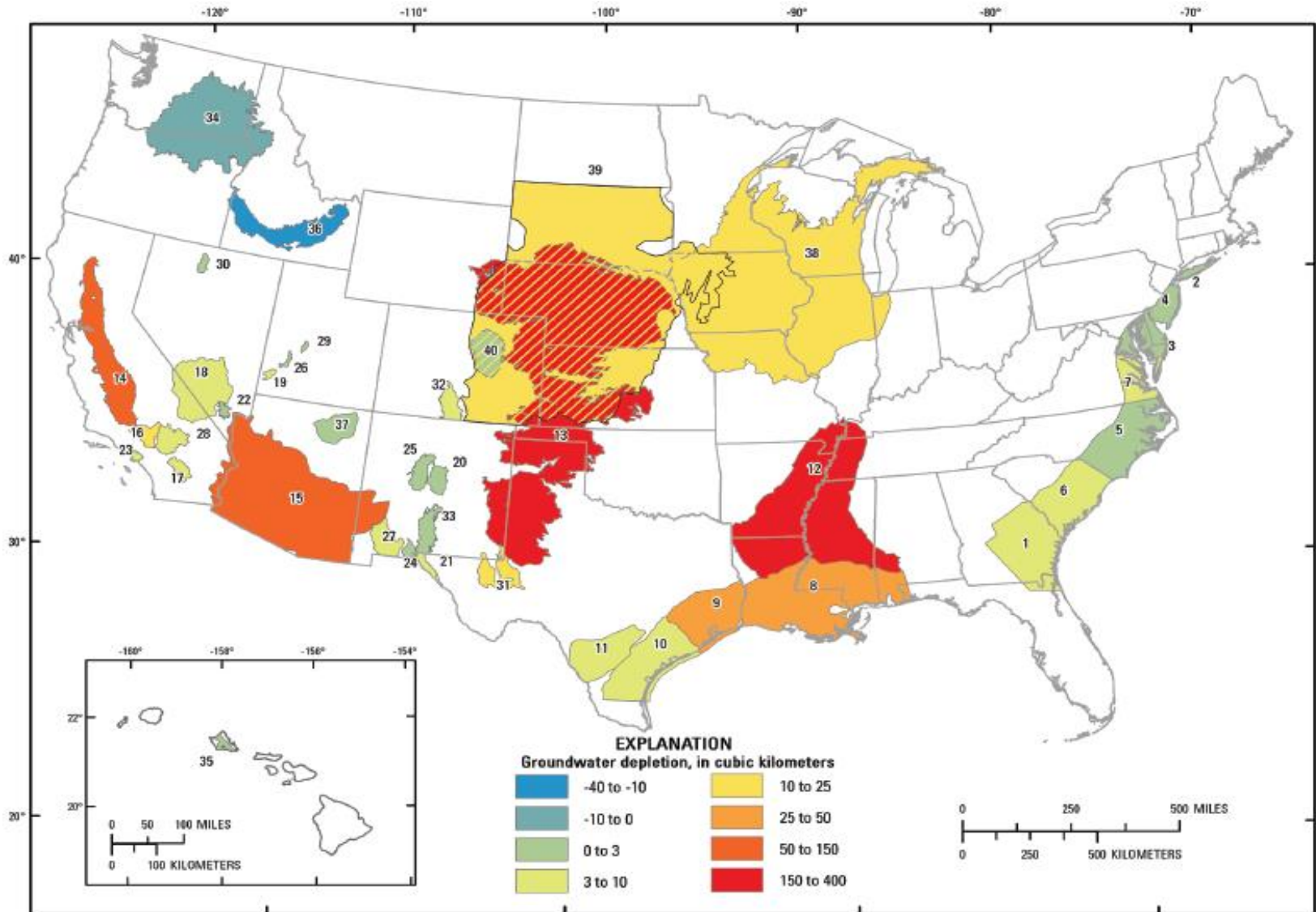


The background of the slide features a dynamic image of water splashing and creating numerous bubbles. The water is a clear, bright blue, and the bubbles vary in size, some appearing as large, rounded droplets and others as smaller, more delicate spheres. The overall effect is one of freshness and movement, suggesting a focus on water resources.

Union-Lincoln Regional Water Supply Initiative

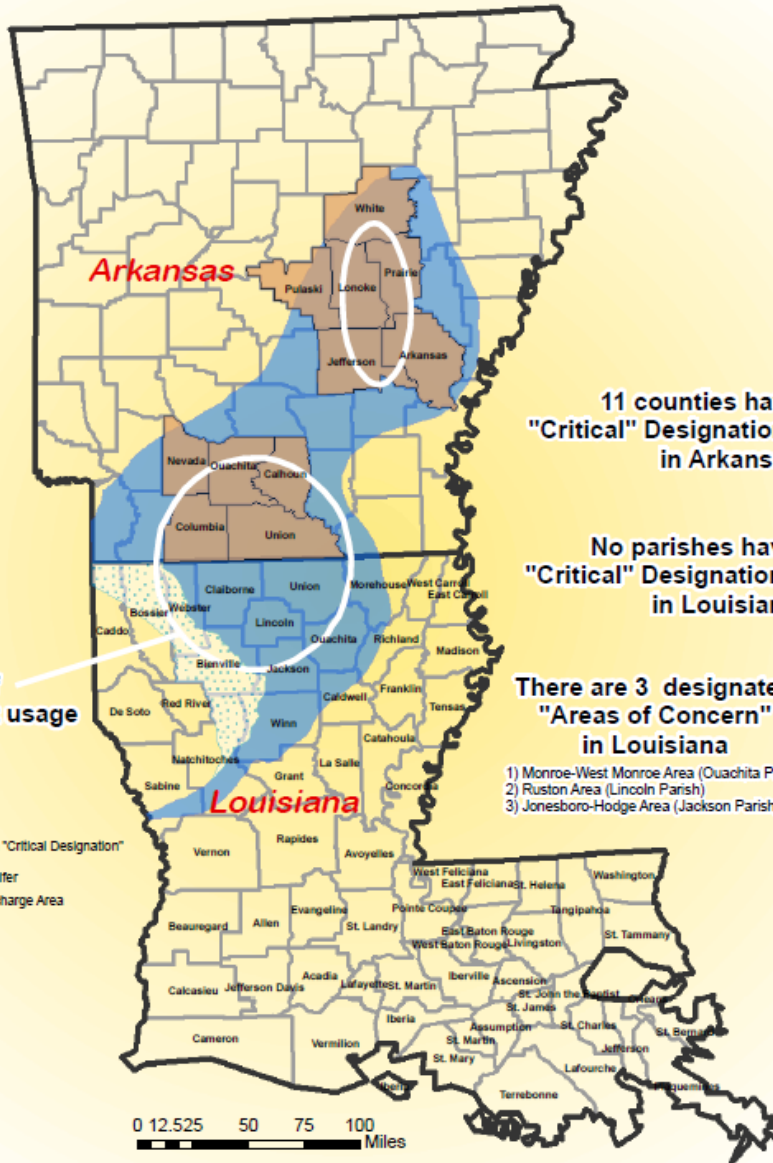
Status Update for the Louisiana Water Resources Commission

December 6, 2017
Baton Rouge, Louisiana



Base from U.S. Geological Survey digital data, 1972, 1:2,000,000
 Albers Equal-Area Conic Projection
 Standard parallels 29° 30' N and 45° 30' N, central meridian 96° 00' W

Map of the United States showing cumulative groundwater depletion, 1990 through 2008, in 40 assessed aquifer systems or subareas.



11 counties have "Critical" Designations in Arkansas

No parishes have "Critical" Designations in Louisiana

There are 3 designated "Areas of Concern" in Louisiana

- 1) Monroe-West Monroe Area (Ouachita Parish)
- 2) Ruston Area (Lincoln Parish)
- 3) Jonesboro-Hodge Area (Jackson Parish)

Areas of heaviest usage

- Legend
- Areas With "Critical Designation"
 - Sparta Aquifer
 - Sparta Recharge Area

SPARTA AQUIFER

Approximate Extent in Louisiana and Arkansas

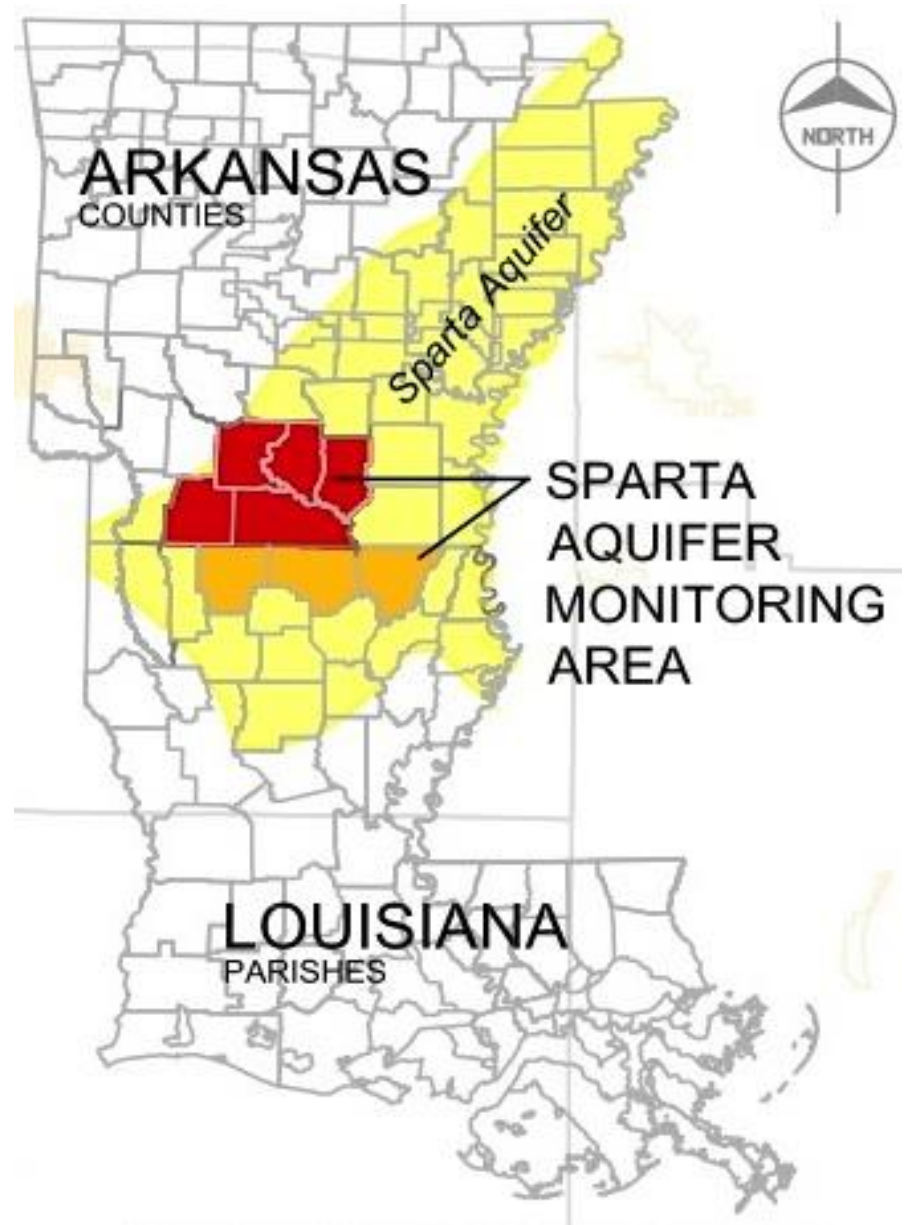
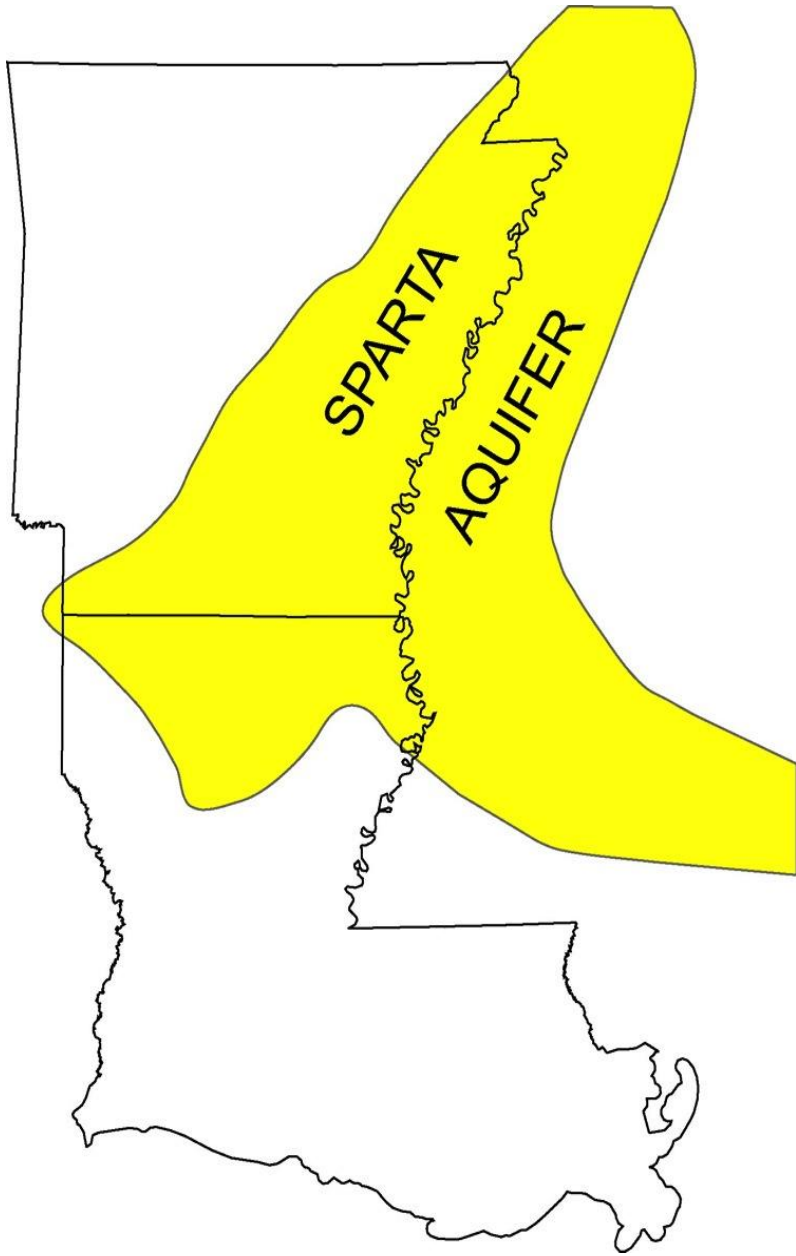


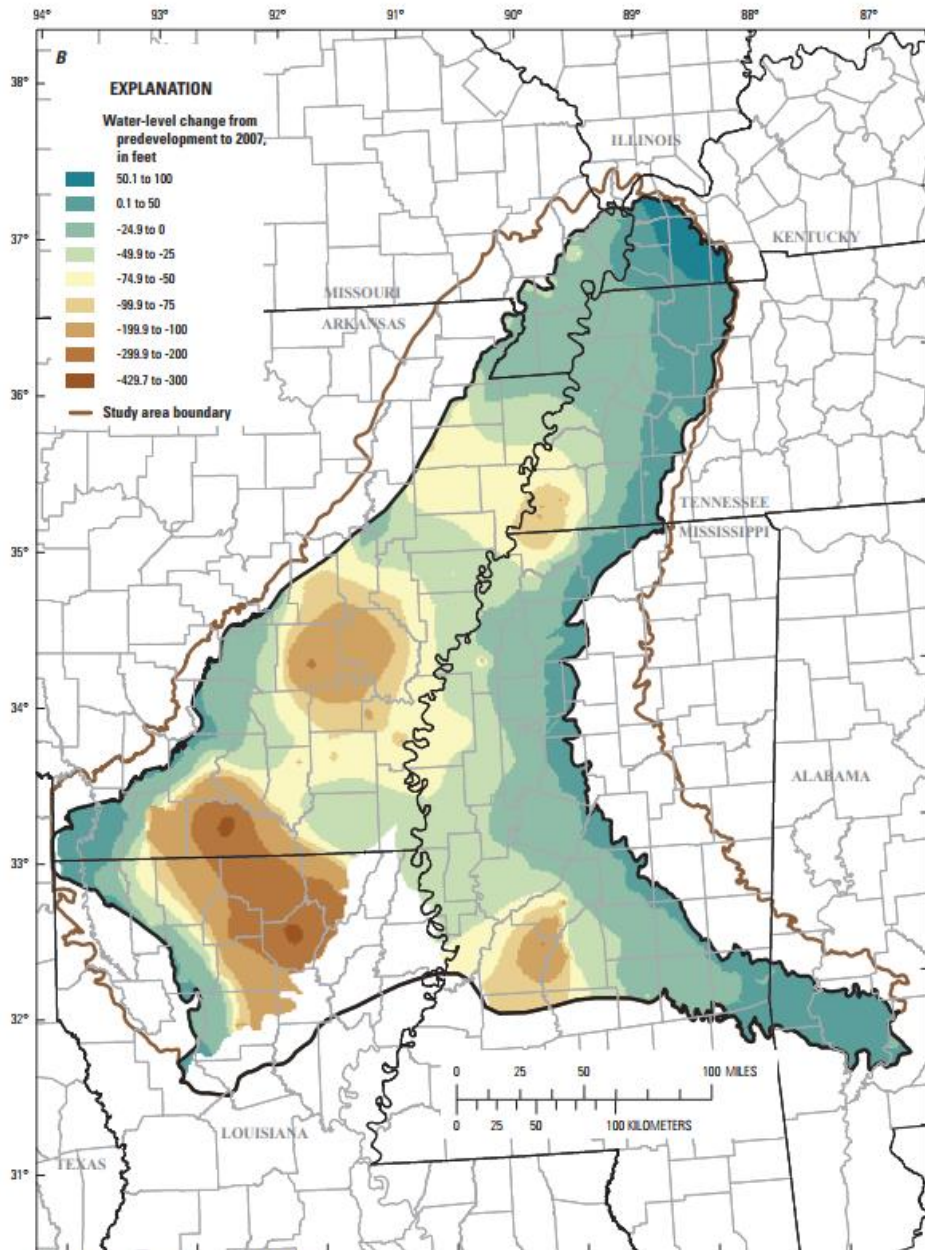
Background on Sparta Aquifer

- 1960 to Present - USGS reports declining Ground Water Levels in aquifer
- 1999 - Louisiana Legislature created Sparta Groundwater Conservation District
 - Evaluate problem
 - Make recommendations
- 2002 - Sparta Groundwater Conservation District Report
 - Sustainable yield ~ 52 MGD
 - Withdrawal demand ~ 70 MGD
 - Recommend Reduction ~ 30MGD
 - Recommends 5 projects to close 30 MGD deficit

Union-Lincoln Regional Water Supply Initiative

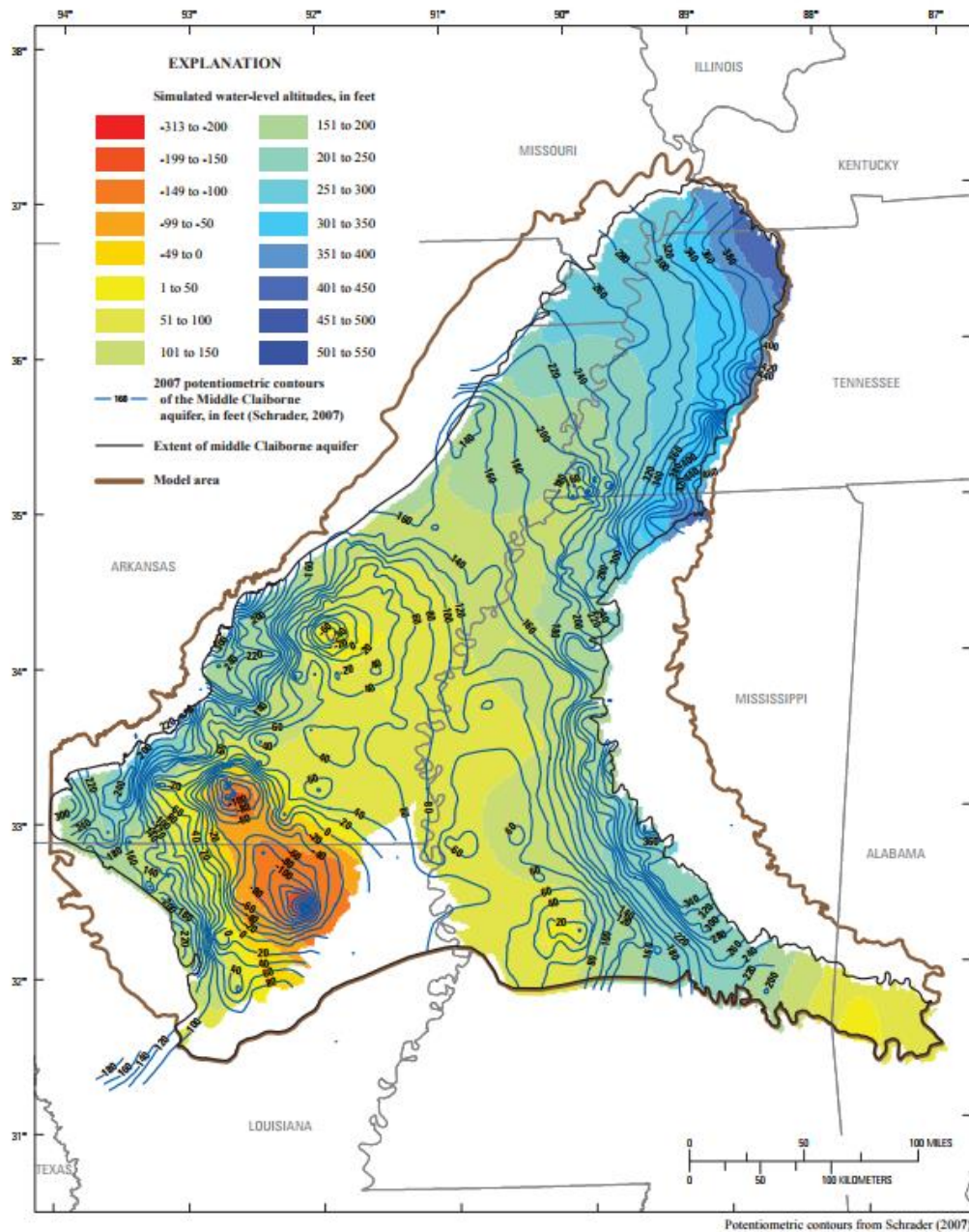
- Formed in 2003
- Includes the following members
 - Union Parish Policy Jury
 - Lincoln Parish Police Jury
 - Town of Farmerville
 - City of Ruston





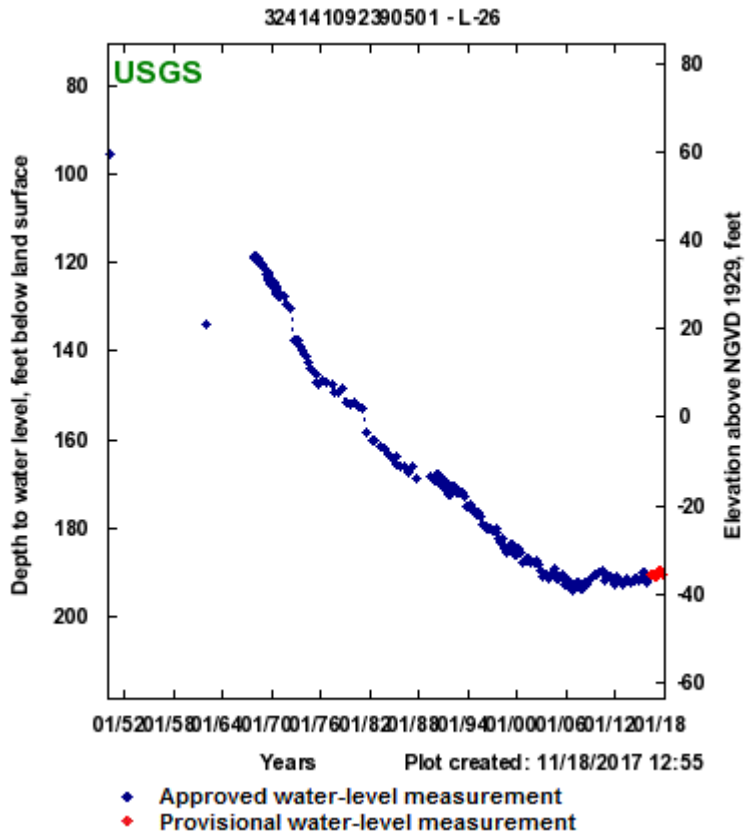
Water Level Change from
Predevelopment to 2007

Figure 14. Water-level change from predevelopment to 2007 in the A, Mississippi River Valley alluvial aquifer and B, the middle Claiborne aquifer.—Continued

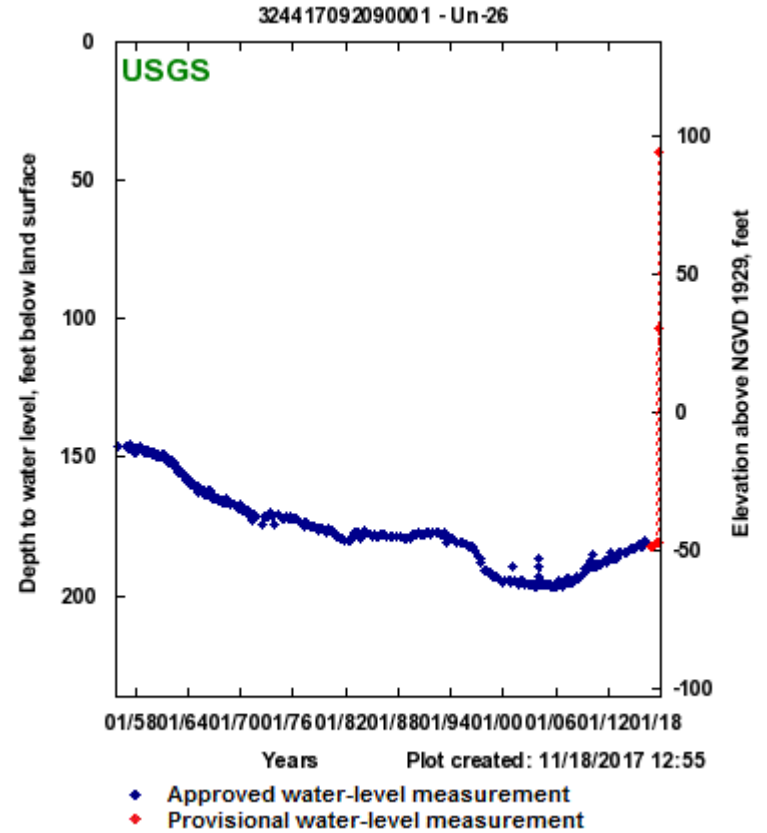


Simulated water level altitudes, in feet

Figure 17. Potentiometric surface and simulated water levels for the middle Claiborne aquifer, 2007.

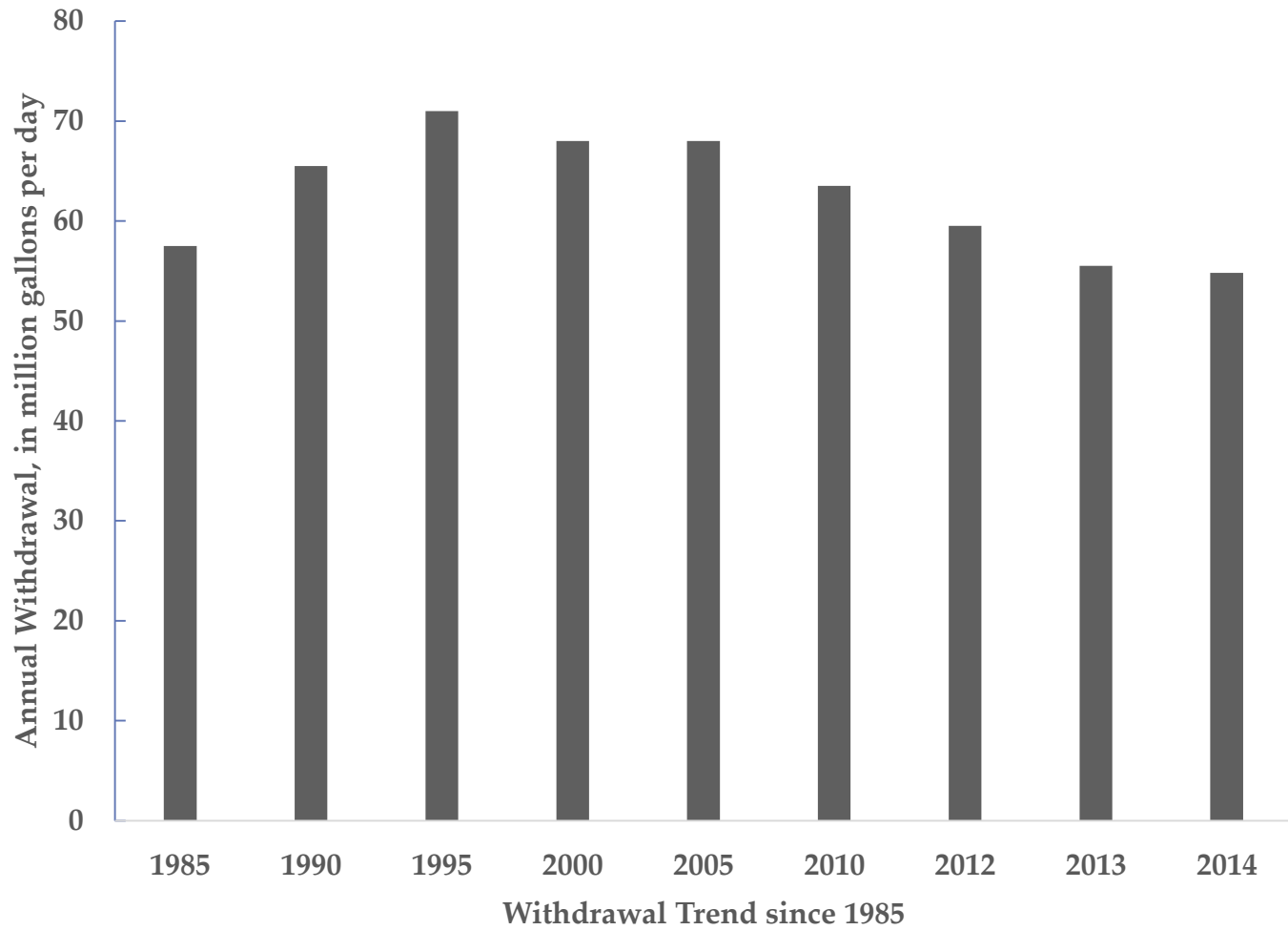


USGS Well L-26 in Lincoln Parish

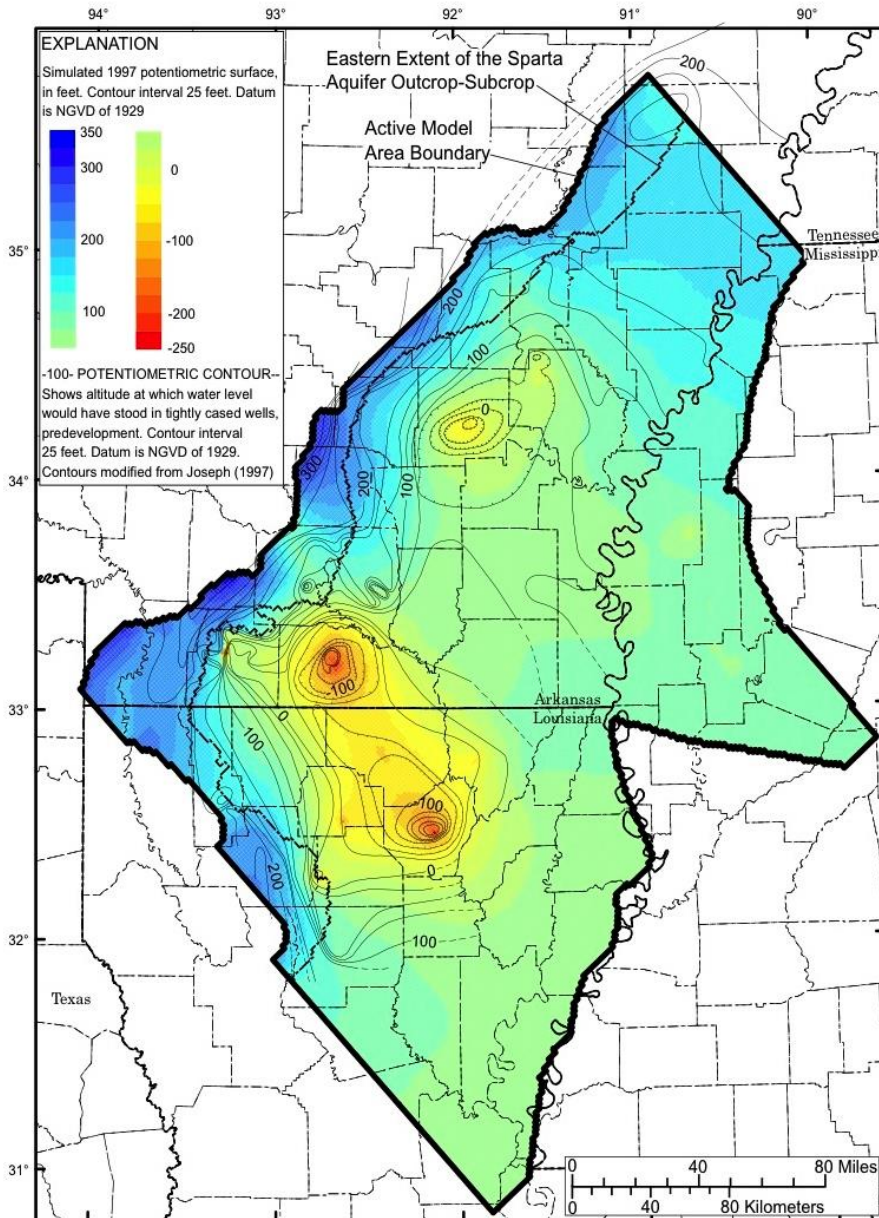


USGS Well U-26 in Union Parish

Depth to water level over time



Sparta Aquifer Withdrawals

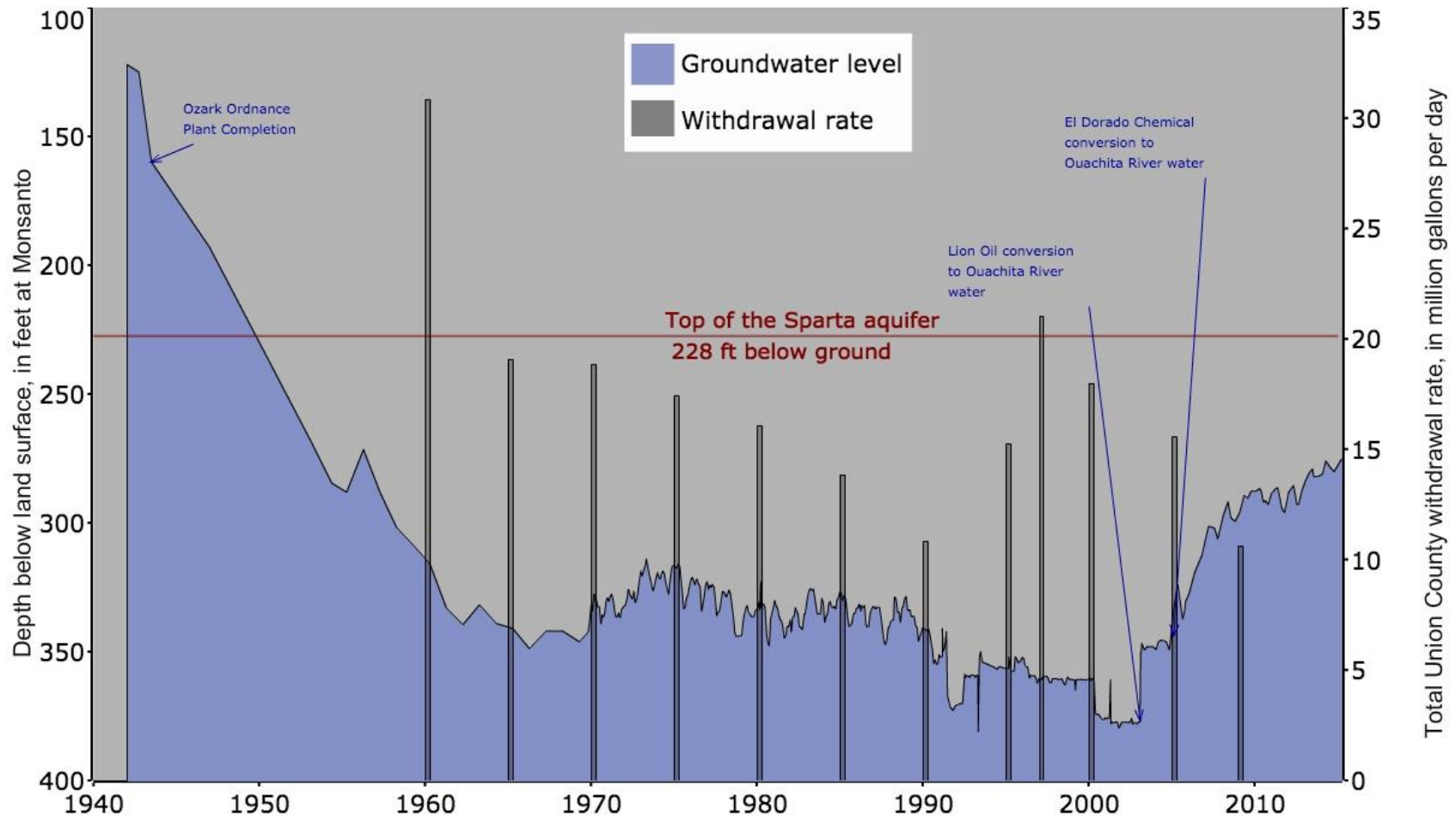


Problem – 1996: *Union County's only source of drinking & industrial water -- was declining rapidly and met Critical Groundwater criteria*

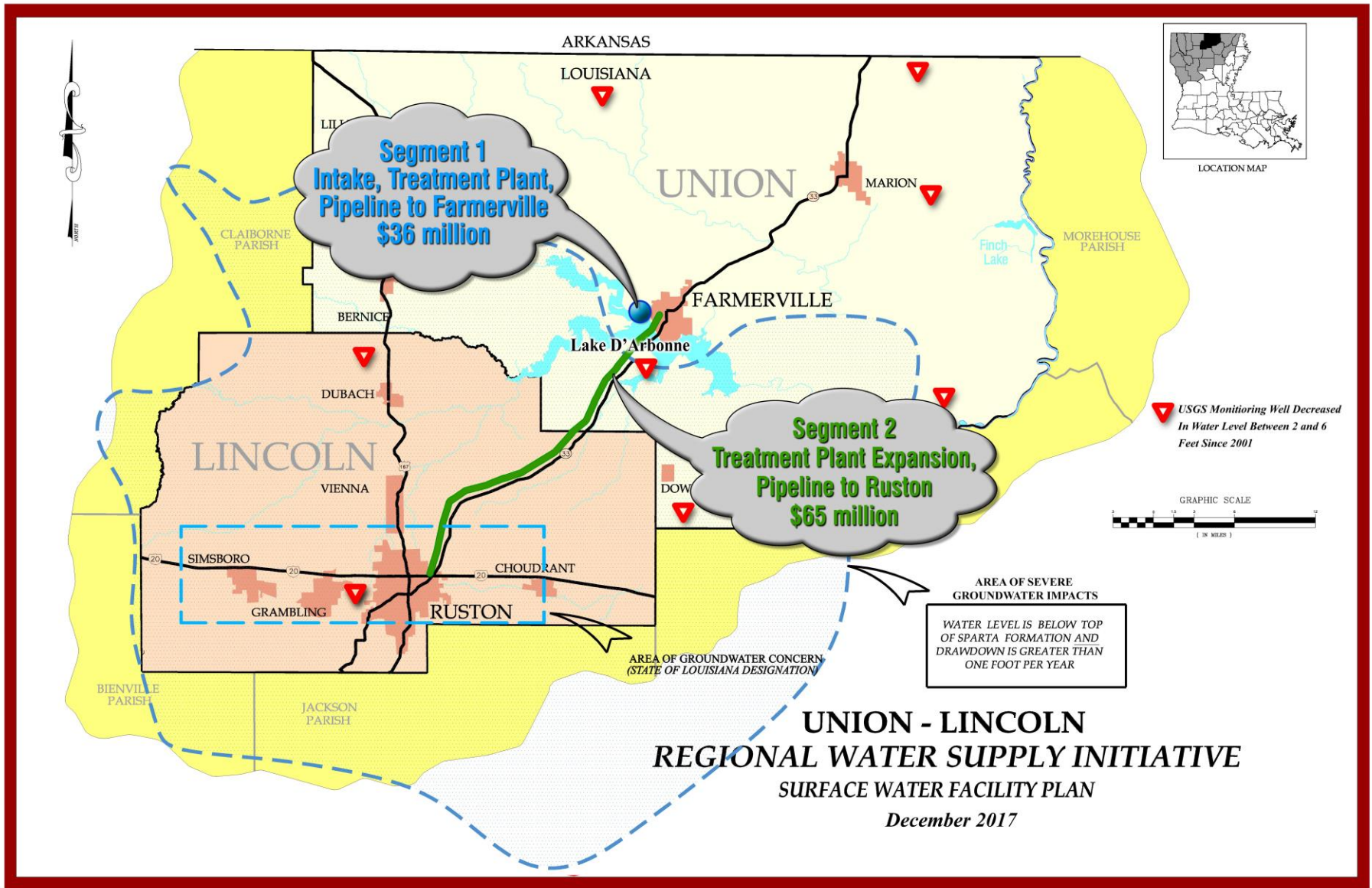
- *Groundwater levels declining 1'+ per year for 5 previous years*
- *Water quality degradation or threat*
- *Groundwater levels at or below top of aquifer*

No time to waste. Help ourselves. Go it alone.

USGS Monsanto Real-Time Monitoring Well



Groundwater Levels 1942 – 2016
Total Union County Groundwater Usage 1960 - 2016
Aquifer Test Pumping Well in 1947 - 1999 – 2012
Interactive at www.ucwcb.org



UNION - LINCOLN
REGIONAL WATER SUPPLY INITIATIVE
SURFACE WATER FACILITY PLAN
December 2017

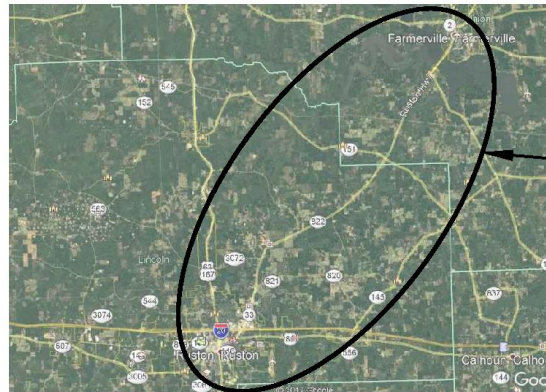
UNION-LINCOLN REGIONAL WATER SUPPLY INITIATIVE SEGMENT 1 AND SEGMENT 2 UNION-LINCOLN PARISH, LOUISIANA



UNION-LINCOLN REGIONAL
WATER SUPPLY INITIATIVE
SEGMENT 1 AND SEGMENT 2
UNION-LINCOLN PARISH, LOUISIANA

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PROJECT LOCATION

SCHEMATIC DESIGN PLANS

NOVEMBER 2017

DRAWING REVISIONS		
NO.	REVISION	DATE

SCHEMATIC
DESIGN
PLANS

DATE	BY	CHECK	APP

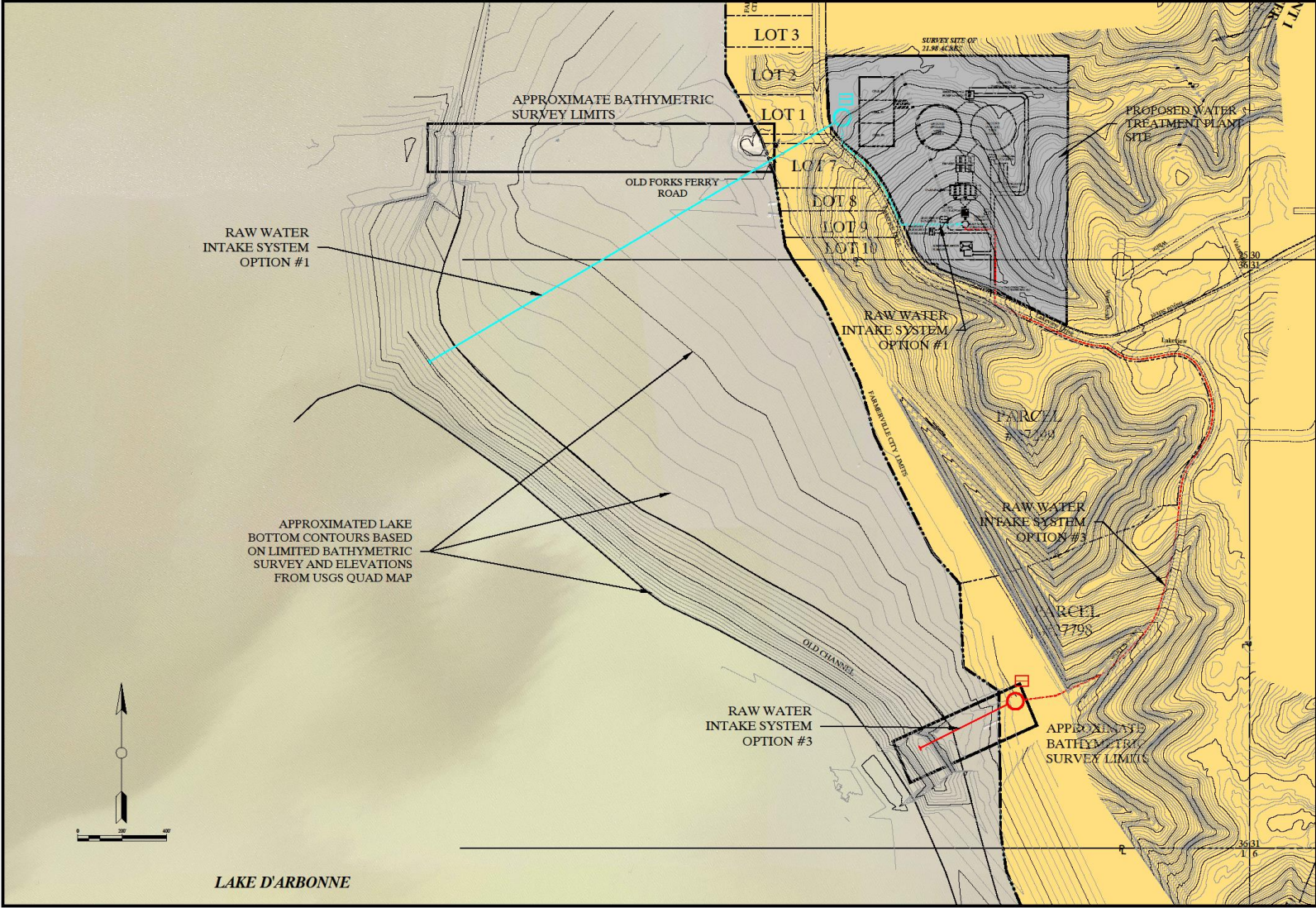
COVER SHEET

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RAW WATER
INTAKE SYSTEM
OPTION #1

APPROXIMATED LAKE
BOTTOM CONTOURS BASED
ON LIMITED BATHYMETRIC
SURVEY AND ELEVATIONS
FROM USGS QUAD MAP

RAW WATER
INTAKE SYSTEM
OPTION #3

APPROXIMATE BATHYMETRIC
SURVEY LIMITS

OLD FORKS FERRY
ROAD

LOT 3

LOT 2

LOT 1

LOT 7

LOT 8

LOT 9

LOT 10

RAW WATER
INTAKE SYSTEM
OPTION #1

PARCEL
17748

RAW WATER
INTAKE SYSTEM
OPTION #3

PARCEL
17798

APPROXIMATE
BATHYMETRIC
SURVEY LIMITS

PROPOSED WATER
TREATMENT PLANT
SITE



**UNION-LINCOLN REGIONAL
WATER SUPPLY INITIATIVE
SEGMENT 1 AND SEGMENT 2
UNION-LINCOLN PARISH, LOUISIANA**

NO.	REVISED / CHANGE REMARKS	DATE

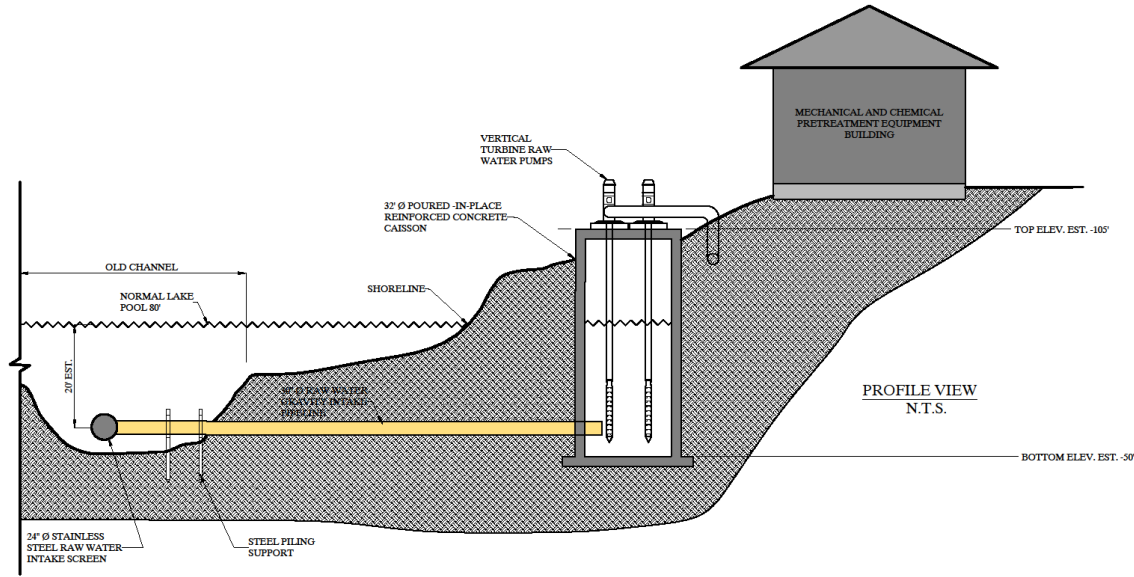
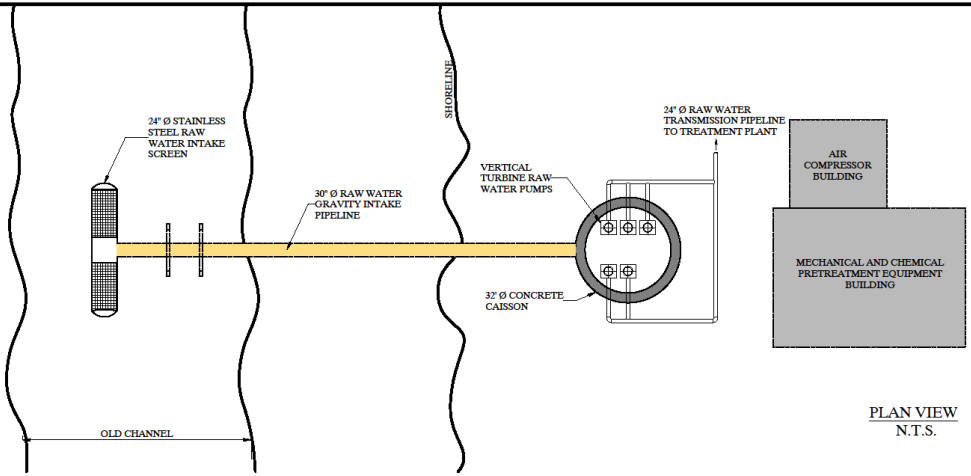
**SCHEMATIC
DESIGN
PLANS**

**SEGMENT 1
INTAKE AND WTP
SITE TOPO**

C1.1

LAKE D'ARBONNE

**UNION-LINCOLN REGIONAL
WATER SUPPLY INITIATIVE
SEGMENT 1 AND SEGMENT 2
UNION-LINCOLN PARISH, LOUISIANA**



DISPOSED REVISIONS		
NO.	REVISIONS	DATE

SCHEMATIC
DESIGN
PLANS

DATE	BY	CHKD.	APP'D.	REVISION

**PRELIMINARY
RAW WATER
INTAKE SYSTEM**

C1.2

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