

Modeling of the Ogallala Aquifer



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presented to the High Plains Irrigation Conference
January 14, 2008

Outline

- Groundwater availability
- Modeling
- Status in Texas

like beauty,
groundwater availability
is in the eye
of the beholder

0



groundwater availability...



Groundwater availability in Texas



Desired Future Conditions

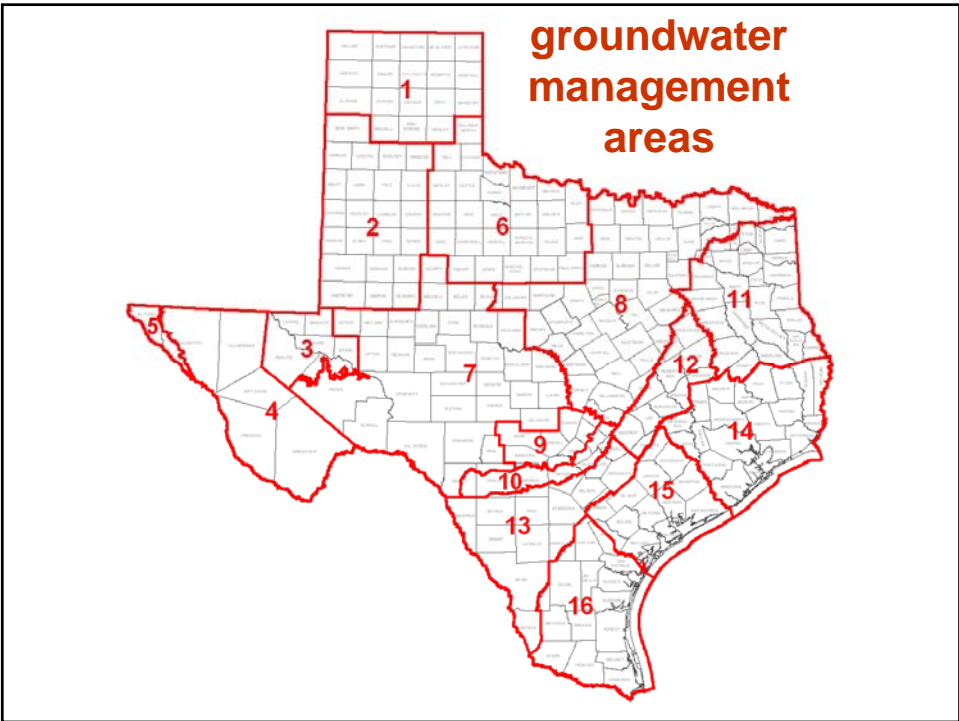
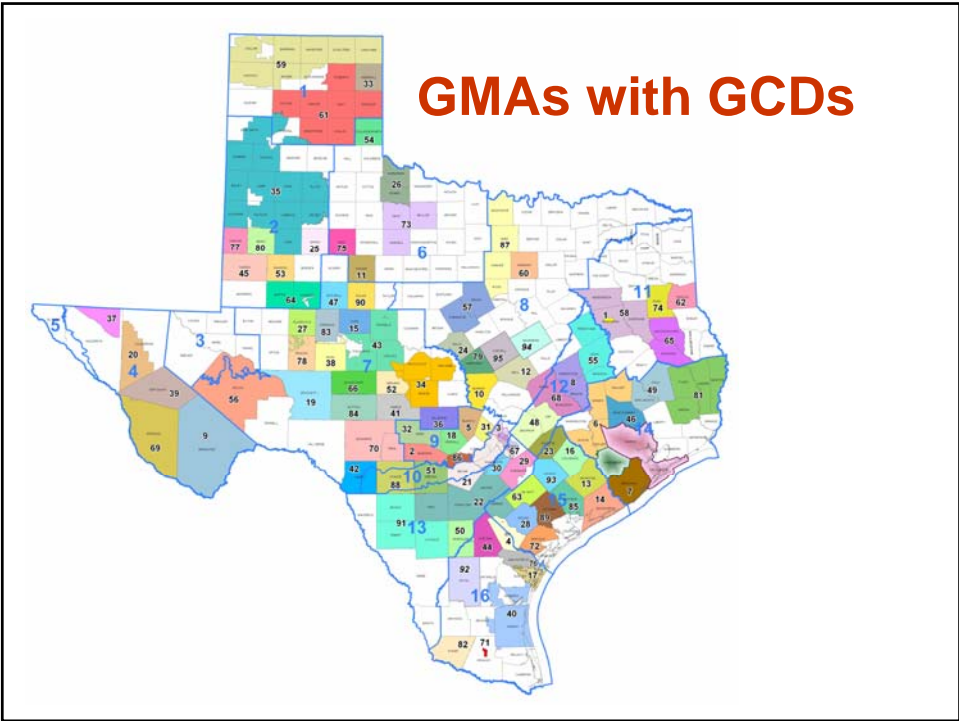


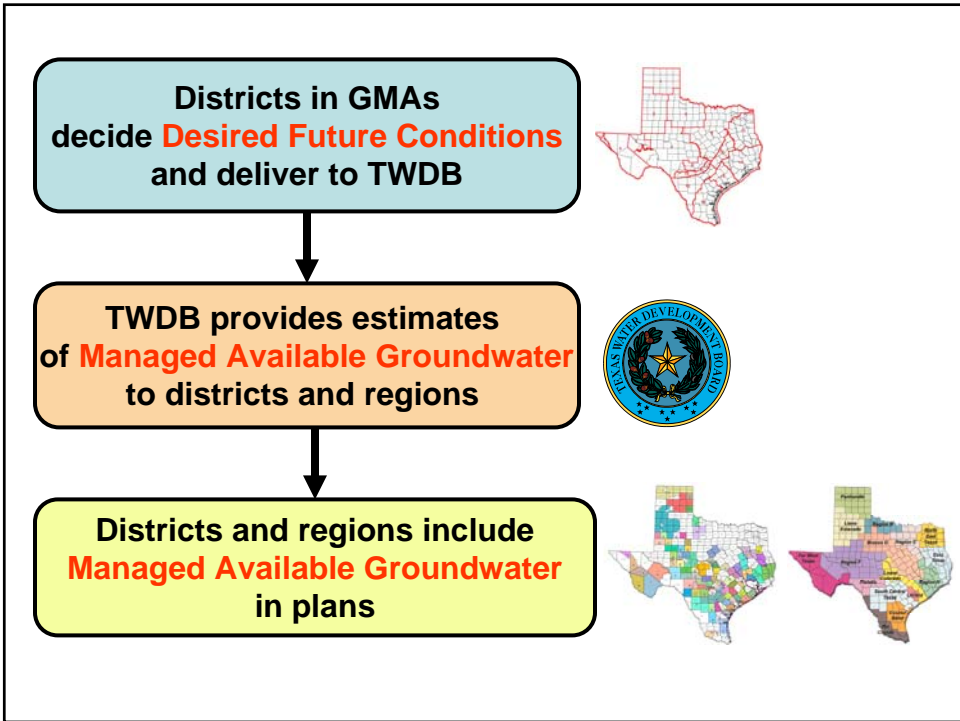
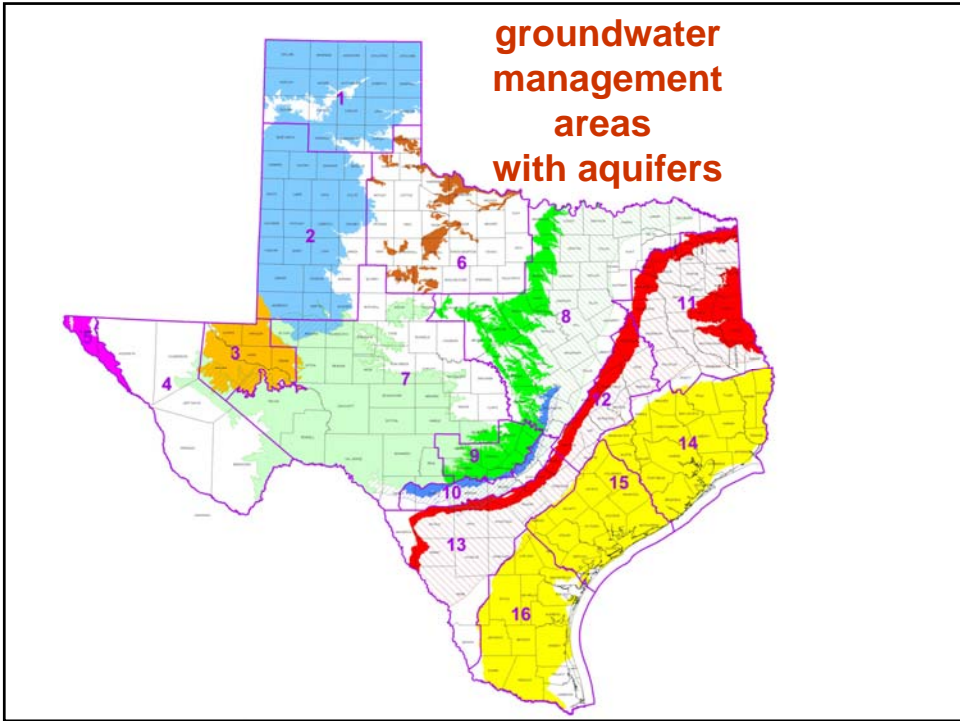
Managed Available Groundwater

(policy) + (science) = groundwater availability

desired
future
conditions

managed
available
groundwater

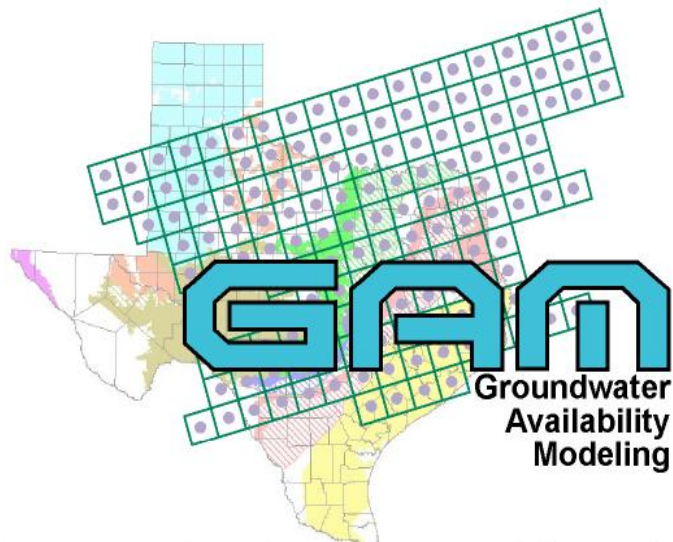
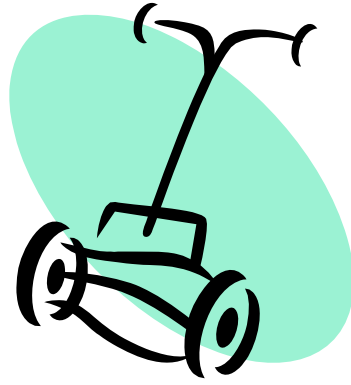


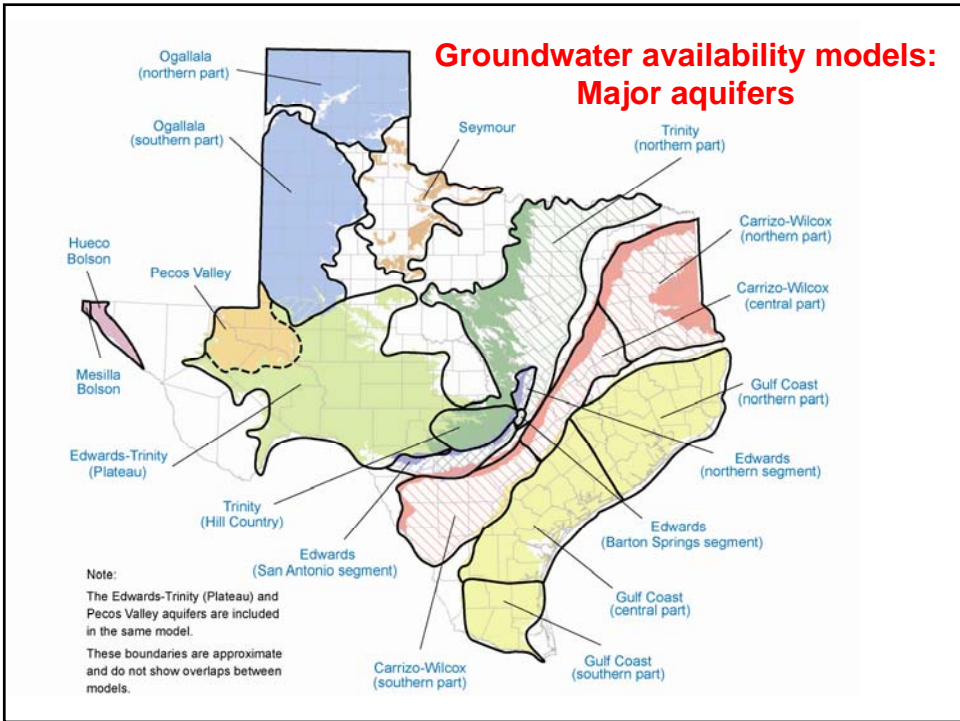
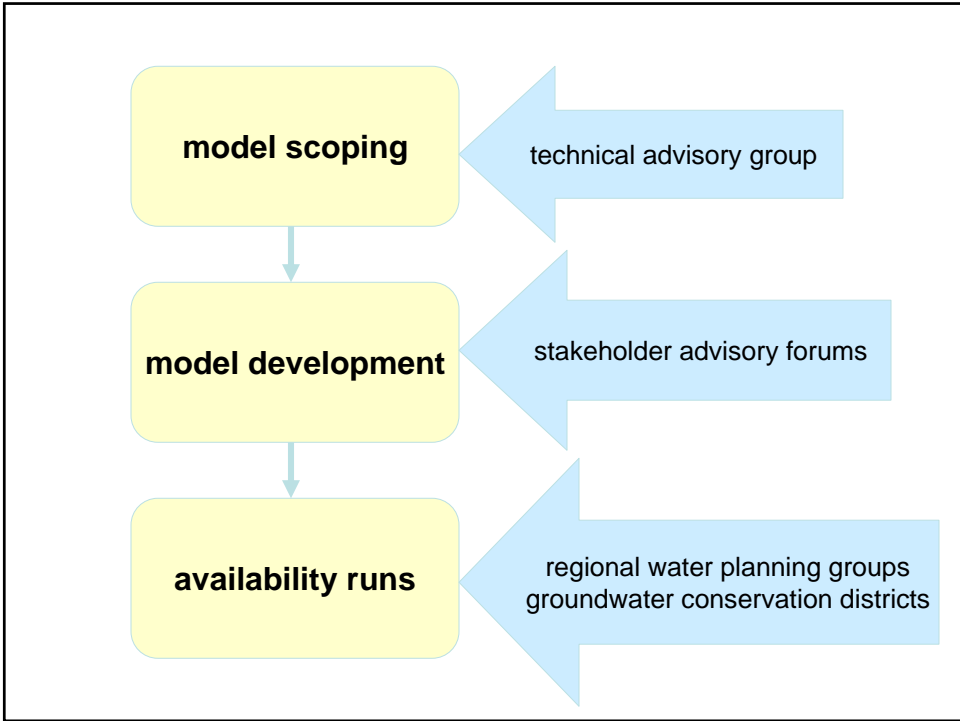


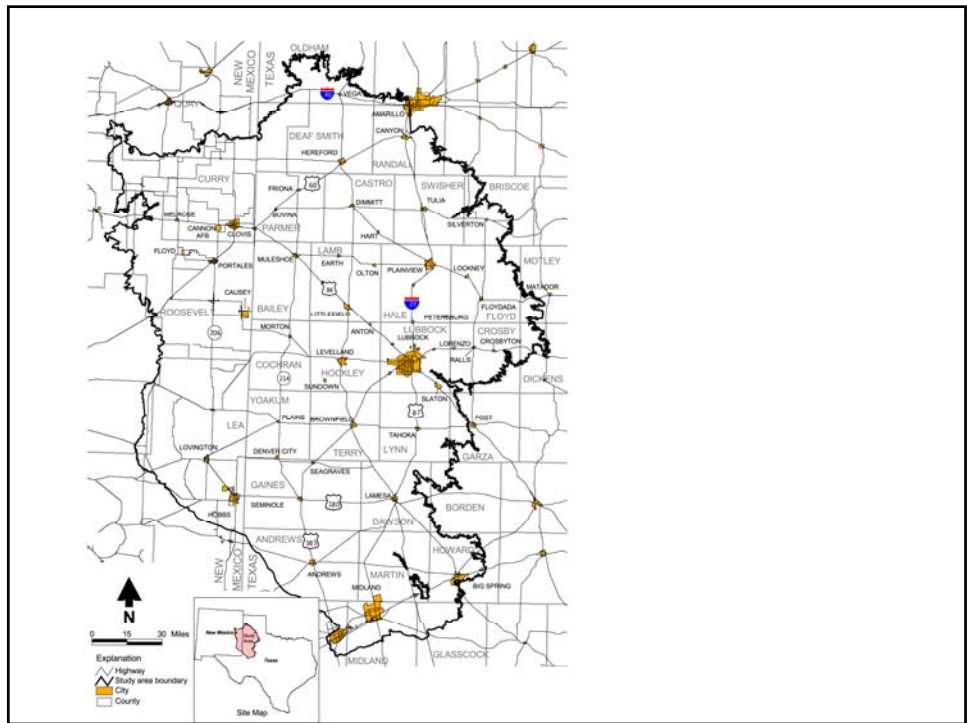
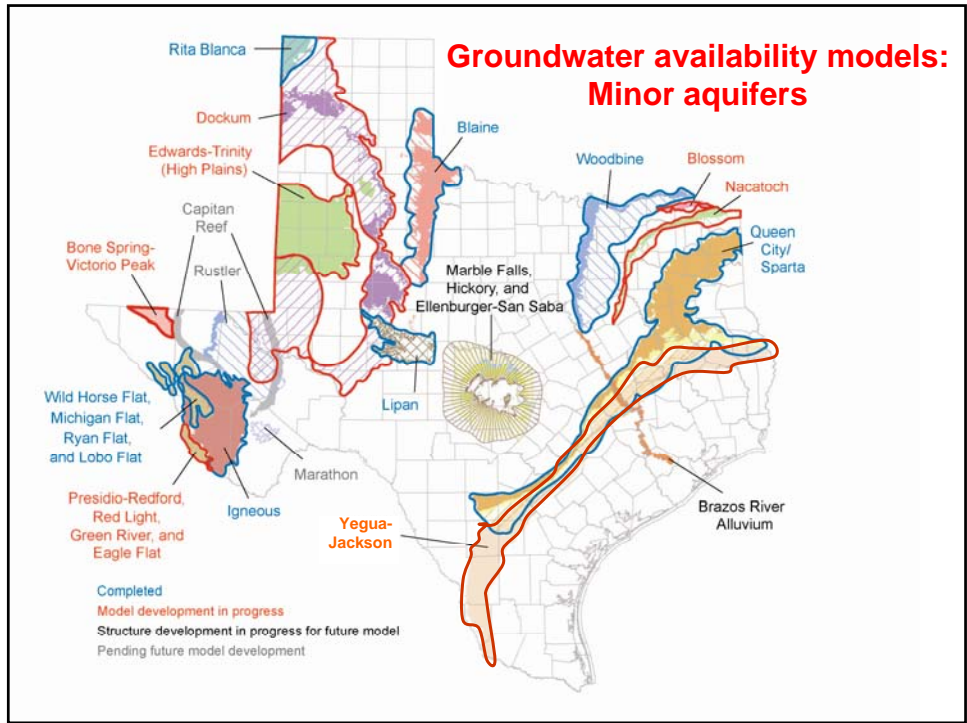
Neighbors...

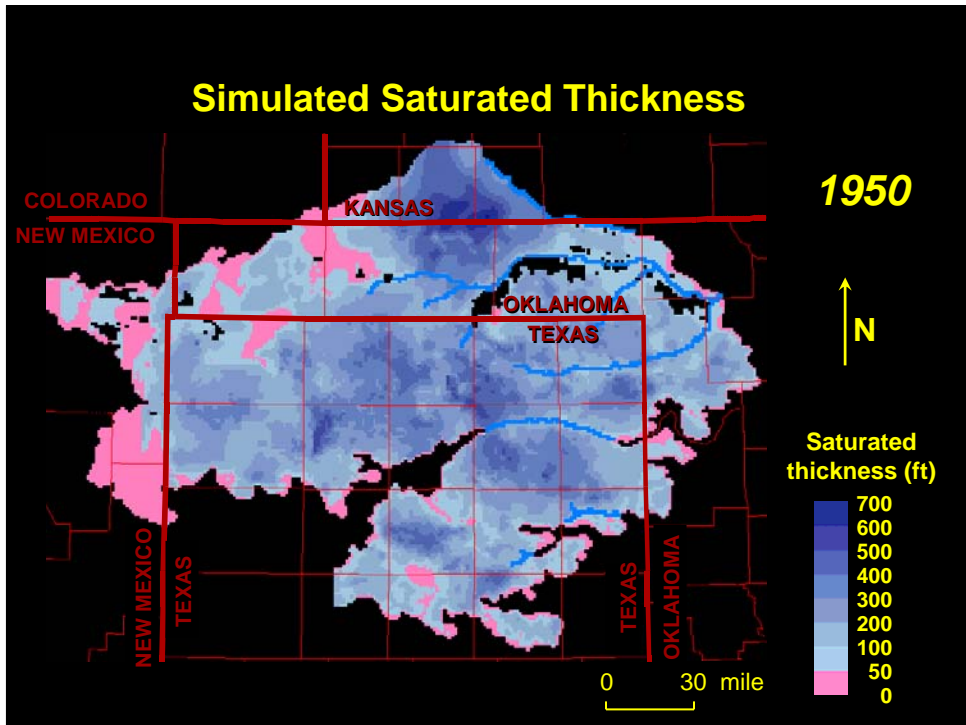
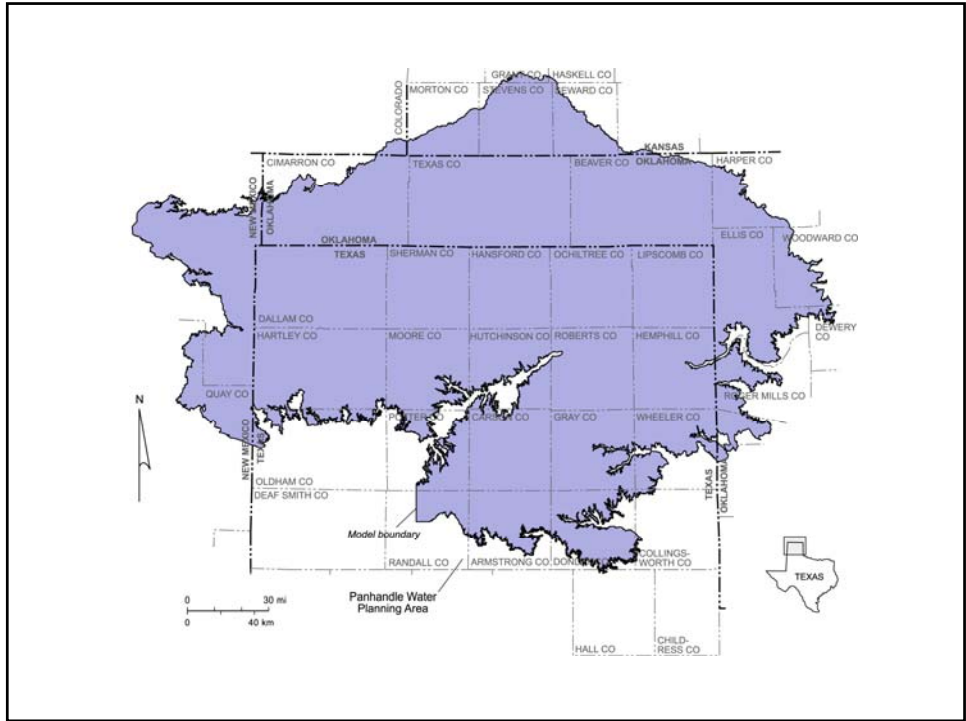
"My neighbor asked if he could use my lawnmower and I told him of course he could, so long as he didn't take it out of my yard."

Eric Morecambe







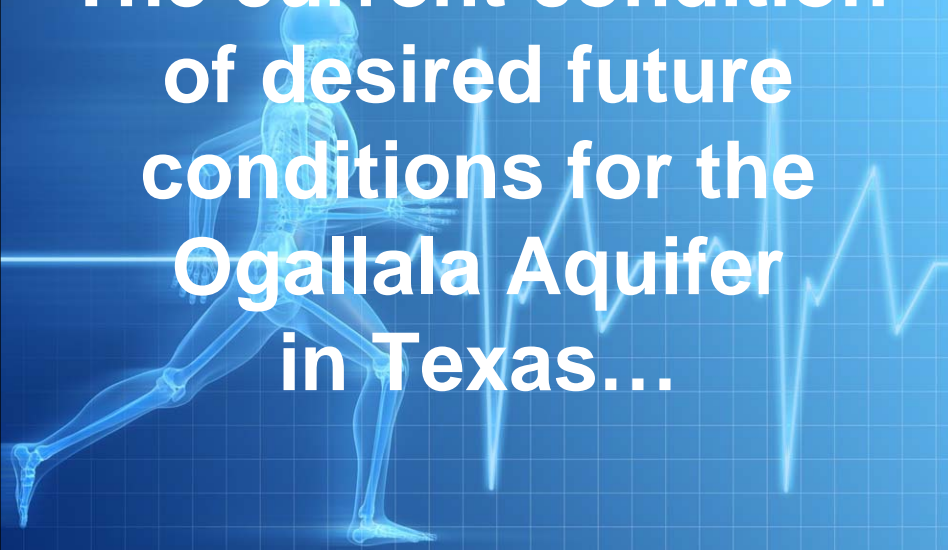


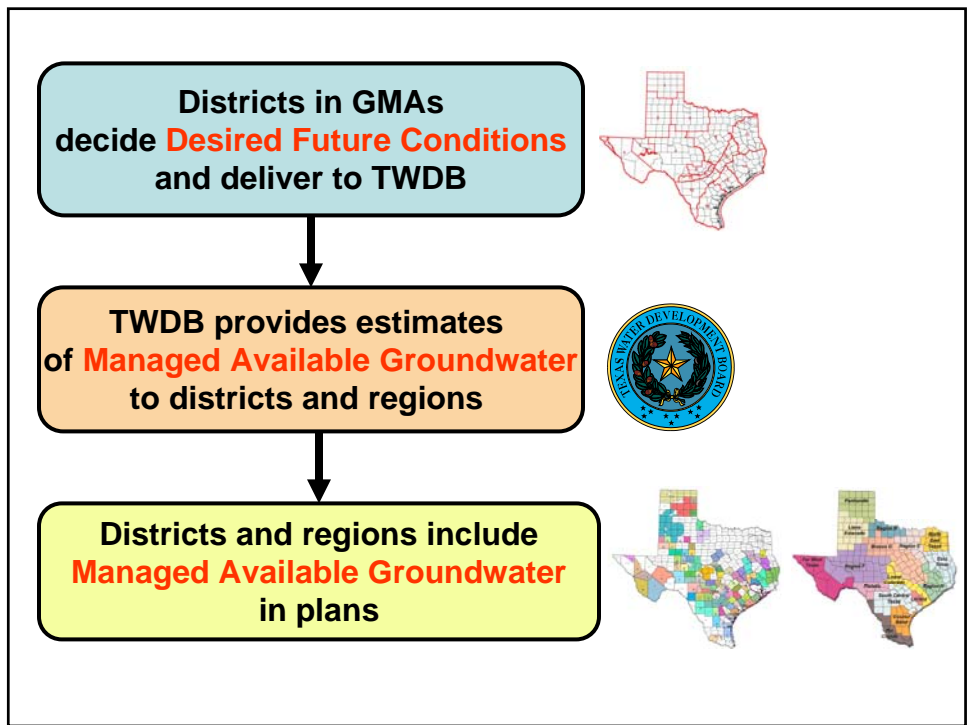
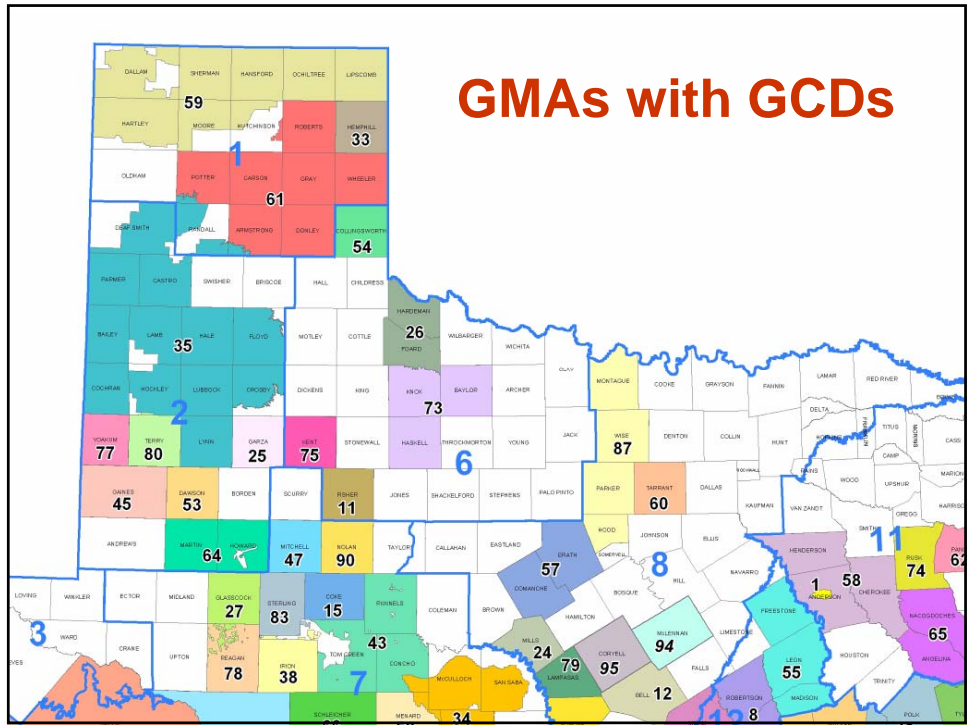
“It is far better to foresee even without certainty than not to foresee at all.”



- Henri Poincare

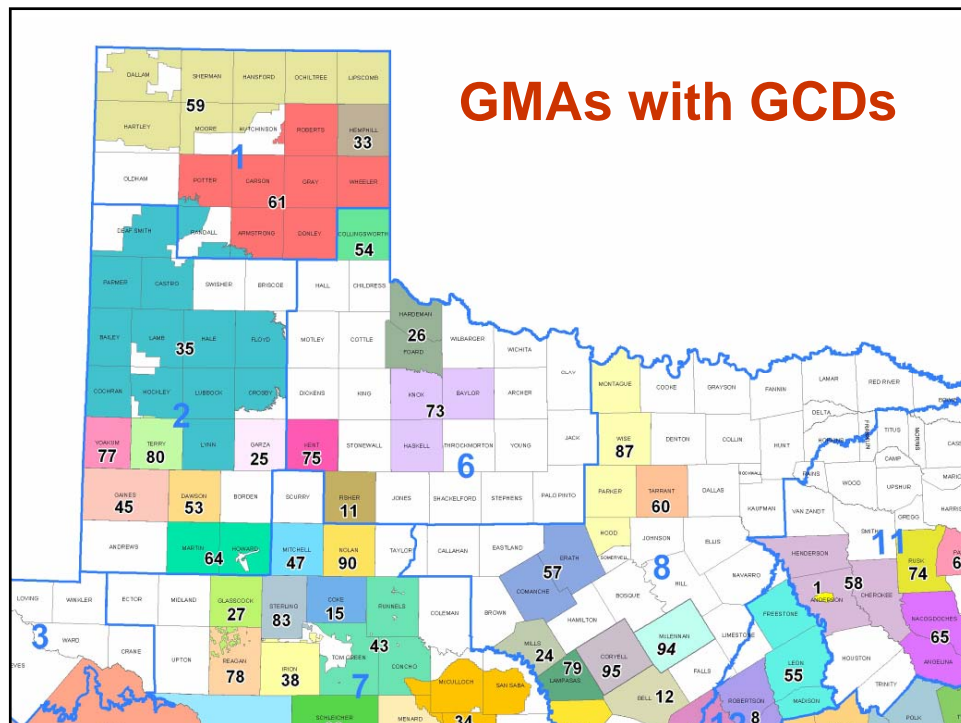
**The current condition
of desired future
conditions for the
Ogallala Aquifer
in Texas...**





Draft desired future conditions

- **GMA 1: Certain percentage left in 50 years.**
- **GMA 2: Certain average amount of water decline per year.**



Draft desired future conditions

- **GMA 1: Certain percentage left in 50 years (3 subdivisions).**
- **GMA 2: Certain average amount of water level decline per year (1 subdivision).**
- **Using models and data to evaluate.**

Conclusions

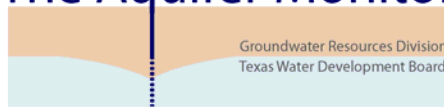
- **Groundwater availability is defined by policy and science**
- **Texas uses 'desired future conditions'**
- **Models are used to quantify desired future conditions**
- **Texas is moving closer to defining groundwater availability for the Ogallala Aquifer**

More about groundwater in Texas



Groundwater in Texas:
www.twdb.state.tx.us/groundwater

The Aquifer Monitor



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groundwater resources
division

