas     | 07S16W20CAB1         | 124SPRT      | 34.09866 | -92.76252 | 322                   | 37.6       | 25.32         | 21.63         |                           | 21.05         | -3.69                      |                            | -4.27                       |
| Dallas     | 08S15W34BDC1         | 124SPRT      | 33.98299 | -92.62503 | 240                   | 35.5       | 23.6          | 7.37          | 27.46                     | 26.3          | -16.23                     | 3.86                       | 2.7                         |
| Dallas     | 08S16W18ACC1         | 124SPRT      | 34.03124 | -92.77760 | 251                   | 23         | 1.59          |               |                           | 15.78         |                            |                            | 14.19                       |
| Dallas     | 08S16W27DD1          | 124SPRT      | 33.99354 | -92.71866 | 280                   | 154        | 29.7          | 31.24         | 32.78                     | 30.6          | 1.54                       | 3.08                       | 0.9                         |
| Dallas     | 09S13W35CCD1         | 124SPRT      | 33.88591 | -92.40372 | 200                   | 401        | 70.19         | 70.49         | 73.4                      | 71.3          | 0.3                        | 3.21                       | 1.11                        |
| Dallas     | 09S16W19CAA1         | 124SPRT      | 33.93486 | -92.78366 | 260                   | 28.2       | 4.85          | 4.71          | 6.14                      | 7.1           | -0.14                      | 1.29                       | 2.25                        |
| Dallas     | 10S13W34ACA2         | 124SPRT      | 33.80818 | -92.41600 | 272                   | 894        | 148.74        | 148.6         | 152                       | 152.3         | -0.14                      | 3.26                       | 3.56                        |
| Dallas     | 10S15W11DBB1         | 124SPRT      | 33.86694 | -92.60889 | 291                   | 240        | 54.57         |               | 57.89                     | 55.08         |                            | 3.32                       | 0.51                        |
| Dallas     | 10S15W18BCC1         | 124SPRT      | 33.85543 | -92.68891 | 328                   | 167        | 73.45         | 75.21         | 75.25                     | 72.29         | 1.76                       | 1.8                        | -1.16                       |
|            |                      |              |          |           |                       |            |               |               | No. Wells in Decline: 4   |               | 0                          | 0                          | 2                           |
|            |                      |              |          |           |                       |            |               |               | Total Wells: 8            |               | 8                          | 8                          | 11                          |
|            |                      |              |          |           |                       |            |               |               | Average Change: -2.05     |               | 3.05                       | 2.44                       |                             |





| County | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft)                    | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|--------|----------------------|--------------|----------|-----------|-----------------------|------------|----------------------------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Desha  | 09S02W26AAC1         | 124SPRT      | 33.89611 | -91.25578 | 153                   | 626        | 68.14                            |               |               | 71.12         |                            |                            | 2.98                        |
|        | 09S04W28DDD1         | 124SPRT      | 33.88600 | -91.50186 | 165                   | 902        | 113.4                            |               |               | 111.18        |                            |                            | -2.22                       |
|        | 10S02W26CCC2         | 124SPRT      | 33.79729 | -91.27333 | 148                   | 785        | 77.18                            |               | 74.12         | 71.65         |                            | -3.06                      | -5.53                       |
|        | 11S02W03CCA1         | 124SPRT      | 33.77105 | -91.28640 | 138                   | 754        | 70.55                            |               | 68.33         | 70.15         |                            | -2.22                      | -0.4                        |
|        | 12S03W34DAD1         | 124SPRT      | 33.61207 | -91.38473 | 147                   | 796        | 81.36                            |               |               | 82.9          |                            |                            | 1.54                        |
|        |                      |              |          |           |                       |            | No. Wells in Decline: 0 2 3      |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Total Wells: 0 2 5               |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Average Change: -2.64 -0.73      |               |               |               |                            |                            |                             |
| Drew   | 12S06W30BBD1         | 124SPRT      | 33.63532 | -91.76197 | 271                   | 779        | 211.47                           |               |               | 207.5         |                            |                            | -3.97                       |
| Drew   | 13S05W36ACB1         | 124SPRT      | 33.53172 | -91.56789 | 165                   | 689        | 91.23                            |               |               | 90            |                            |                            | -1.23                       |
| Drew   | 15S04W12DDA1         | 124SPRT      | 33.40816 | -91.45658 | 125                   | 760        | 61.65                            |               |               | 62.6          |                            |                            | 0.95                        |
|        |                      |              |          |           |                       |            | No. Wells in Decline: 0 0 2      |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Total Wells: 0 0 3               |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Average Change: -1.42            |               |               |               |                            |                            |                             |
| Grant  | 03S13W12AAA1         | 124SPRT      | 34.47935 | -92.35173 | 362                   | 198        | 126.75                           | 128.79        | 128.88        | 130.4         | 2.04                       | 2.13                       | 3.65                        |
| Grant  | 03S15W26DAA1         | 124SPRT      | 34.43348 | -92.57973 | 337                   | 95         | 4.77                             |               | 5.03          | 10.94         |                            | 0.26                       | 6.17                        |
| Grant  | 05S13W03CAA1         | 124SPRT      | 34.31221 | -92.40013 | 260                   | 569        | 84.62                            |               |               | 85.5          |                            |                            | 0.88                        |
| Grant  | 05S14W06DCC1         | 124SPRT      | 34.31181 | -92.55741 | 293                   | 370        | 96.32                            |               |               | 83            |                            |                            | -13.32                      |
| Grant  | 06S11W05ACD1         | 124SPRT      | 34.22801 | -92.23695 | 269                   | 1081       | 193.14                           |               | 186.09        | 190.5         |                            | -7.05                      | -2.64                       |
| Grant  | 06S15W26ACA1         | 124SPRT      | 34.17278 | -92.59378 | 280                   | 172        | 59.33                            |               | 62.38         | 58.6          |                            | 3.05                       | -0.73                       |
|        |                      |              |          |           |                       |            | No. Wells in Decline: 0 1 3      |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Total Wells: 1 4 6               |               |               |               |                            |                            |                             |
|        |                      |              |          |           |                       |            | Average Change: 2.04 -0.40 -1.00 |               |               |               |                            |                            |                             |

Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Greene                | 16N06E08DB2          | 124SPRT      | 36.02894 | -90.46390 | 254                   | 185        | 71.89         |               |               |               |                            |                            |                             |
| Greene                | 16N06E16AA1          | 124SPRT      | 36.02142 | -90.44565 | 253                   | 180        | 42.58         |               |               |               |                            |                            |                             |
| Greene                | 16N06E22BD1          | 124SPRT      | 36.00342 | -90.43722 | 251                   | 120        | 5.5           |               |               |               |                            |                            |                             |
| Greene                | 17N06E36BD1          | 124SPRT      | 36.05424 | -90.39566 | 249                   | 171        | 53.31         |               |               |               |                            |                            |                             |
| Greene                | 18N06E35BC1          | 12405MP      | 36.15366 | -90.40721 | 266                   | 180        | 16.77         |               |               |               |                            |                            |                             |
| Jefferson             | 03S09W23BBD1         | 124SPRT      | 34.44082 | -91.95360 | 224                   | 163.7      |               |               | 158.98        | 161.2         | -4.72                      | -2.5                       |                             |
| Jefferson             | 03S10W27AAD1         | 124SPRT      | 34.41724 | -92.07606 | 222                   | 679        | 118.84        |               | 118.03        | 121.3         | -0.81                      | 2.46                       |                             |
| Jefferson             | 03S11W22ABC1         | 124SPRT      | 34.44745 | -92.18285 | 312                   | 707        | 168.7         |               | 170.1         | 172           | 1.4                        | 3.3                        |                             |
| Jefferson             | 04S11W14BAD1         | 124SPRT      | 34.37215 | -92.16669 | 400                   | 854        | 296.14        |               | 302.32        |               |                            | 6.18                       |                             |
| Jefferson             | 06S10W23ACA2         | 124SPRT      | 34.18975 | -92.08443 | 235                   | 849        | 216.65        |               | 220.39        | 219           | 3.74                       | 2.35                       |                             |
| Jefferson             | 07S07W24BAB1         | 124SPRT      | 34.10908 | -91.75639 | 189                   | 1180       | 156.67        |               | 157.27        | 164.9         | 0.6                        | 8.23                       |                             |
| No. Wells in Decline: |                      |              |          |           |                       |            |               |               |               |               | 0                          | 2                          | 1                           |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 0                          | 5                          | 6                           |
| Average Change:       |                      |              |          |           |                       |            |               |               |               |               | 0.04                       | 3.34                       |                             |
| Lincoln               | 07S07W30CDC1         | 124SPRT      | 34.07887 | -91.84524 | 208                   | 1350       | 172.99        |               | 168.54        | 175.6         | -4.45                      | 2.61                       |                             |
| Lincoln               | 08S05W35ACC1         | 124SPRT      | 33.98517 | -91.56035 | 166                   | 836        | 123.15        |               | 115.43        | 121.65        | -7.72                      | -1.5                       |                             |
| Lincoln               | 08S08W35DBB1         | 124SPRT      | 33.98288 | -91.87289 | 244                   | 974        | 212.83        |               | 204.8         | 209           | -8.03                      | -3.83                      |                             |
| Lincoln               | 08S08W35DCB1         | 124SPRT      | 33.98071 | -91.87149 | 270                   | 1062       | 232.2         |               | 232.1         | 249.5         | -0.1                       | 17.3                       |                             |
| Lincoln               | 09S07W07DAD1         | 124SPRT      | 33.94275 | -91.85786 | 296                   | 1052       | 263.67        |               | 261.43        | 263.5         | -2.24                      | -0.17                      |                             |
| No. Wells in Decline: |                      |              |          |           |                       |            |               |               |               |               | 0                          | 5                          | 3                           |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 0                          | 5                          | 5                           |
| Average Change:       |                      |              |          |           |                       |            |               |               |               |               | -4.51                      | 2.88                       |                             |

Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010



Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Poinsett              | 10N01E12BDC1         | 12405MP      | 35.50732 | -90.94155 | 234                   | 285        | 110.65        | 109.59        | 109.59        | 103.1         | -0.06                      | -1.06                      | -7.55                       |
| Poinsett              | 10N01E15DBB1         | 12405MP      | 35.49182 | -90.97365 | 232                   | 302        | 99.08         | 98.62         | 98.62         | 98.3          | -0.46                      | -0.46                      | -0.78                       |
| Poinsett              | 10N01E33ABA1         | 12405MP      | 35.45692 | -90.99001 | 221                   | 240        | 100.37        | 100.37        | 84.5          | 80.4          | -15.87                     | -15.87                     | -19.97                      |
| Poinsett              | 10N03E23CAC1         | 12405MP      | 35.48045 | -90.74230 | 258                   | 194        | 119.43        | 119.43        |               |               |                            |                            |                             |
| Poinsett              | 10N03E05AC1          | 124SPRT      | 35.53136 | -90.79296 | 241                   | 200        | 109.09        | 109.09        |               |               |                            |                            |                             |
| Poinsett              | 10N03E13BCB1         | 124SPRT      | 35.49953 | -90.73122 | 272                   | 188        | 152.8         | 147           | 147           | 140           | -0.36                      | -5.8                       | -12.8                       |
| Poinsett              | 11N02E02AAA1         | 124SPRT      | 35.62254 | -90.84056 | 245                   | 284        | 123.71        | 123.35        |               |               | 0.27                       |                            |                             |
| Poinsett              | 11N02E10ABB1         | 124SPRT      | 35.60852 | -90.86485 | 245                   |            | 125.06        | 125.33        |               |               | -7.39                      |                            |                             |
| Poinsett              | 11N02E14BBB1         | 124SPRT      | 35.59270 | -90.85690 | 244                   | 240        | 124.03        | 116.64        |               |               | -1.75                      |                            |                             |
| Poinsett              | 11N02E11BDC1         | 12405MP      | 35.60153 | -90.85194 | 244                   | 478        | 122.8         | 121.05        |               |               | 0.55                       |                            |                             |
| Poinsett              | 11N02E11CA1 A-4      | 124SPRT      | 35.59383 | -90.84919 | 243                   | 223        | 122.5         | 123.05        |               |               |                            |                            |                             |
| Poinsett              | 11N02E16CCC1         | 12405MP      | 35.58006 | -90.88923 | 240                   | 313        | 121.86        | 111.6         |               |               |                            |                            | -10.26                      |
| Poinsett              | 11N02E24BA1 A-3      | 124SPRT      | 35.57943 | -90.83440 | 244                   | 195        | 138.82        |               |               |               |                            |                            |                             |
| Poinsett              | 11N02E25AC1          | 124SPRT      | 35.55718 | -90.82594 | 240                   | 235        | 120.45        |               |               |               |                            |                            |                             |
| Poinsett              | 11N03E25BDD1 W4      | 12405MP      | 35.55782 | -90.72305 | 273                   | 228        | 128.82        |               |               |               |                            |                            |                             |
| Poinsett              | 11N03E29DB1          | 124SPRT      | 35.55720 | -90.78716 | 243                   | 240        | 113.16        |               |               |               |                            |                            |                             |
| Poinsett              | 11N03E31CD1          | 124SPRT      | 35.62152 | -90.81661 | 246                   | 240        | 117.34        |               |               |               |                            |                            |                             |
| Poinsett              | 12N03E04DAD1         | 124SPRT      | 35.69917 | -90.76667 | 249                   | 210        | 113.89        | 107           | 107           | 107.62        | -6.89                      | -6.89                      | -6.27                       |
| Poinsett              | 12N03E12BBB1         | 12405MP      | 35.69373 | -90.72780 | 248                   | 240        | 105.2         |               |               | 99.6          |                            |                            | -5.6                        |
| Poinsett              | 12N03E31DCB1 A-10    | 124SPRT      | 35.62696 | -90.81028 | 246                   | 280        | 121.07        |               |               |               |                            |                            |                             |
| Poinsett              | Un-84 Truxno         | 12405MP      | 32.94639 | -92.40472 | 212                   | 696        | 249.35        | 251.03        | 253.36        |               | 1.68                       | 4.01                       |                             |
| No. Wells in Decline: |                      |              |          |           |                       |            | 2             | 5             | 6             | 7             |                            |                            |                             |
| Total Wells:          |                      |              |          |           |                       |            | 5             | 7             | 7             | 7             |                            |                            |                             |
| Average Change:       |                      |              |          |           |                       |            | -1.05         | -3.97         | -3.97         | -9.03         |                            |                            |                             |

Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|----------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Prairie               | 01N05W19CDC1         | 124SPRT      | 34.68697 | -91.58480 | 210                   | 522        | 138.44        | 141.59        | 142.8         | 142.8         | 3.15                       | 6.91                       | 4.36                        |
| Prairie               | 01N06W02ABB1         | 124SPRT      | 34.74511 | -91.61693 | 223.02                | 431        | 113.38        | 119.35        | 120.29        | 112.4         | 5.97                       | 6.91                       | -0.98                       |
| Prairie               | 01N06W34CBB1         | 124SPRT      | 34.66195 | -91.64616 | 227                   | 500        | 152.82        | 150.34        | 164.25        | 150.5         | 11.43                      | 11.43                      | -2.32                       |
| Prairie               | 01S05W06BCB1         | 124SPRT      | 34.65111 | -91.59212 | 221                   | 616        | 146.92        | 150.34        | 165.72        | 145.8         | 3.42                       | 18.8                       | -1.12                       |
| Prairie               | 01S06W01BDD2         | 124SPRT      | 34.64986 | -91.60355 | 226                   | 609        | 153.09        | 156.16        | 165.72        | 150.5         | 3.07                       | 10.45                      | -2.59                       |
| Prairie               | 01S06W11DBD1         | 124SPRT      | 34.63028 | -91.61507 | 230                   | 618        | 159.88        | 160.78        | 170.33        | 167.1         | 0.9                        | 10.45                      | 7.22                        |
| Prairie               | 01S06W12BAB2         | 124SPRT      | 34.64056 | -91.60361 | 228                   | 663.4      | 155.34        | 159.13        | 167.48        | 167.48        | 3.79                       | 12.14                      | -0.43                       |
| Prairie               | 02N05W24BCA4         | 124SPRT      | 34.78306 | -91.49361 | 222                   | 447.2      | 97.73         | 103.93        | 103.93        | 97.3          | 6.2                        | 0.88                       | -0.43                       |
| Prairie               | 02N06W04DBB1         | 124SPRT      | 34.82444 | -91.64778 | 234                   | 245        | 107.57        | 108.45        | 108.45        | 108.45        | 0.88                       | 0.88                       | -0.43                       |
| Prairie               | 02N06W19AAB          | 124SPRT      | 34.78840 | -91.68054 | 238                   | 260        | 156.45        | 152.82        | 155.18        | 148.77        | -1.27                      | -1.27                      | -7.68                       |
| Prairie               | 02N06W20BCB1         | 124SPRT      | 34.78516 | -91.67583 | 238                   | 330        | 159.95        | 152.82        | 160.04        | 145           | -7.13                      | 0.09                       | -14.95                      |
| Prairie               | 02N06W21DAD1         | 124SPRT      | 34.77893 | -91.64152 | 232                   | 314        | 119.54        | 122.84        | 123.85        | 118.6         | 3.3                        | 4.31                       | -0.94                       |
| Prairie               | 02N06W22BDD1         | 124SPRT      | 34.78157 | -91.63352 | 235                   | 451        | 124.41        | 120.46        | 121.15        | 117.2         | -3.95                      | -3.26                      | -7.21                       |
| Prairie               | 02N06W24CAA2         | 124SPRT      | 34.78083 | -91.59750 | 231                   | 535.2      | 116.7         | 120.46        | 121.15        | 117.2         | -3.95                      | -3.26                      | -7.21                       |
| Prairie               | 03N05W03ADA2         | 124SPRT      | 34.91435 | -91.51181 | 206                   | 176        | 55.82         | 54.8          | 54.8          | 54.8          | -6.62                      | -6.62                      | -1.02                       |
| Prairie               | 04N06W33ABA1         | 124SPRT      | 34.93389 | -91.64326 | 220                   | 152        | 93.7          | 87.08         | 87.08         | 87.08         | -6.62                      | -6.62                      | -1.02                       |
| No. Wells in Decline: |                      |              |          |           |                       |            |               |               |               |               | 3                          | 2                          | 10                          |
| Total Wells:          |                      |              |          |           |                       |            |               |               |               |               | 10                         | 11                         | 12                          |
| Average Change:       |                      |              |          |           |                       |            |               |               |               |               | 0.59                       | 6.06                       | -2.30                       |
| St. Francis           | 03N01W33CDD1         | 124SPRT      | 34.91287 | -91.10974 | 209                   | 142        | 72.84         |               |               |               |                            |                            |                             |
| St. Francis           | 04N06E16CCB1         | 124SPRT      | 34.95326 | -90.47493 | 198                   | 1091       | 49.39         |               |               |               |                            |                            |                             |

Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County                | Local Well ID Number     | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft) | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|-----------------------|--------------------------|--------------|----------|-----------|-----------------------|------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Union                 | 16S14W15CAB1             | 124SPRT      | 33.32890 | -92.53836 | 94                    | 466        | 108.64        | 111.69        | 120.99        | 129.1         | 3.05                       | 12.35                      | 20.46                       |
| Union                 | 16S14W34CBC1             | 124SPRT      | 33.28361 | -92.54139 | 150                   | 620        | 224.05        | 228.73        | 248.93        |               | 4.68                       | 24.88                      |                             |
| Union                 | 16S15W31ACC1             | 124SPRT      | 33.28808 | -92.69136 | 168                   | 630        | 214           | 217.72        | 241.66        |               | 3.72                       | 27.66                      |                             |
| Union                 | 16S16W02ABC1             | 124SPRT      | 33.36830 | -92.72461 | 114                   | 552        | 132.9         | 132.2         | 146.19        |               | -0.7                       | 13.29                      |                             |
| Union                 | 16S17W36DCC1             | 124SPRT      | 33.28333 | -92.81167 | 174                   | 612        | 202.75        | 215.53        |               |               |                            | 12.78                      |                             |
| Union                 | 17S13W31BAC1             | 124SPRT      | 33.20005 | -92.48769 | 217                   | 772        | 231.5         | 211.99        |               | 276.6         | -19.51                     |                            | 45.1                        |
| Union                 | 17S14W10DCC1             | 124SPRT      | 33.24911 | -92.53424 | 182                   | 300        | 85.24         | 87.17         | 91.25         | 93.8          | 1.93                       | 6.01                       | 8.56                        |
| Union                 | 17S14W15ABA1             | 124SPRT      | 33.24758 | -92.53328 | 169                   | 250        | 85.5          | 86.94         | 83.57         | 85            | 1.44                       | -1.93                      | -0.5                        |
| Union                 | 17S14W22BAB1             | 124SPRT      | 33.23177 | -92.54005 | 200                   | 607.2      | 245.55        | 251.98        | 267.06        |               | 6.43                       | 21.51                      |                             |
| Union                 | 17S15W06BAA1             | 124SPRT      | 33.27933 | -92.69250 | 170                   | 630        | 192.89        | 191.9         | 212.63        | 223.95        | -0.99                      | 19.74                      | 31.06                       |
| Union                 | 17S15W08CDD1             | 124SPRT      | 33.25133 | -92.67428 | 174.92                | 667        | 230.98        | 236.65        | 257.71        | 271.95        | 5.67                       | 26.73                      | 40.97                       |
| Union                 | 17S15W18DBB1             | 124SPRT      | 33.24416 | -92.69145 | 182.93                | 540        | 240.45        | 248.1         | 275.57        |               | 7.65                       | 35.12                      |                             |
| Union                 | 17S15W28DBA1             | 124SPRT      | 33.21280 | -92.65272 | 231                   | 668        | 287.29        | 292.1         | 316.27        |               | 4.81                       | 28.98                      |                             |
| Union                 | 17S15W28DCC1             | 124SPRT      | 33.20914 | -92.65659 | 274                   | 754        | 337.8         | 343.63        | 386.47        |               | 5.83                       | 48.67                      |                             |
| Union                 | 17S15W31DCA1             | 124SPRT      | 33.19585 | -92.68798 | 270                   | 753        | 335.13        | 343.85        | 369.01        |               | 8.72                       | 33.88                      |                             |
| Union                 | 17S15W31DCB1             | 124SPRT      | 33.19696 | -92.69084 | 258                   | 260        | 97.32         | 99.47         |               |               | 2.15                       |                            |                             |
| Union                 | 17S15W33ABB1             | 124SPRT      | 33.20652 | -92.65654 | 267.7                 | 709        | 329.21        | 335.38        | 355.37        |               | 6.17                       | 26.16                      |                             |
| Union                 | 17S16W01BAA1             | 124SPRT      | 33.28029 | -92.70916 | 157                   | 707        | 217.72        | 222.9         | 249.75        | 262.58        | 5.18                       | 32.03                      | 44.86                       |
| Union                 | 17S17W25DBA2             | 124SPRT      | 33.21569 | -92.81044 | 250                   | 648        | 285.73        | 290.89        | 310.33        |               | 5.16                       | 24.6                       |                             |
| Union                 | 18S12W33CBC1             | 124SPRT      | 33.10513 | -92.35374 | 110                   | 730        | 113.66        | 115.82        | 112.69        |               | 2.16                       | -0.97                      |                             |
| Union                 | 18S13W16ADD1             | 124SPRT      | 33.15291 | -92.44331 | 238                   | 354        | 191.21        | 181.29        | 165.23        |               | -9.92                      | -25.98                     |                             |
| Union                 | 18S14W06CCD1             | 124SPRT      | 33.17756 | -92.59191 | 233                   | 783        | 280.17        | 294           | 316.15        | 315.8         | 13.83                      | 35.98                      | 35.63                       |
| Union                 | 18S15W03DAB2 Welcome Cen | 124SPRT      | 33.18528 | -92.63389 | 240                   | 788        | 295.28        | 300.36        |               |               | 5.08                       |                            |                             |
| Union                 | 18S16W11DAC1             | 124SPRT      | 33.16979 | -92.72121 | 273                   | 767        | 338.90        | 347.21        | 356.99        | 372.2         | 8.31                       | 18.09                      | 33.3                        |
| Union                 | 18S16W12ACD1             | 124SPRT      | 33.17306 | -92.70667 | 284                   | 229        | 179.4         |               |               |               |                            |                            |                             |
| Union                 | 18S16W28BBB1             | 124SPRT      | 33.13577 | -92.76988 | 225                   | 636        | 271.63        | 266.45        | 295.83        | 290.45        | -5.18                      | 24.2                       | 18.82                       |
| Union                 | 18S17W22BDD1             | 124SPRT      | 33.14886 | -92.84902 | 283                   | 705        | 300.65        | 304.34        | 318.23        |               | 3.69                       | 17.58                      |                             |
| Union                 | 19S10W16CBC1             | 124SPRT      | 33.05806 | -92.15110 | 82                    | 652        | 77.8          | 77.3          | 81.9          | 88.1          | -0.5                       | 4.1                        | 10.3                        |
| Union                 | 19S11W23ACA1             | 124SPRT      | 33.04872 | -92.20800 | 142                   | 500        | 145.15        | 143.36        | 148.35        | 152.12        | -1.79                      | 3.2                        | 6.97                        |
| Union                 | 19S11W25AAA1             | 124SPRT      | 33.03829 | -92.18695 | 133                   | 529        | 139.67        | 141.12        | 138.86        | 148.25        | 1.45                       | -0.81                      | 8.58                        |
| Union                 | 19S12W13AAA1             | 124SPRT      | 33.06979 | -92.28799 | 191                   | 339        | 163.06        | 165.05        | 172.29        | 165.72        | 1.99                       | 9.23                       | 2.66                        |
| Union                 | 19S15W01CCA1             | 124SPRT      | 33.09300 | -92.61250 | 190                   | 318        | 30.98         | 31.3          | 22.75         | 56.7          | 0.32                       | -8.23                      | 25.72                       |
| Union                 | 19S16W35DDC1             | 124SPRT      | 33.01913 | -92.72376 | 173                   | 601        | 208.25        | 190.26        | 221.08        | 218.08        | -17.99                     | 12.83                      | 9.83                        |
| Union                 | 19S17W16BAA1             | 124SPRT      | 33.08208 | -92.86460 | 238                   | 595        | 236.34        | 239.03        | 255.86        |               | 2.69                       | 19.52                      |                             |
| Union                 | 19S18W14ADA1             | 124SPRT      | 33.08103 | -92.93553 | 259                   | 380        | 184.75        | 185.33        | 188.35        | 191.28        | 0.58                       | 3.6                        | 6.53                        |
| No. Wells in Decline: |                          |              |          |           |                       |            |               |               |               |               | 8                          | 5                          | 1                           |
| Total Wells:          |                          |              |          |           |                       |            |               |               |               |               | 33                         | 31                         | 17                          |
| Average Change:       |                          |              |          |           |                       |            |               |               |               |               | 1.70                       | 16.28                      | 20.52                       |



Sparta Aquifer  
Hydrologic Data 2020, 2019, 2015, 2010

| County   | Local Well ID Number | Aquifer Code | Latitude | Longitude | Land Surface Altitude | Well Depth | 2020 DTW (ft)         | 2019 DTW (ft) | 2015 DTW (ft) | 2010 DTW (ft) | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|----------|----------------------|--------------|----------|-----------|-----------------------|------------|-----------------------|---------------|---------------|---------------|----------------------------|----------------------------|-----------------------------|
| Woodruff | 05N01W11ABA1         | 12405MP      | 35.07384 | -91.06866 | 210                   | 410        | 64.04                 | 63.71         | 59.6          |               |                            | -0.33                      | -4.44                       |
| Woodruff | 05N01W17DBB1         | 12405MP      | 35.05297 | -91.12420 | 208                   | 350        | 47.64                 | 48.83         | 45.15         |               |                            | 1.19                       | -2.49                       |
| Woodruff | 05N02W31DCB3         | 12405MP      | 35.00747 | -91.24886 | 194                   | 259        | 9.68                  | 18.55         | 8.65          |               |                            | 8.87                       | -1.03                       |
| Woodruff | 07N01W12BCB1         | 12405MP      | 35.24488 | -91.05727 | 222                   | 180        | 72.02                 | 74.4          |               |               |                            | 2.38                       |                             |
| Woodruff | 08N01W12CDA1         | 12405MP      | 35.32612 | -91.05294 | 225                   | 190        | 77.64                 | 76.63         | 75.2          |               |                            | -1.01                      | -2.44                       |
|          |                      |              |          |           |                       |            | No. Wells in Decline: | 0             | 2             | 4             |                            |                            |                             |
|          |                      |              |          |           |                       |            | Total Wells:          | 0             | 5             | 4             |                            |                            |                             |
|          |                      |              |          |           |                       |            | Average Change:       |               | 2.22          | -2.60         |                            |                            |                             |

| Water Level Measurements, Spring 2020: 202 |  |  |  | 1 Year Change ('19 to '20) | 5 Year Change ('15 to '20) | 10 Year Change ('10 to '20) |
|--------------------------------------------|--|--|--|----------------------------|----------------------------|-----------------------------|
| Total Wells in Decline:                    |  |  |  | 26                         | 35                         | 55                          |
| Total Wells:                               |  |  |  | 89                         | 138                        | 132                         |
| Percent of Total Wells in Decline:         |  |  |  | 29.21%                     | 25.36%                     | 41.67%                      |
| Total Average Change:                      |  |  |  | 0.93                       | 5.92                       | 3.05                        |