

# WAUKESHA WATER UTILITY

## THE DEVELOPMENT OF A NEW WATER SUPPLY

*March/April, 2012*



# MEETING FORMAT

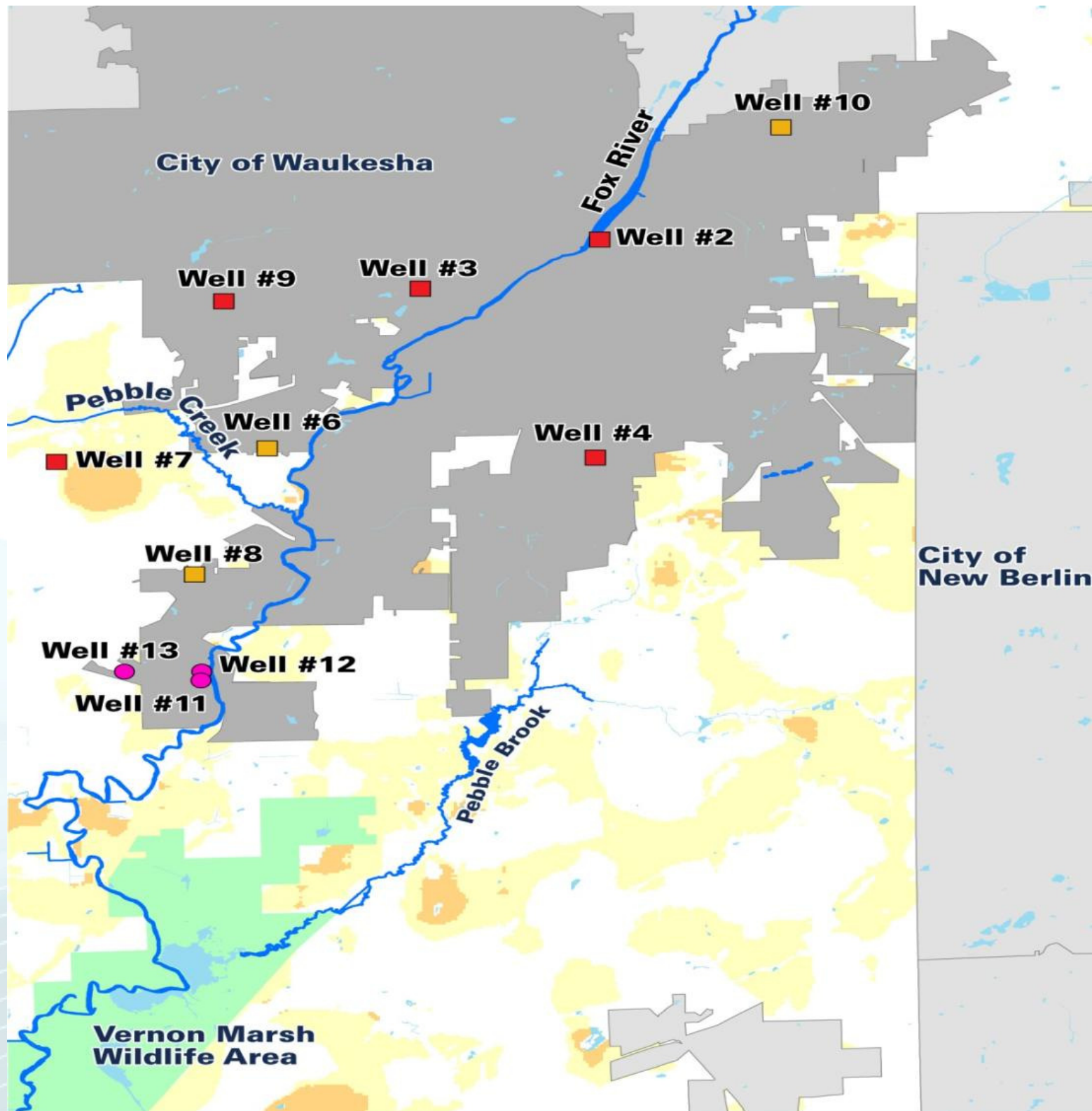
- Background on the Waukesha Water Utility
- How Did We Get to This Point?
- What Alternatives Have Been Evaluated?
- What Is the Schedule Moving Forward?
- Questions?????

# **BACKGROUND ON THE WAUKESHA WATER UTILITY**



# Our Current Water System

- 8 deep wells (87%)
- 3 shallow wells (13%)
- 12 Storage tanks
- 10 pump stations
- 337 miles of pipe
- Population Served  
70,718



# MEETINGS AND TRANSPARENCY

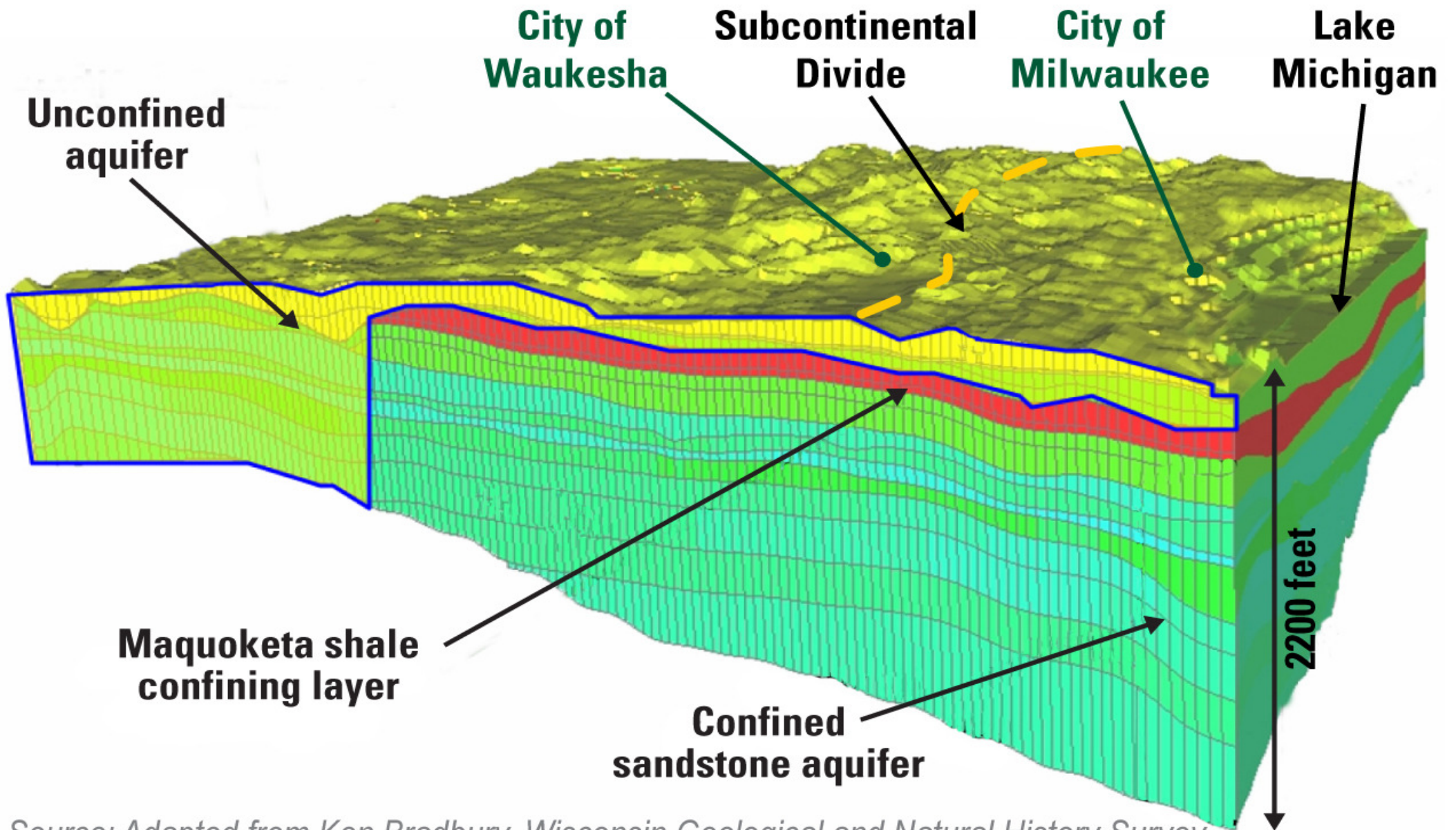
## Water Utility Commission

- 60+ Public Meetings
- Common Council
  - 9 Open Meetings
- Open Houses
  - 4 Open Houses
- Comments on Application
  - Over 200 pages of comments received
- Community Groups
- Neighborhood Meetings
- Web Site Access to All Application Materials:
  - [www.ci.waukesha.wi.us/982](http://www.ci.waukesha.wi.us/982)

**HOW DID WE GET TO THIS POINT?**



# OUR CURRENT WATER SUPPLY

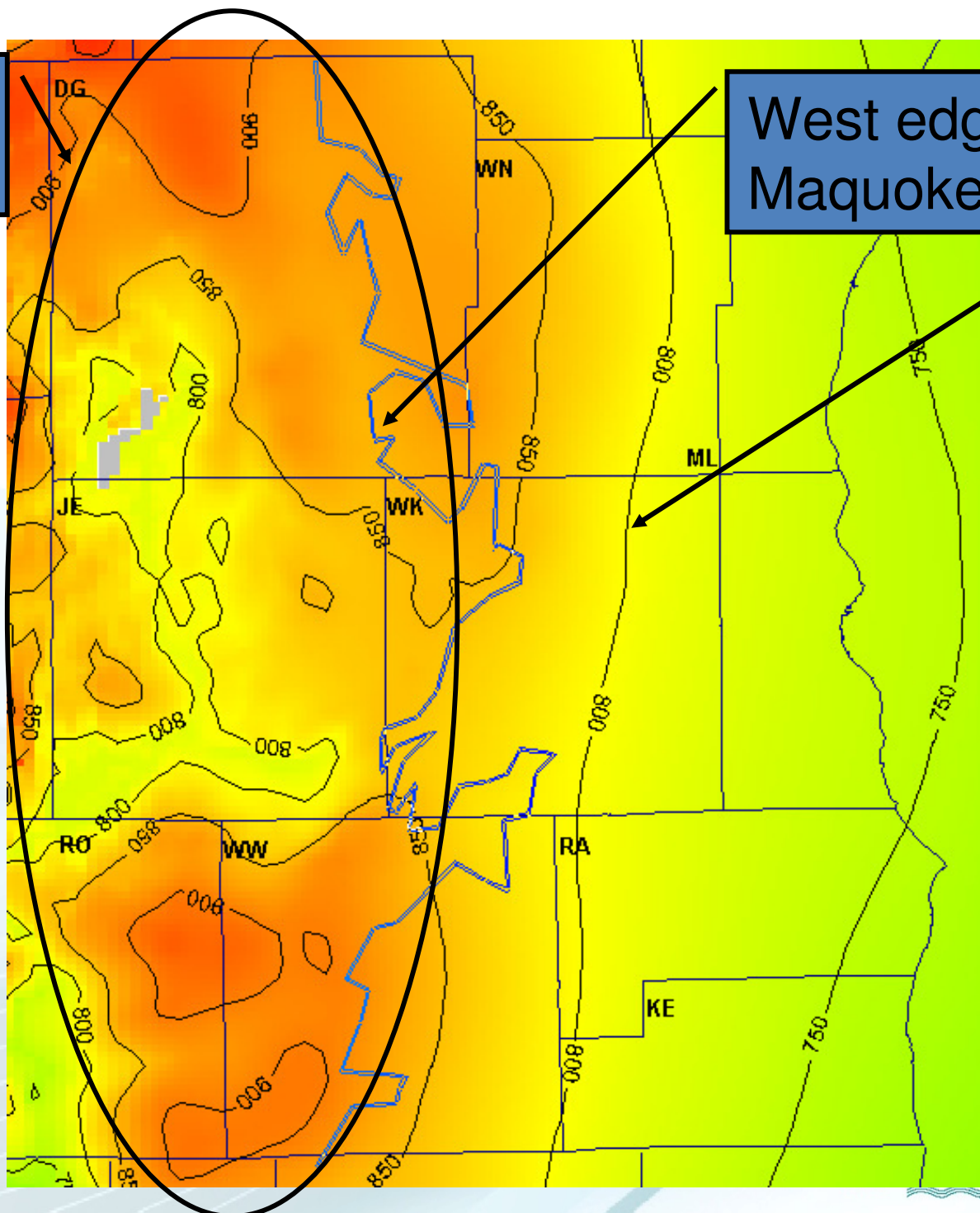


Source: Adapted from Ken Bradbury, Wisconsin Geological and Natural History Survey

unconfined  
area

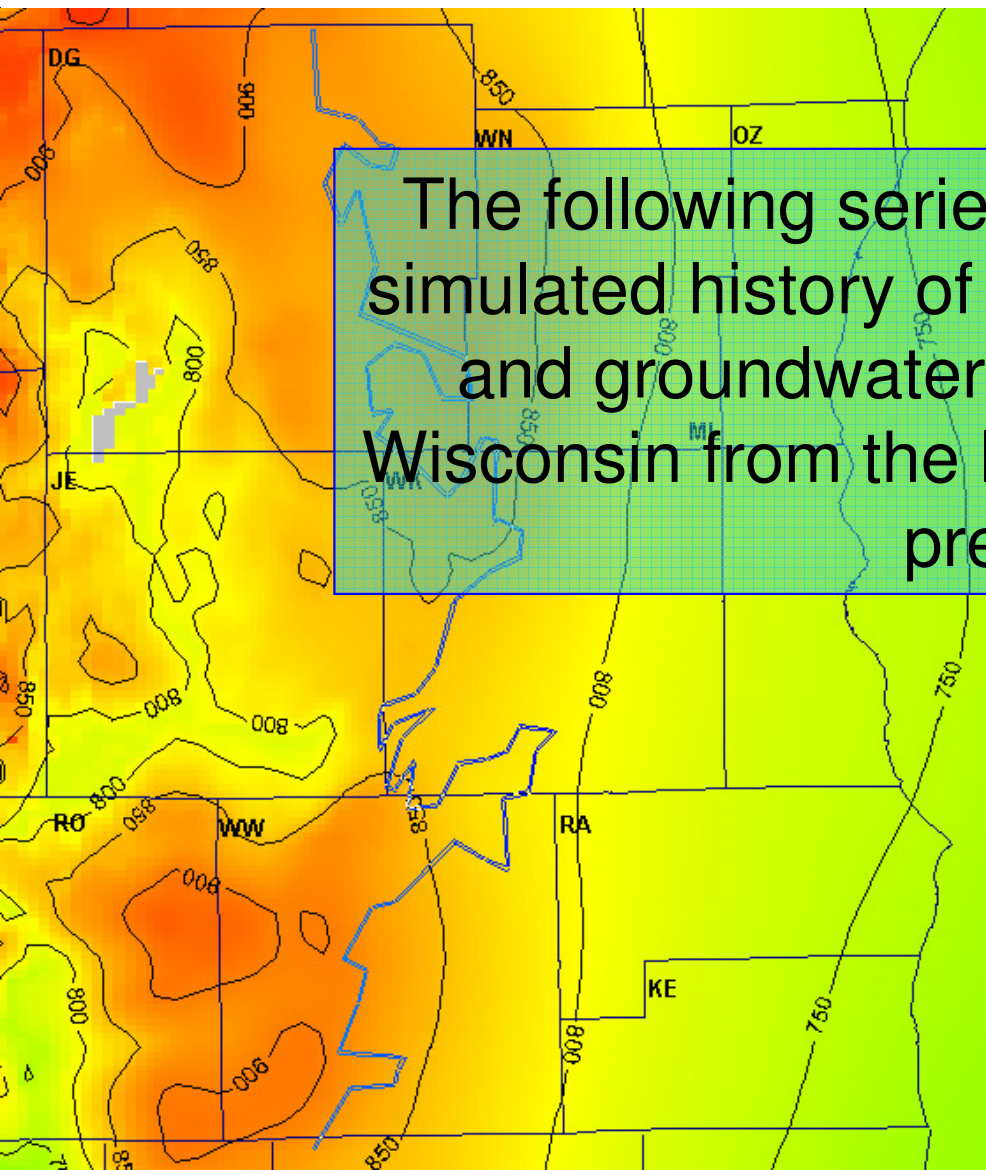
West edge of  
Maquoketa Shale

water  
elevations  
in deep  
sandstone  
(feet above  
sea level)

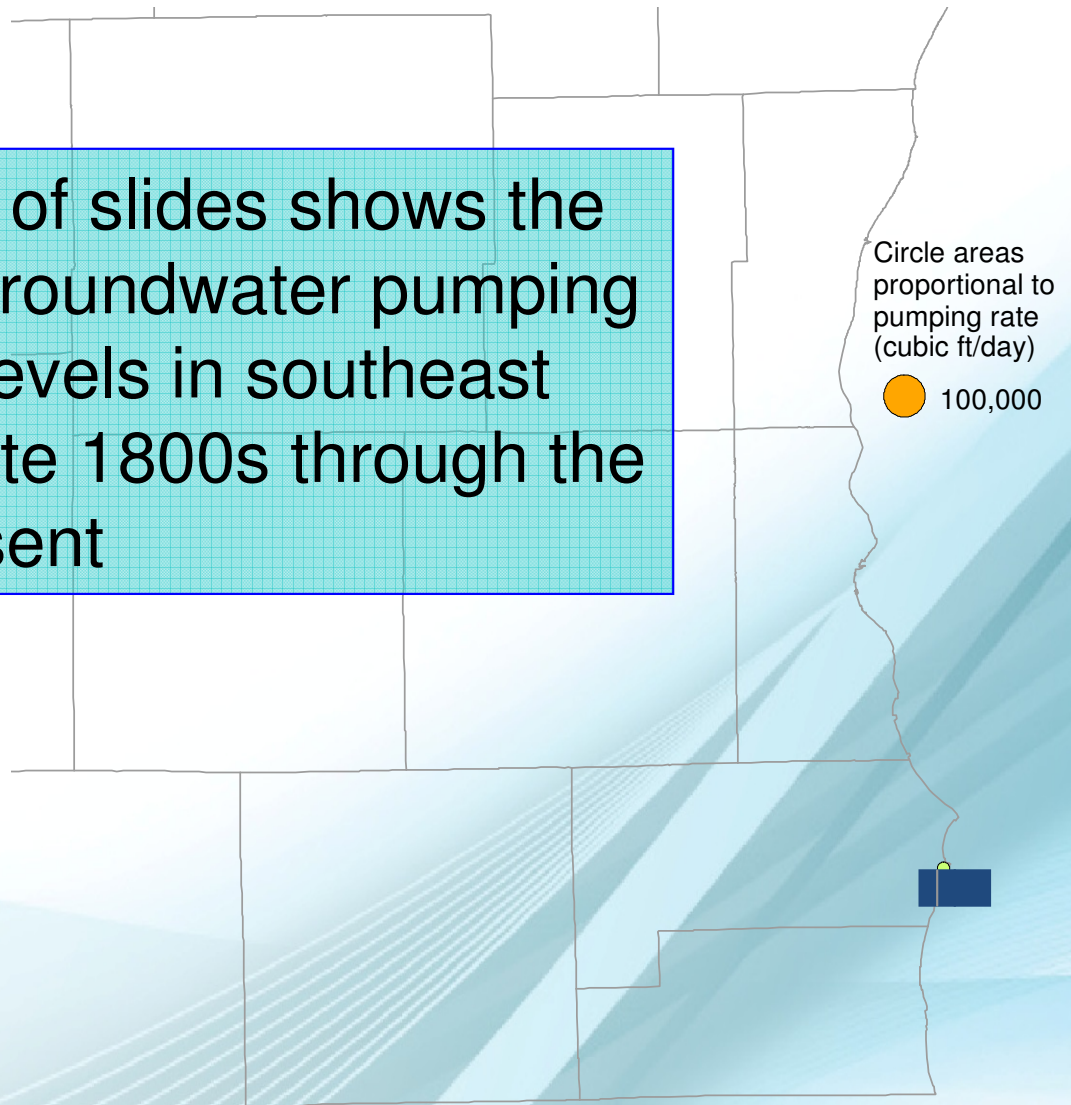




The following series of slides shows the simulated history of groundwater pumping and groundwater levels in southeast Wisconsin from the late 1800s through the present



Water Levels in the Sandstone Aquifer  
(feet above sea level)

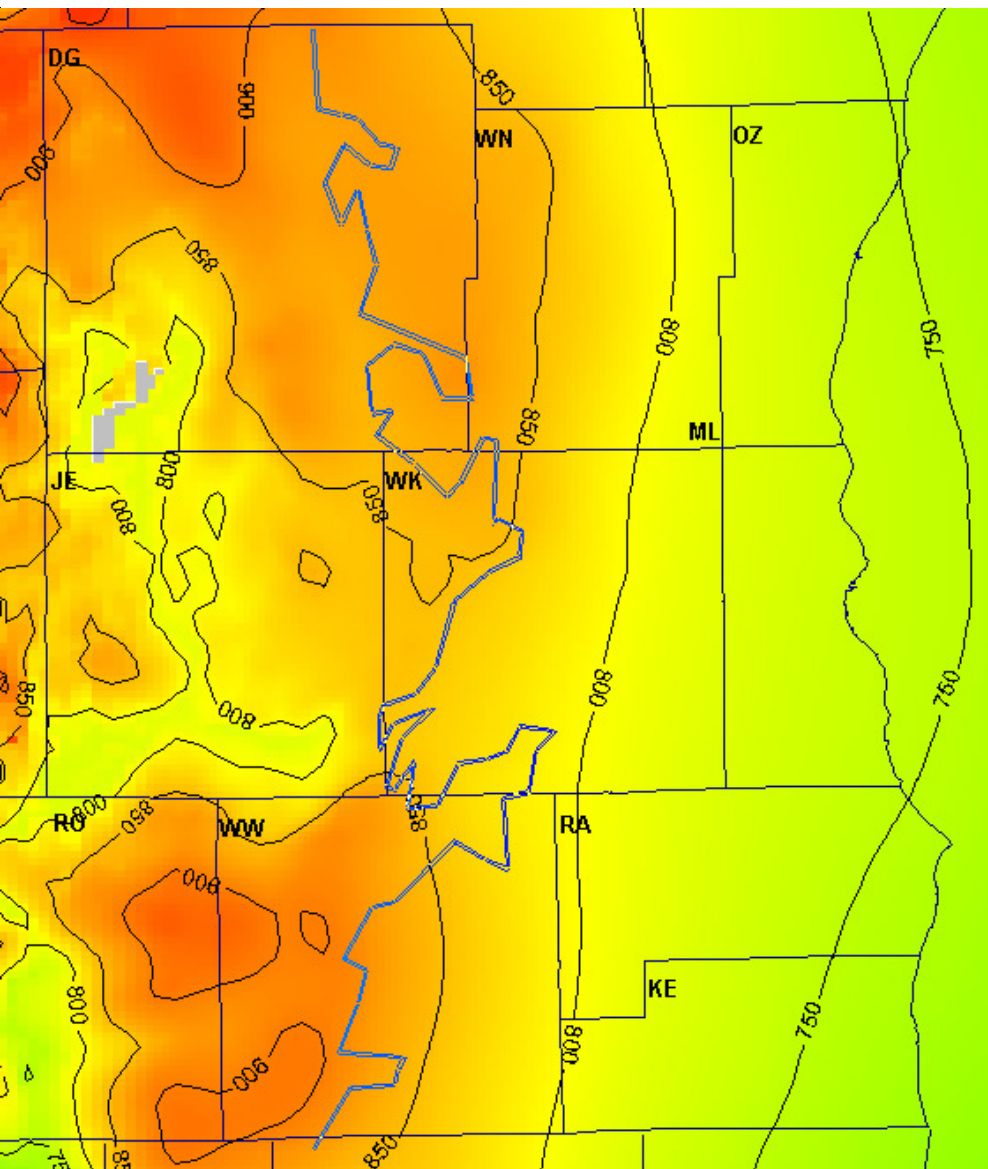


Well Locations and Pumping Rates

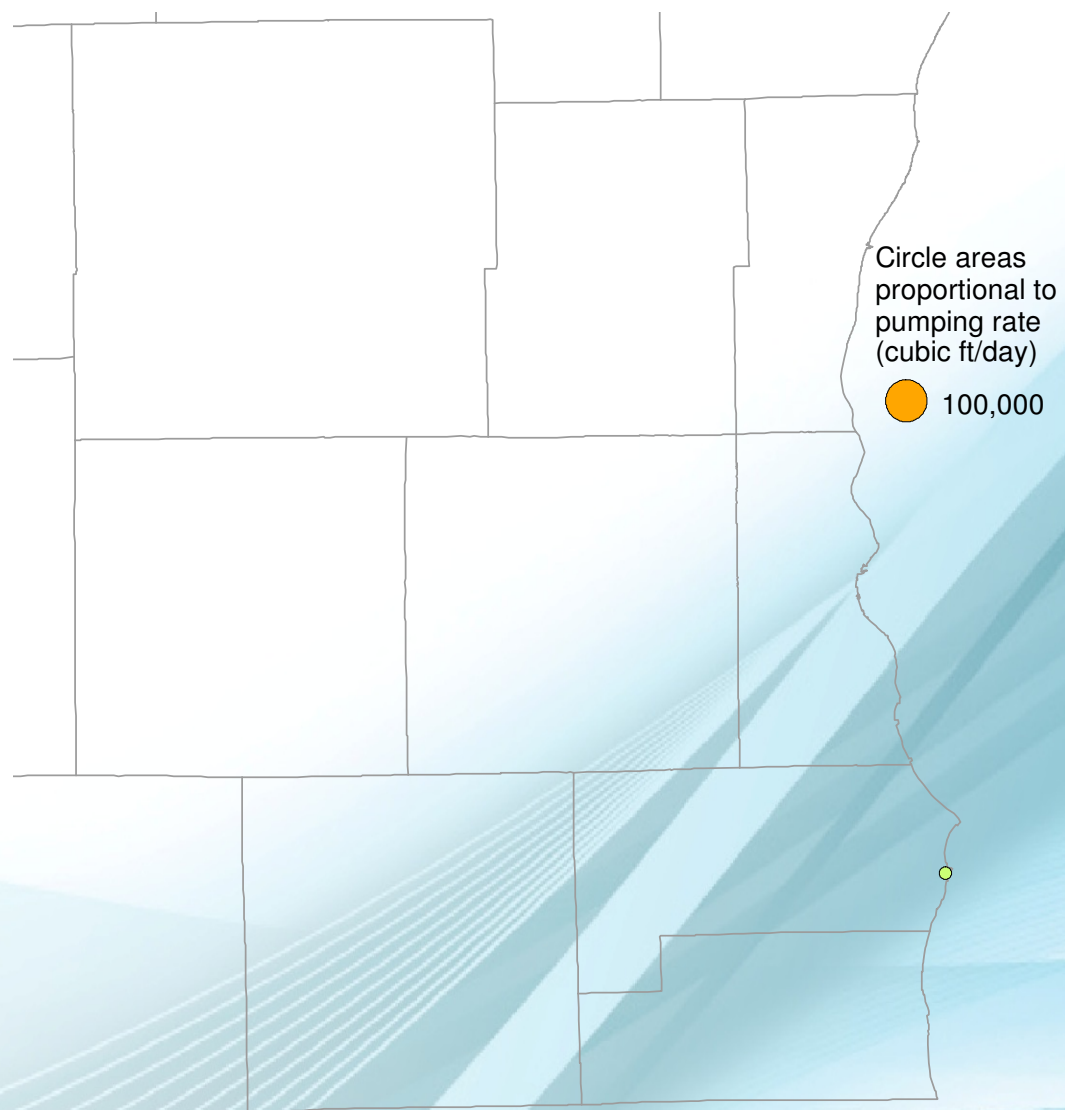
Shallow

Deep

Pre-1864



Water Levels in the Sandstone Aquifer  
(feet above sea level)



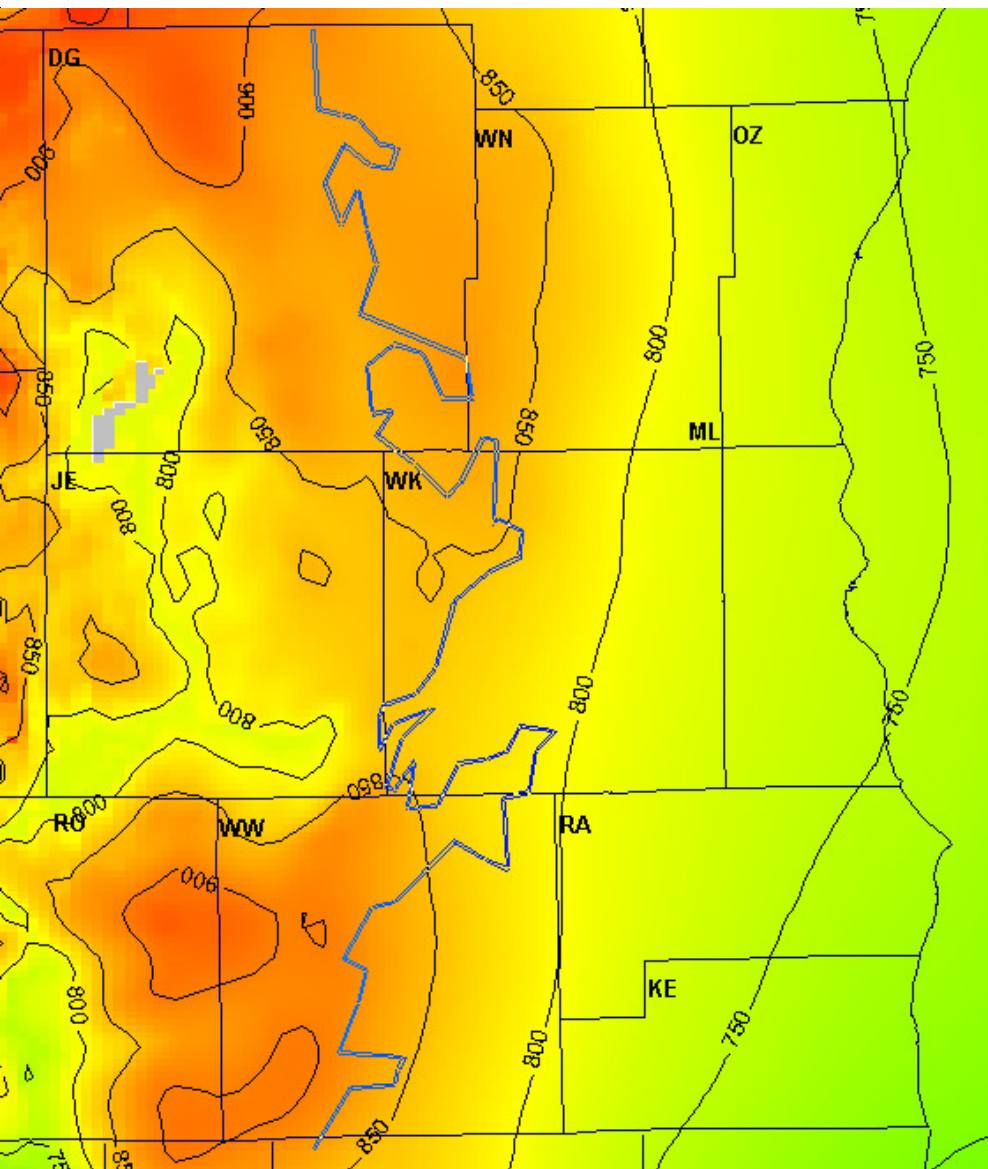
Well Locations and Pumping Rates

Shallow

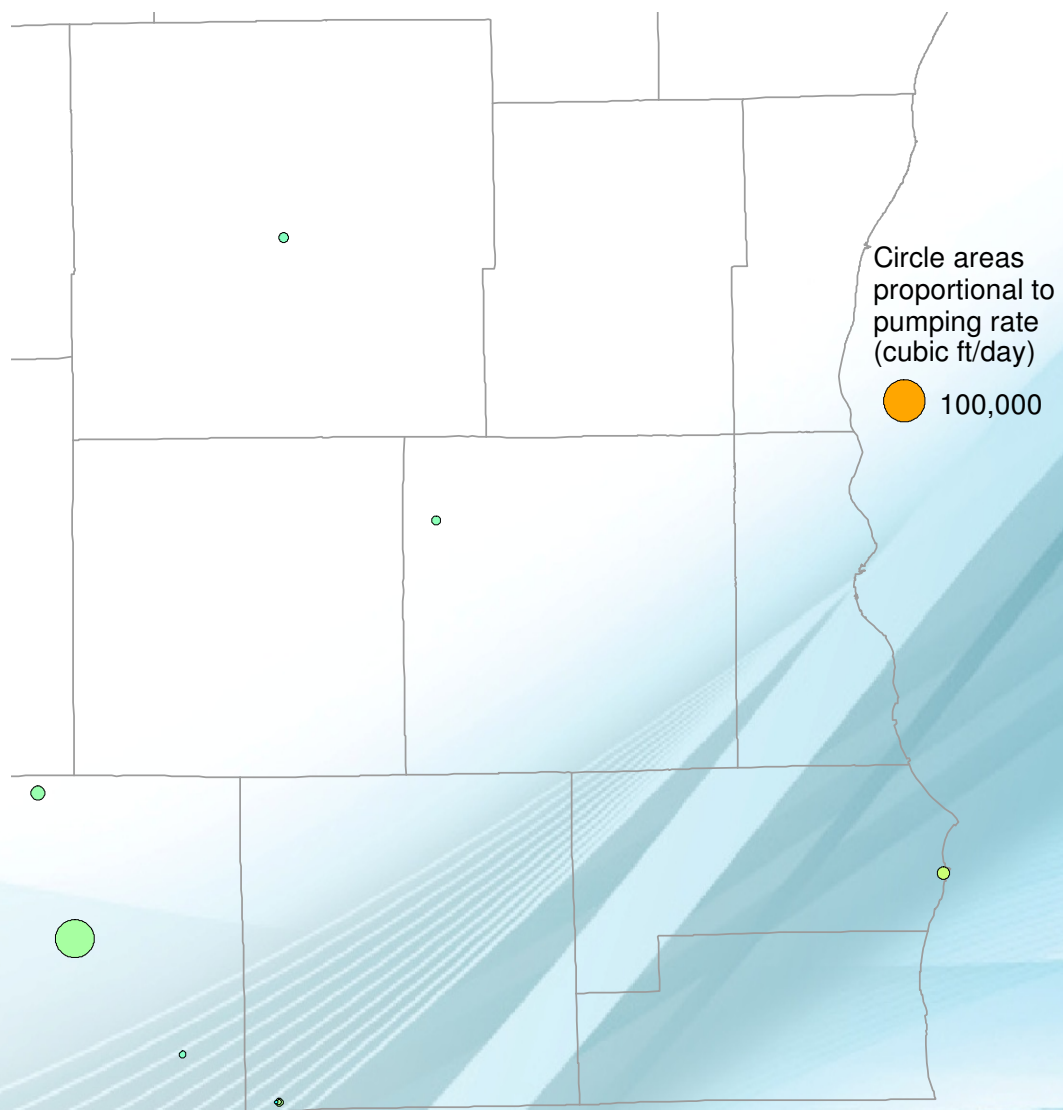
Deep

1864-1880





Water Levels in the Sandstone Aquifer  
(feet above sea level)



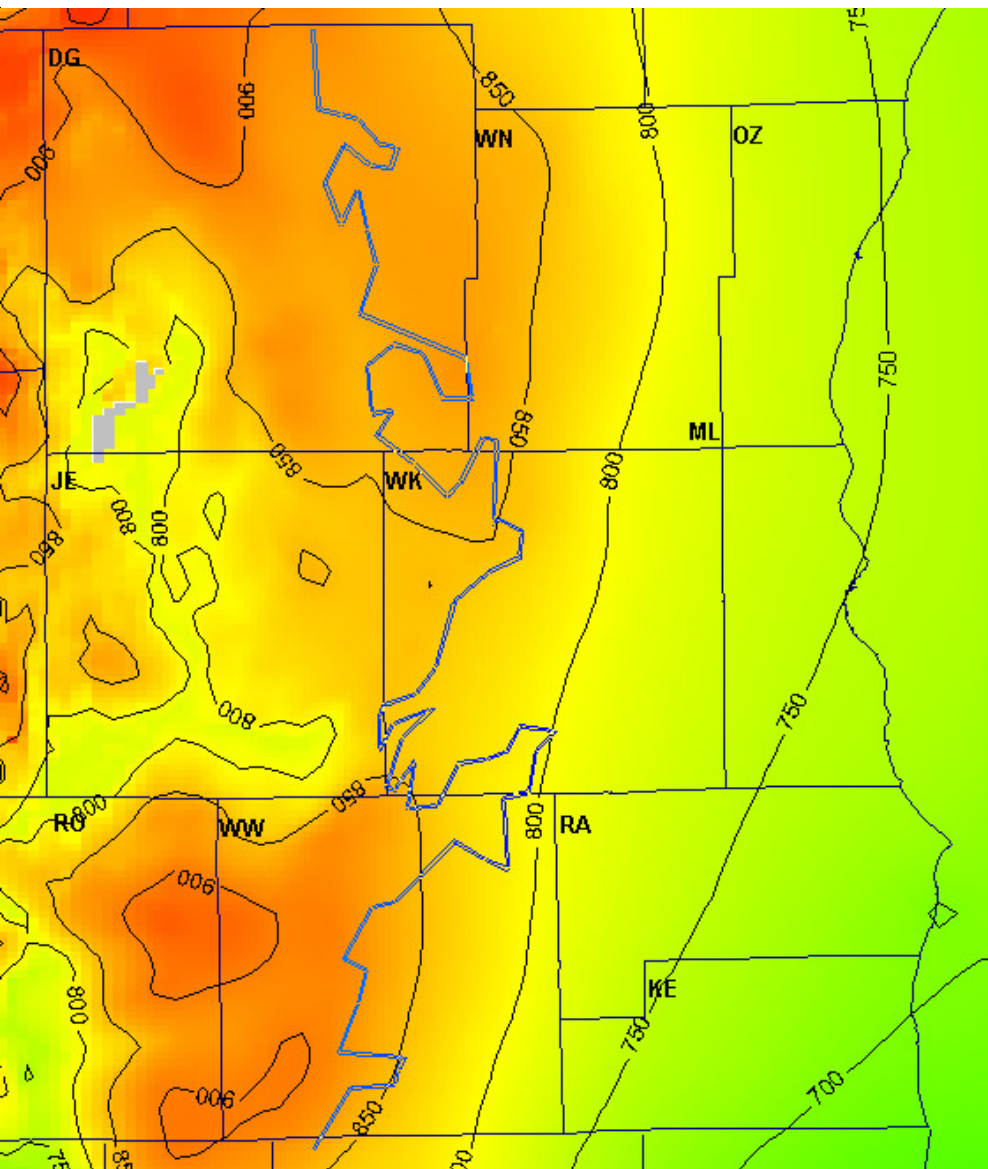
Well Locations and Pumping Rates

Shallow

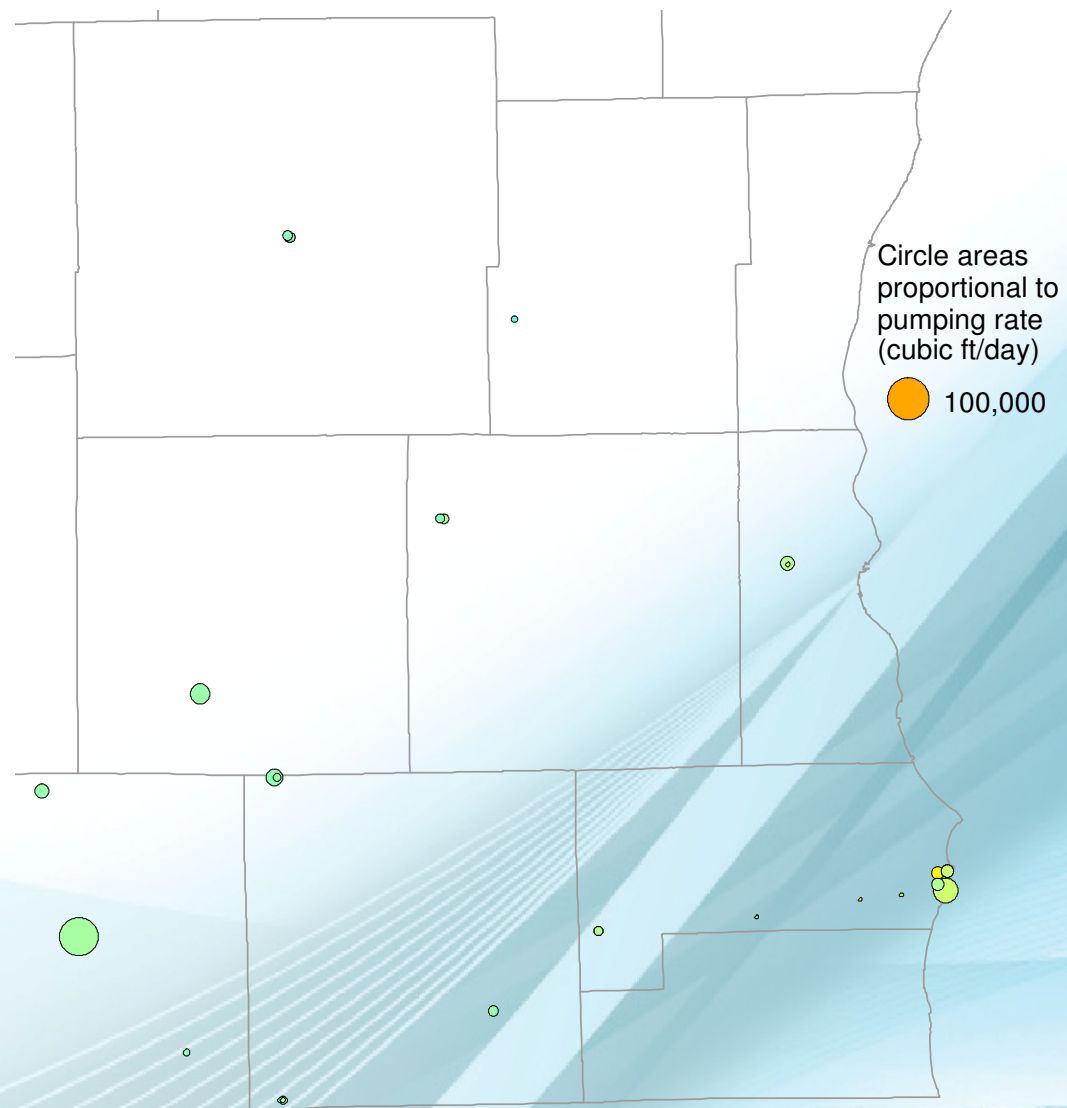
Deep

1880-1900





Water Levels in the Sandstone Aquifer  
(feet above sea level)

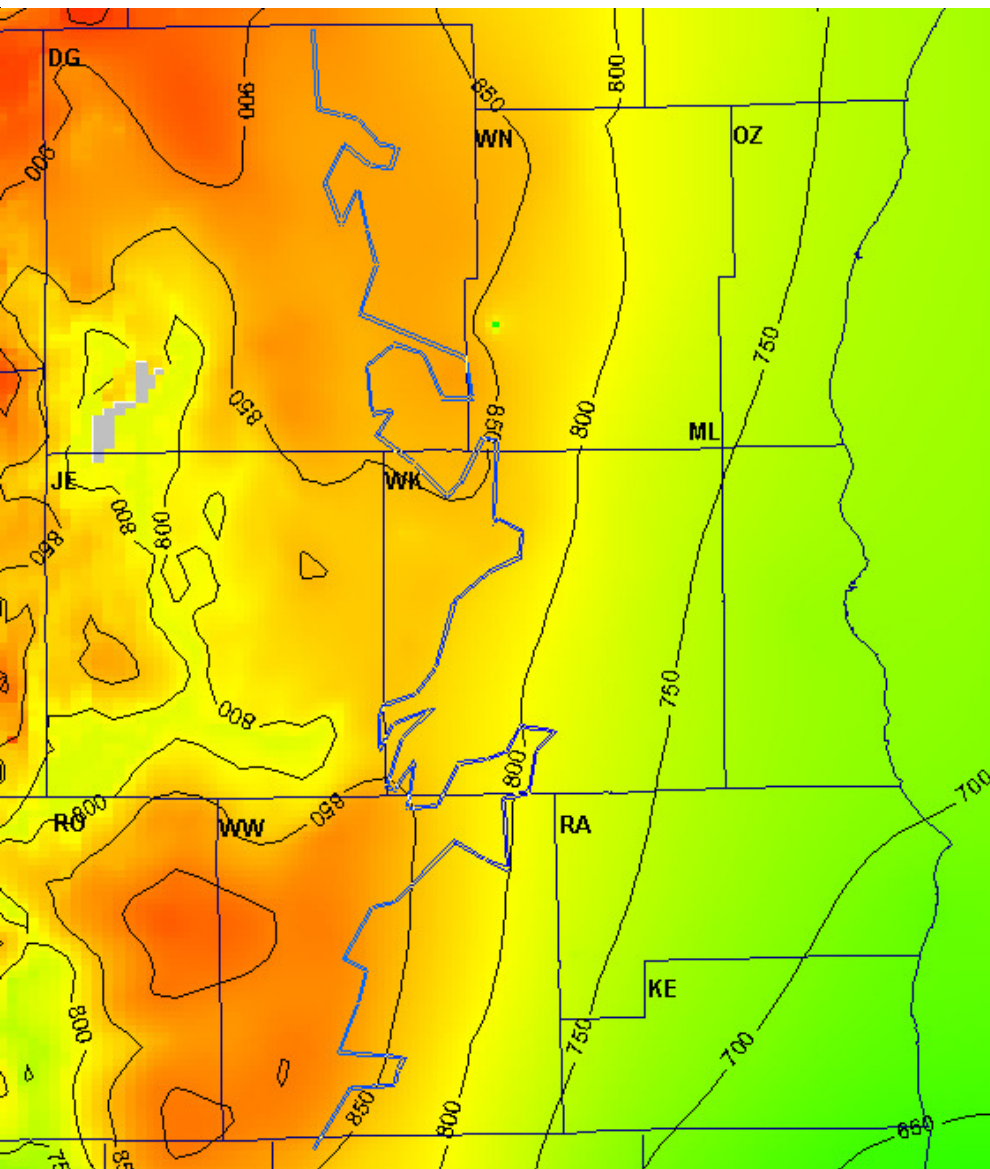


Well Locations and Pumping Rates

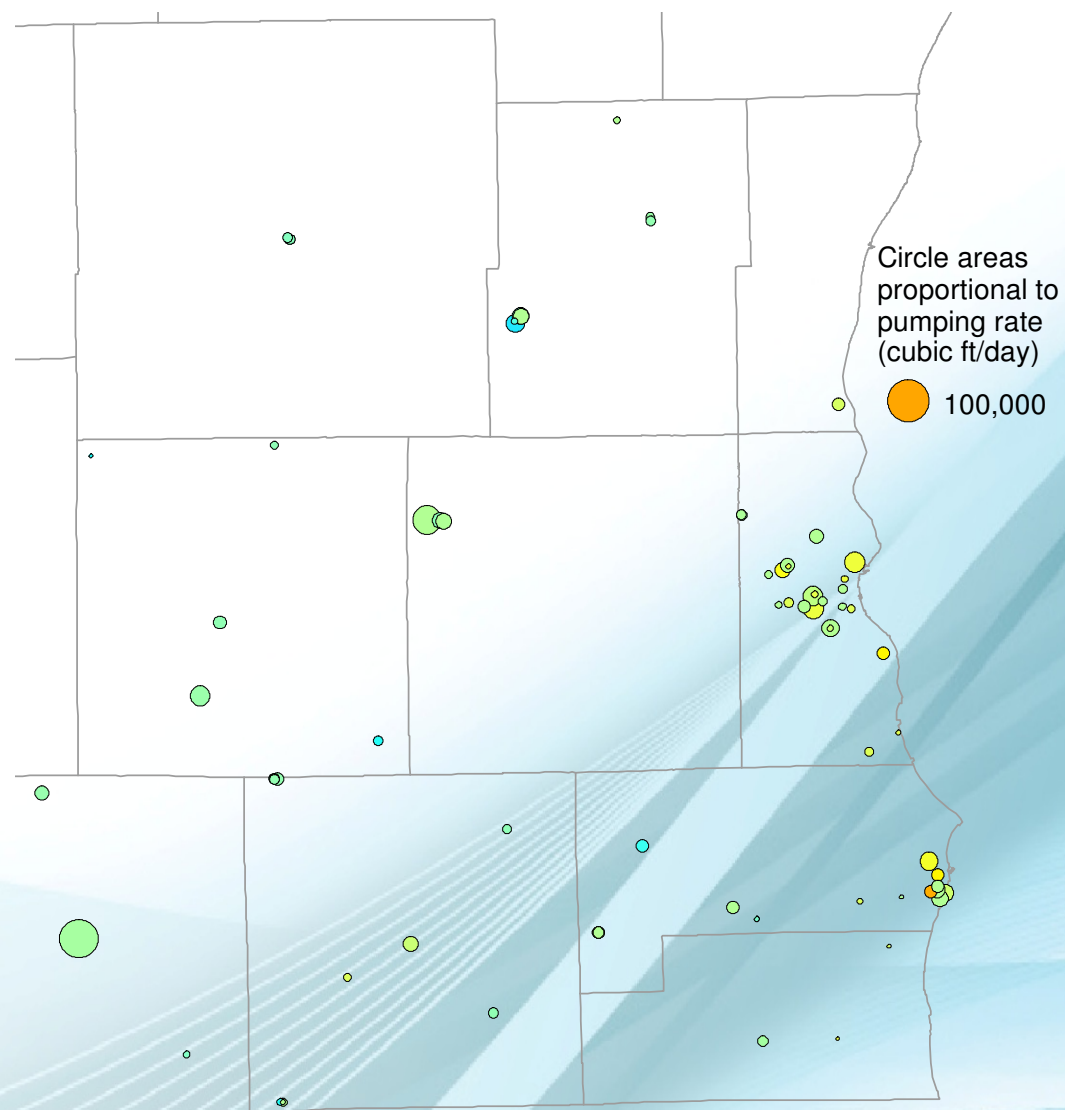
Shallow

Deep

1900-1910



Water Levels in the Sandstone Aquifer  
(feet above sea level)



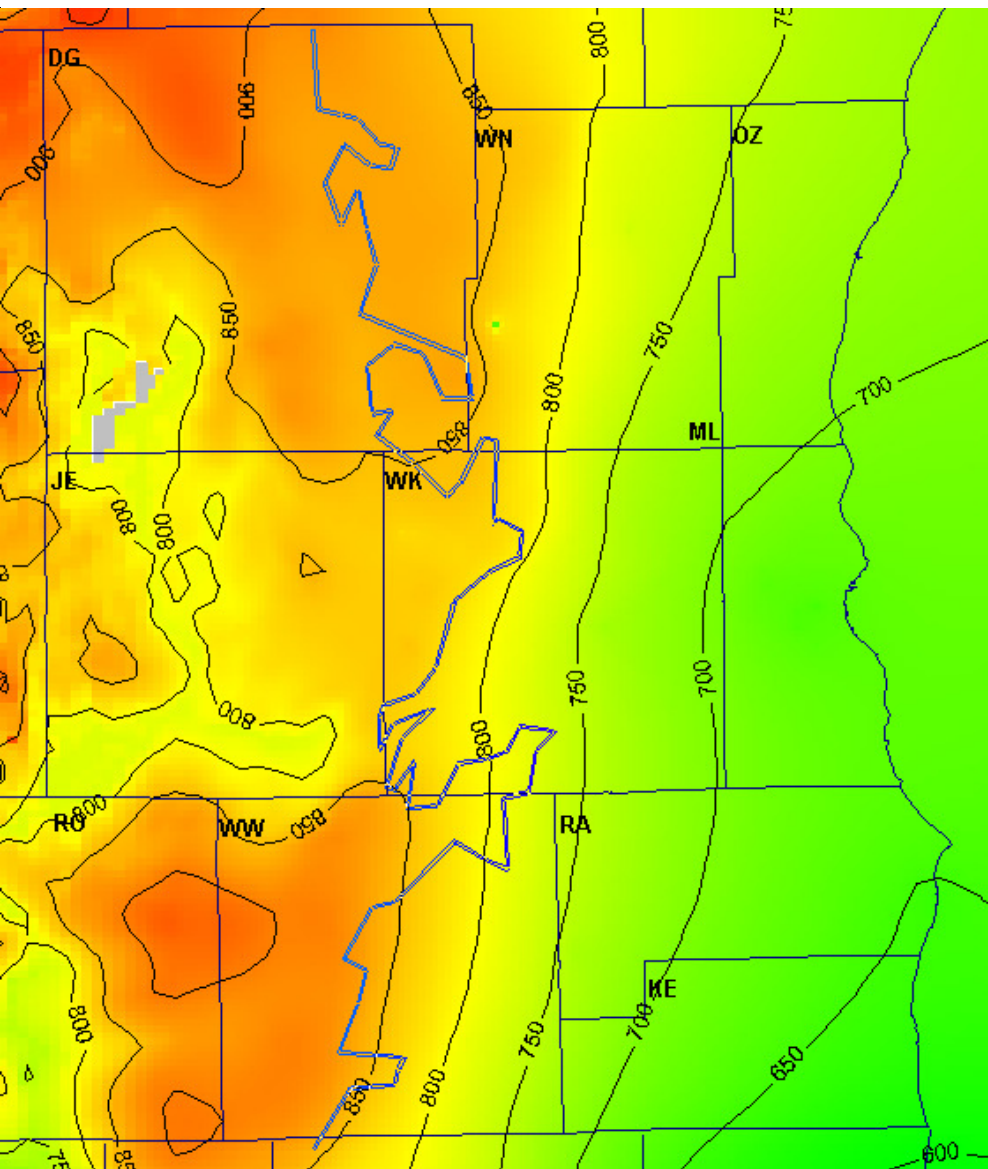
Well Locations and Pumping Rates

Shallow

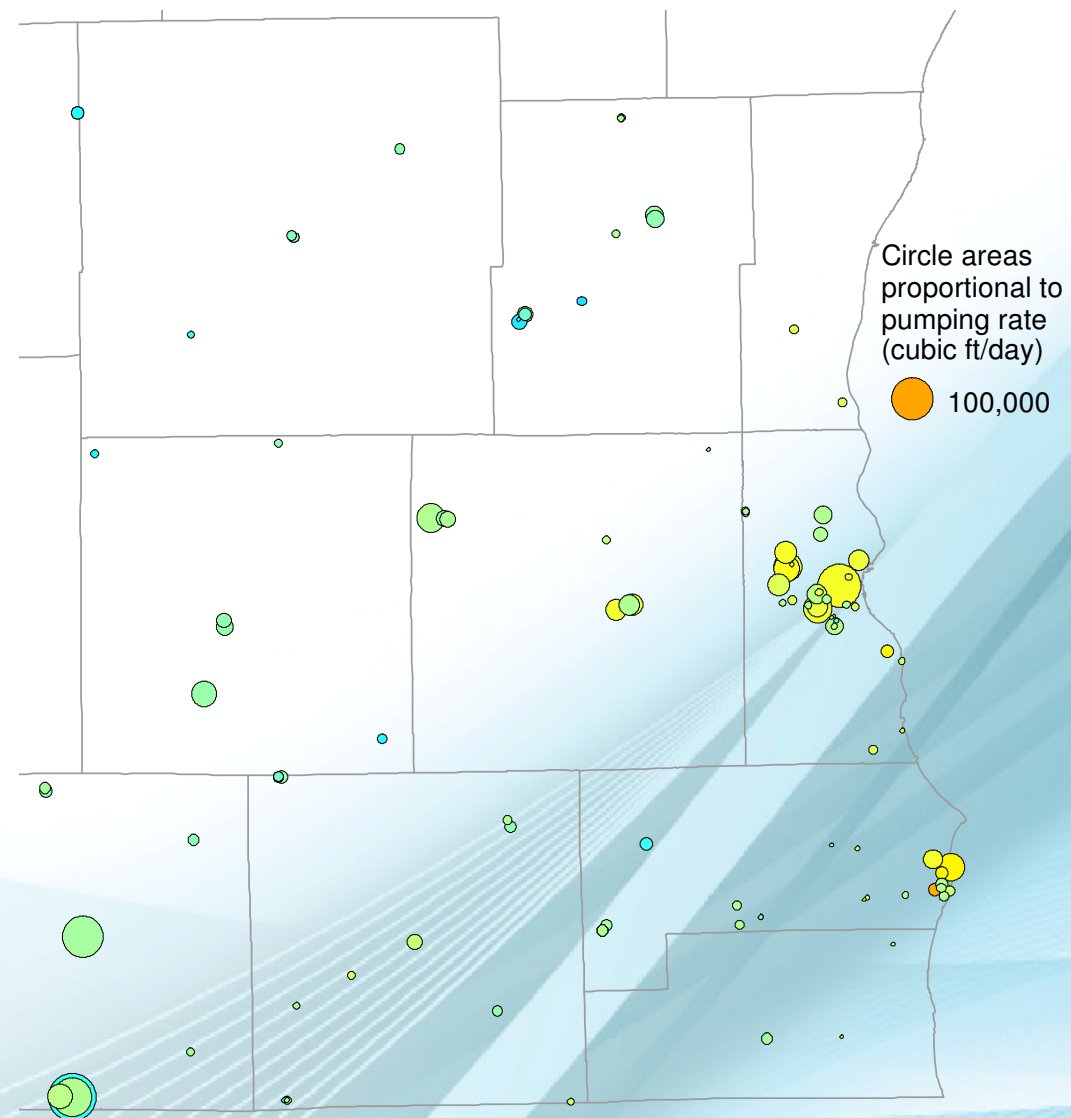
Deep

1910-1920





Water Levels in the Sandstone Aquifer  
(feet above sea level)



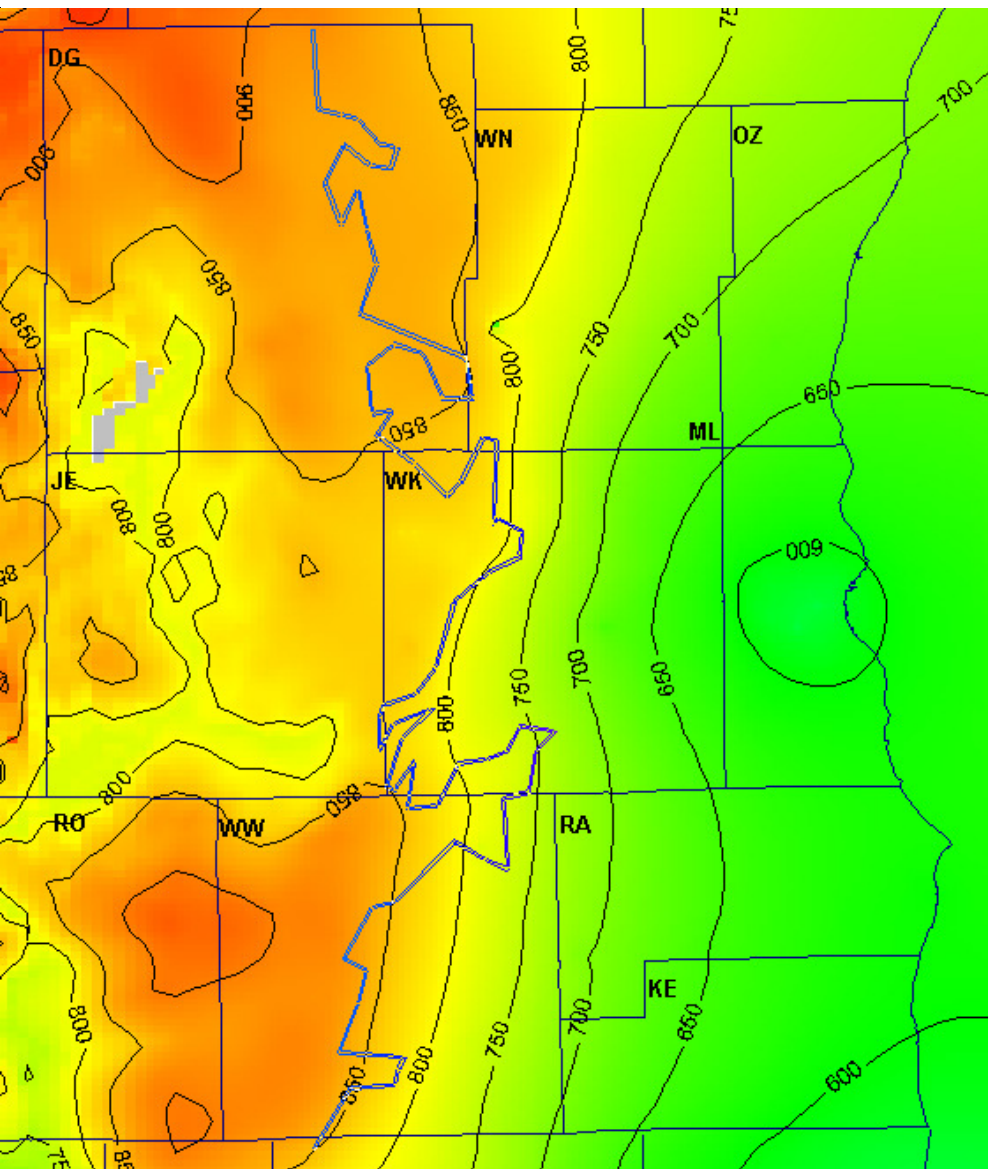
Well Locations and Pumping Rates

Shallow

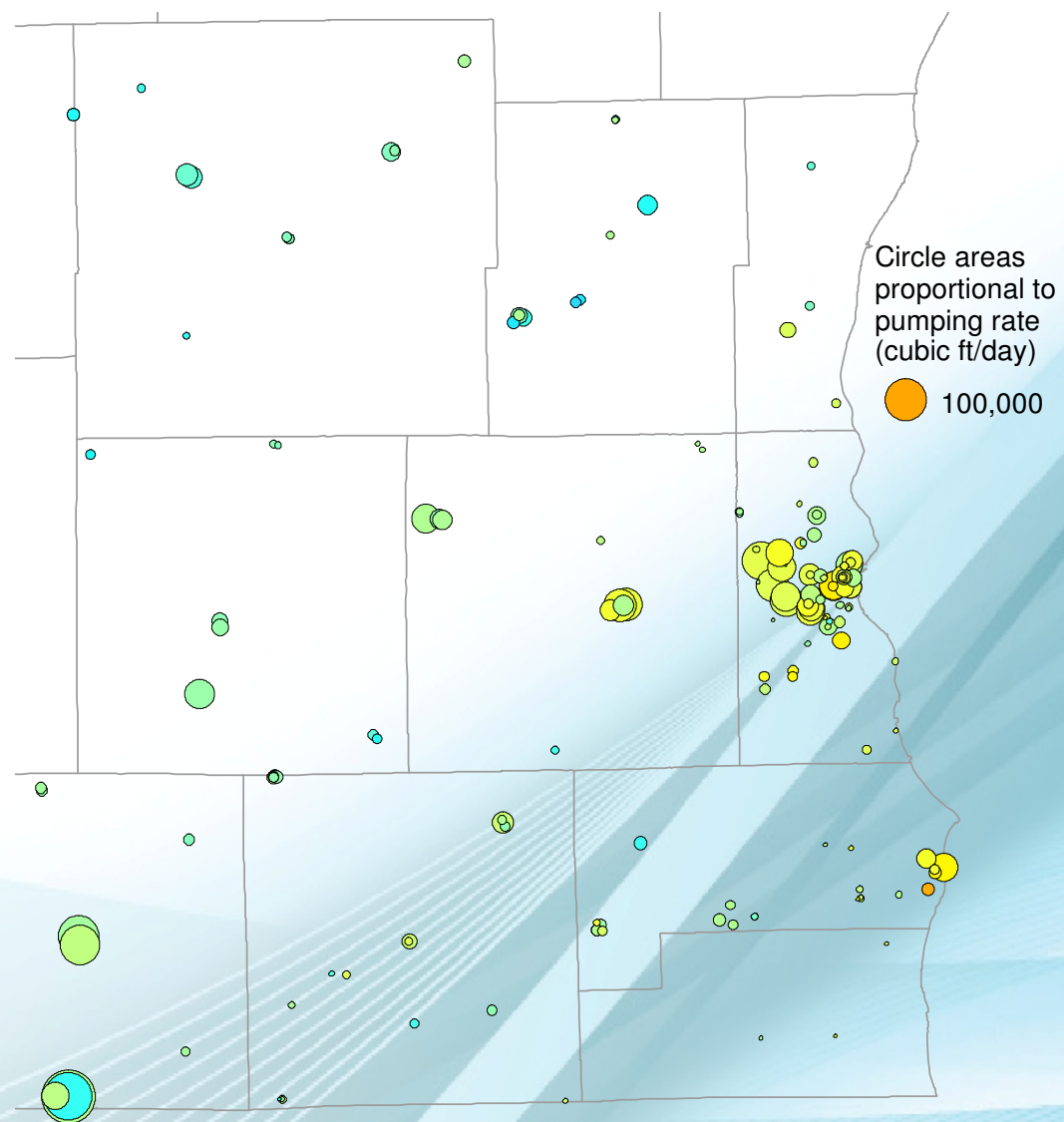
Deep

1920-1930





Water Levels in the Sandstone Aquifer  
(feet above sea level)

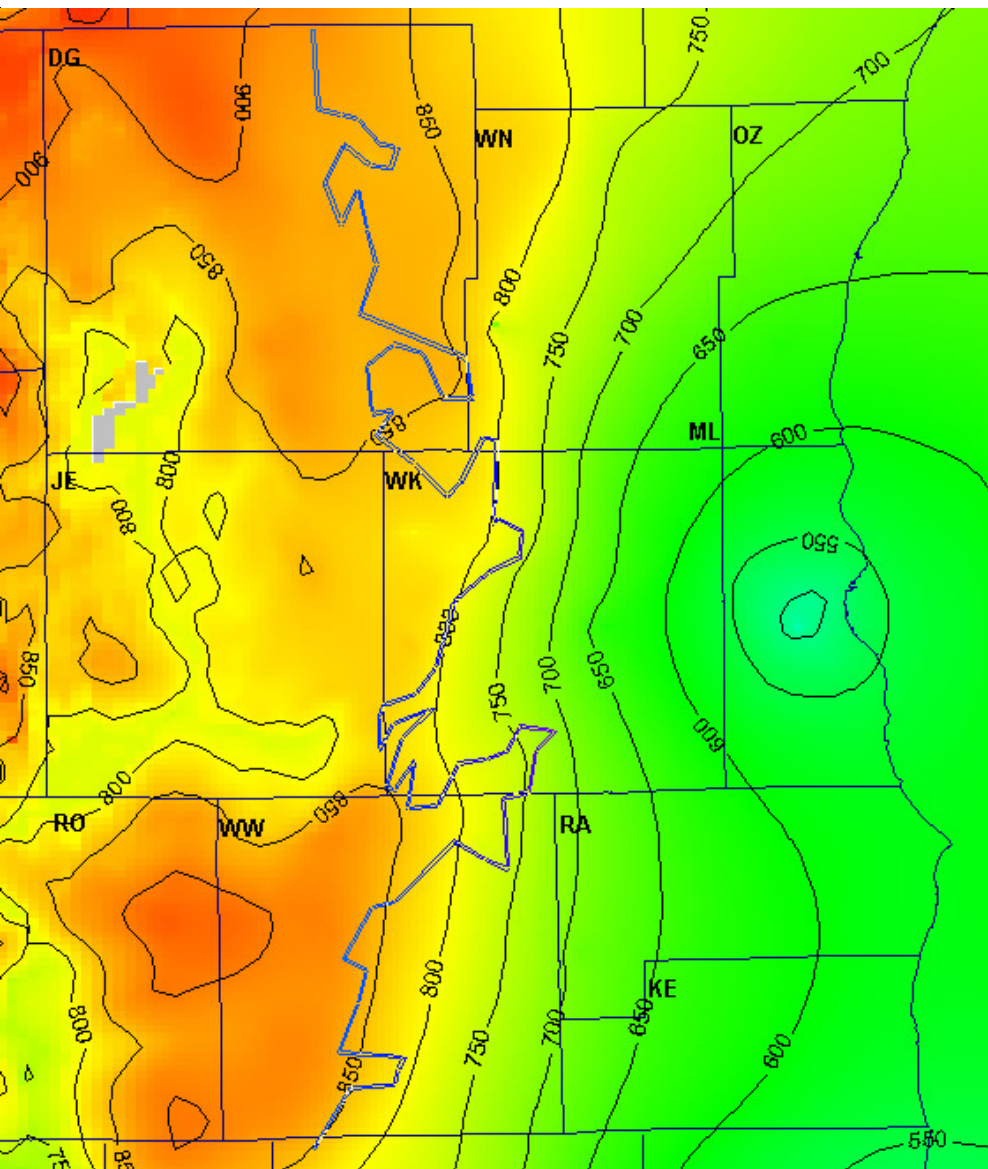


Well Locations and Pumping Rates

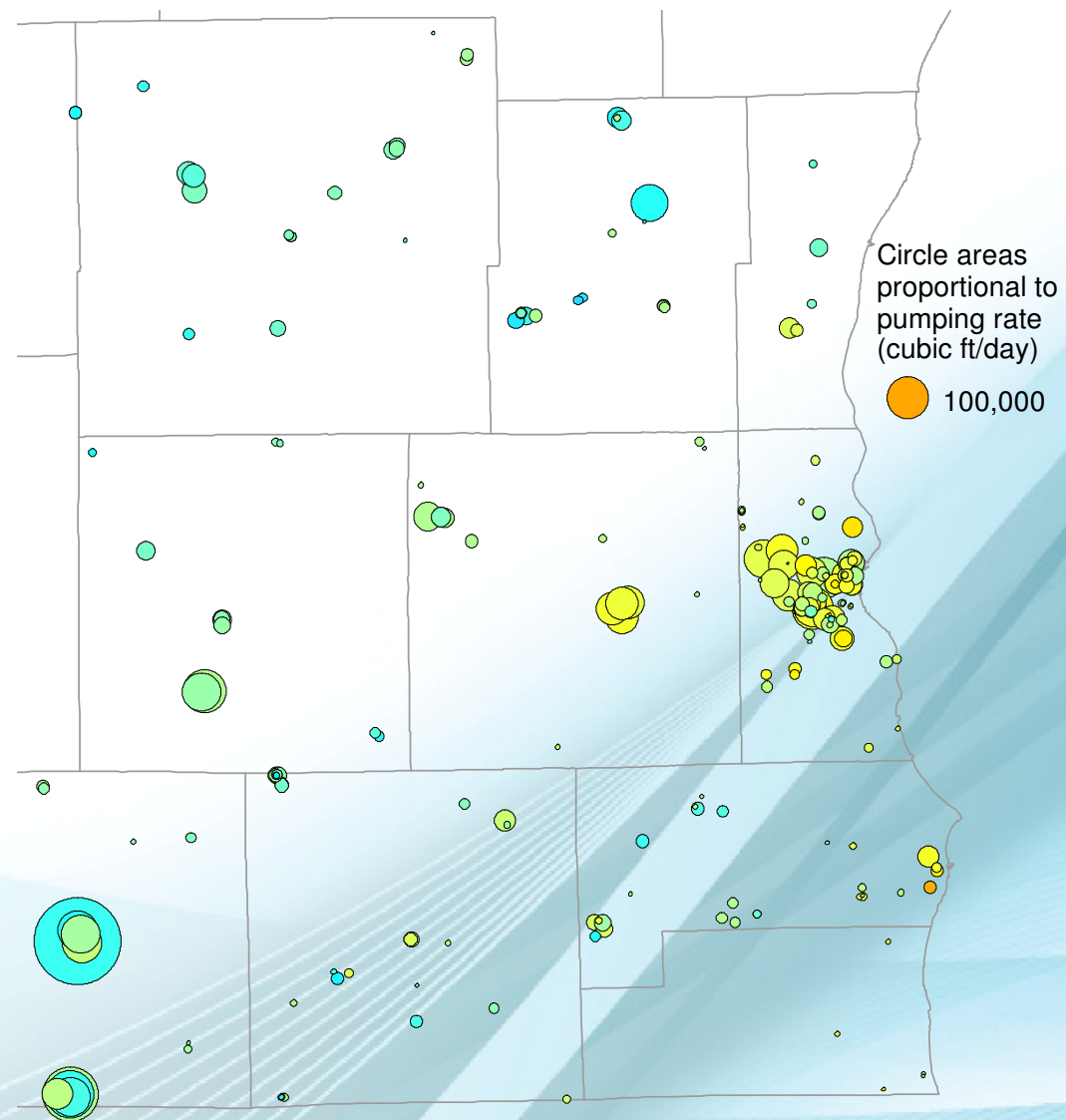
Shallow

Deep

1930-1940



Water Levels in the Sandstone Aquifer  
(feet above sea level)



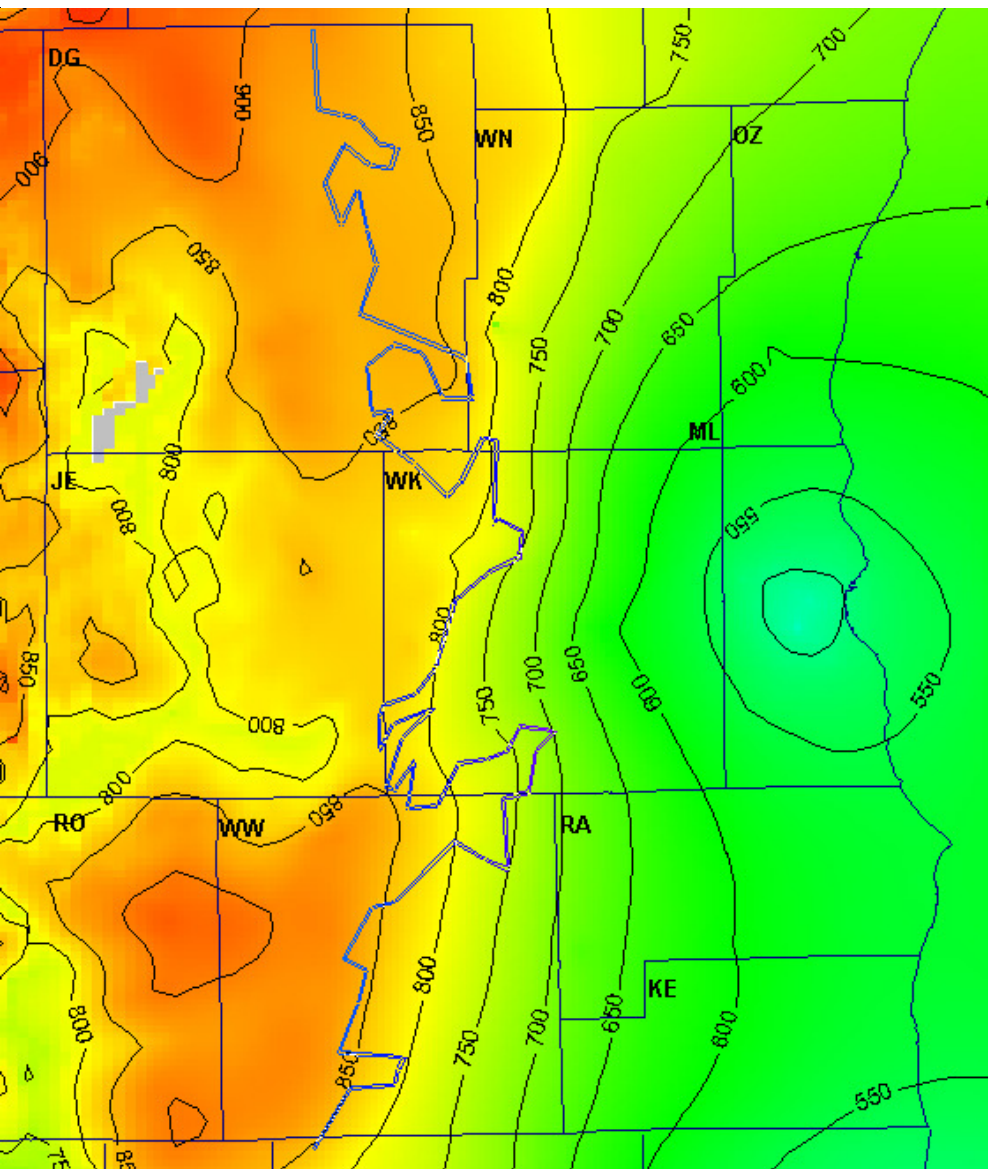
Well Locations and Pumping Rates

Shallow

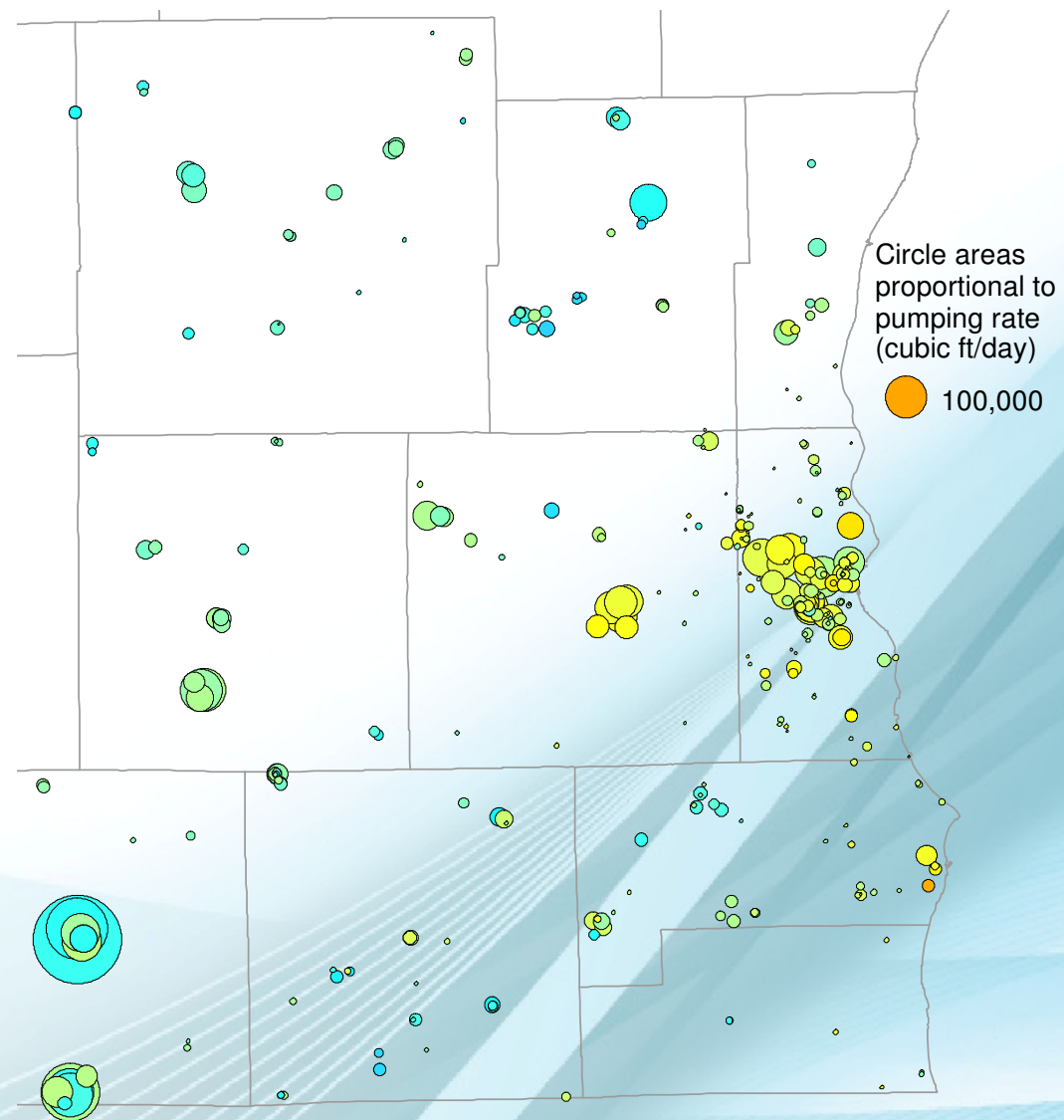
Deep

1940-1945





Water Levels in the Sandstone Aquifer  
(feet above sea level)



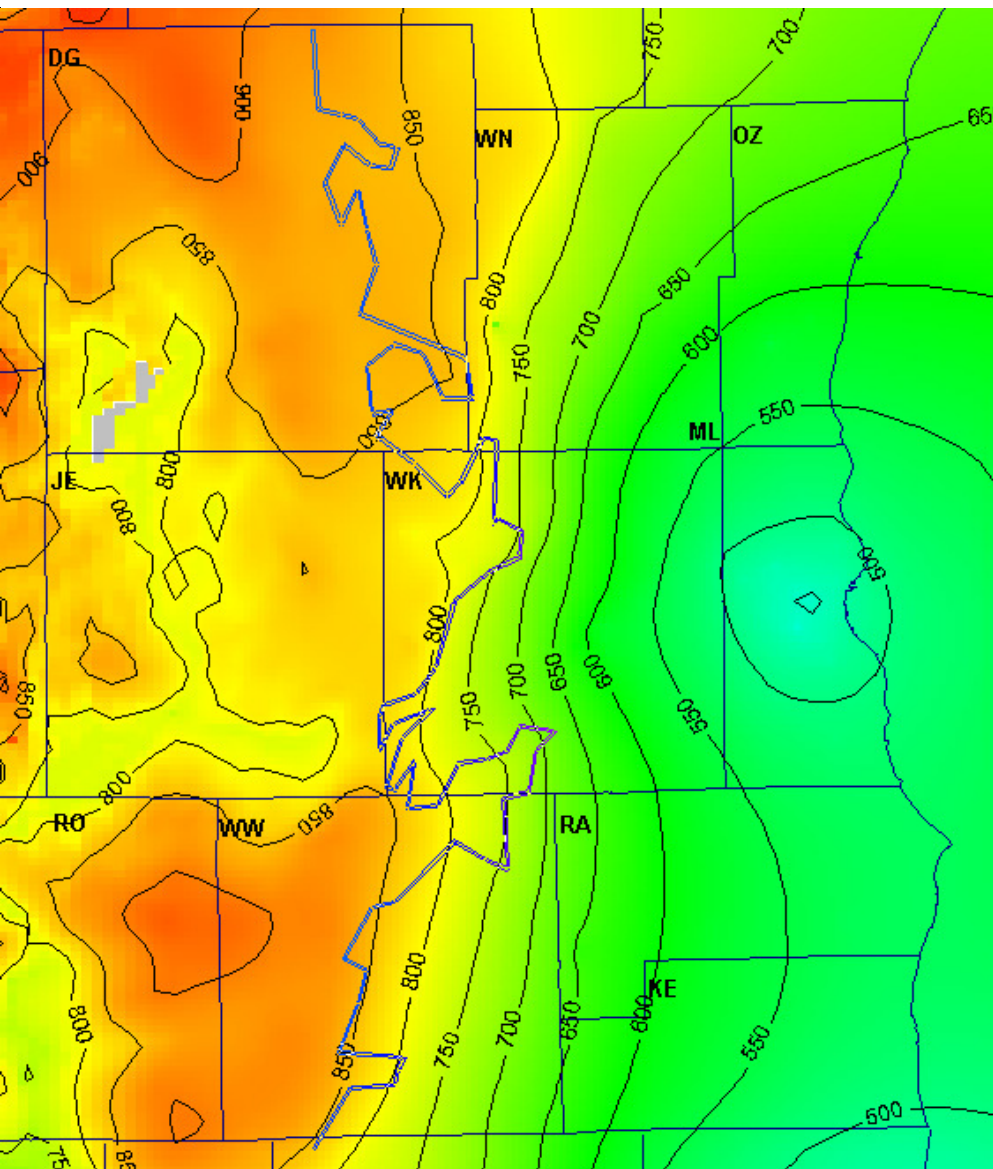
Well Locations and Pumping Rates

Shallow

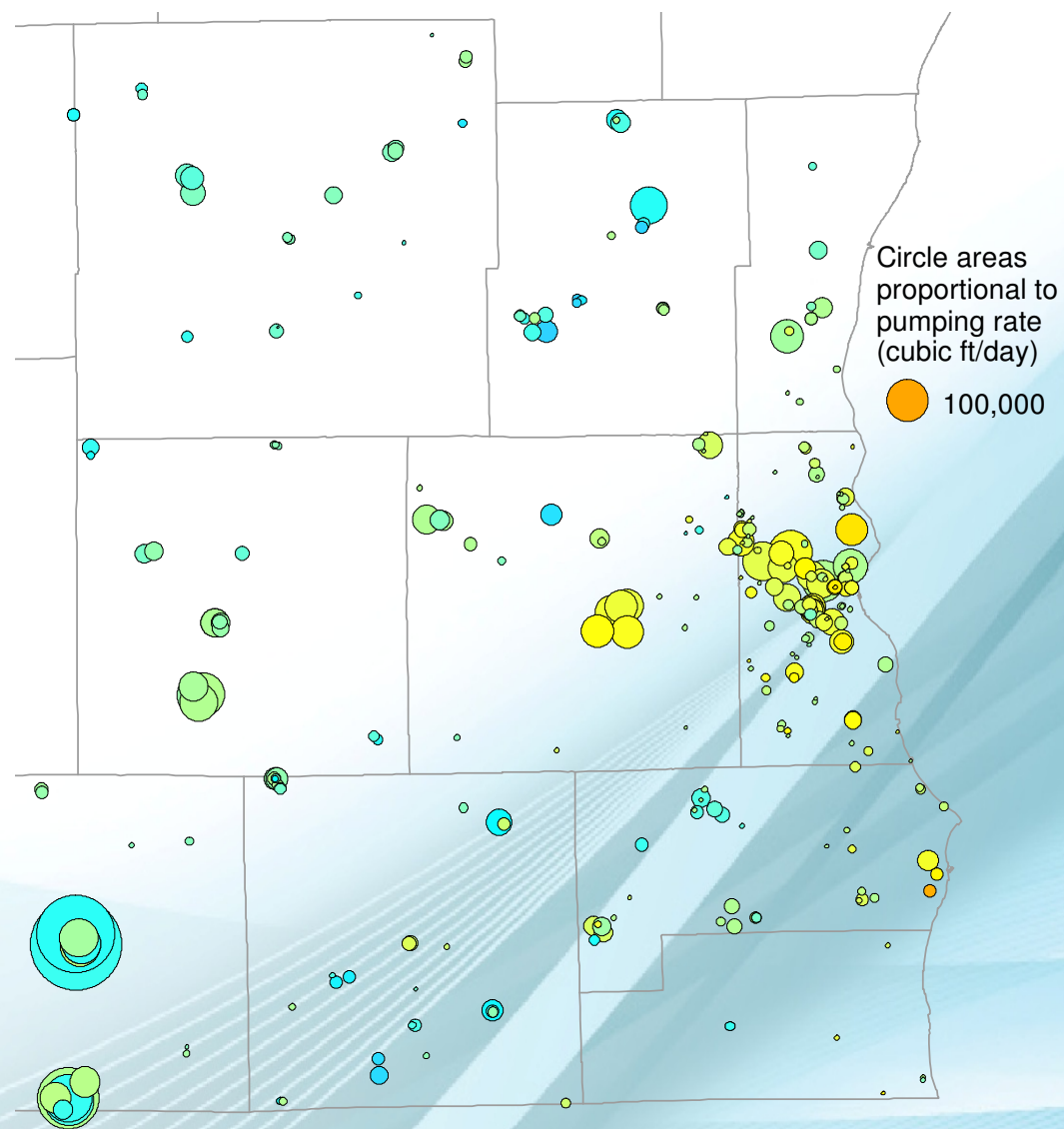
Deep

1945-1950





Water Levels in the Sandstone Aquifer  
(feet above sea level)



Well Locations and Pumping Rates

Shallow

Deep

1950-1961