

# Art and Science of Groundwater

Robin Havens Gary

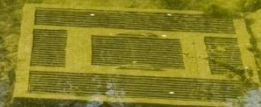
*Senior Public Information and Education Coordinator*



**Barton Springs  
Edwards Aquifer**  
Conservation District



Enter groundwater system here



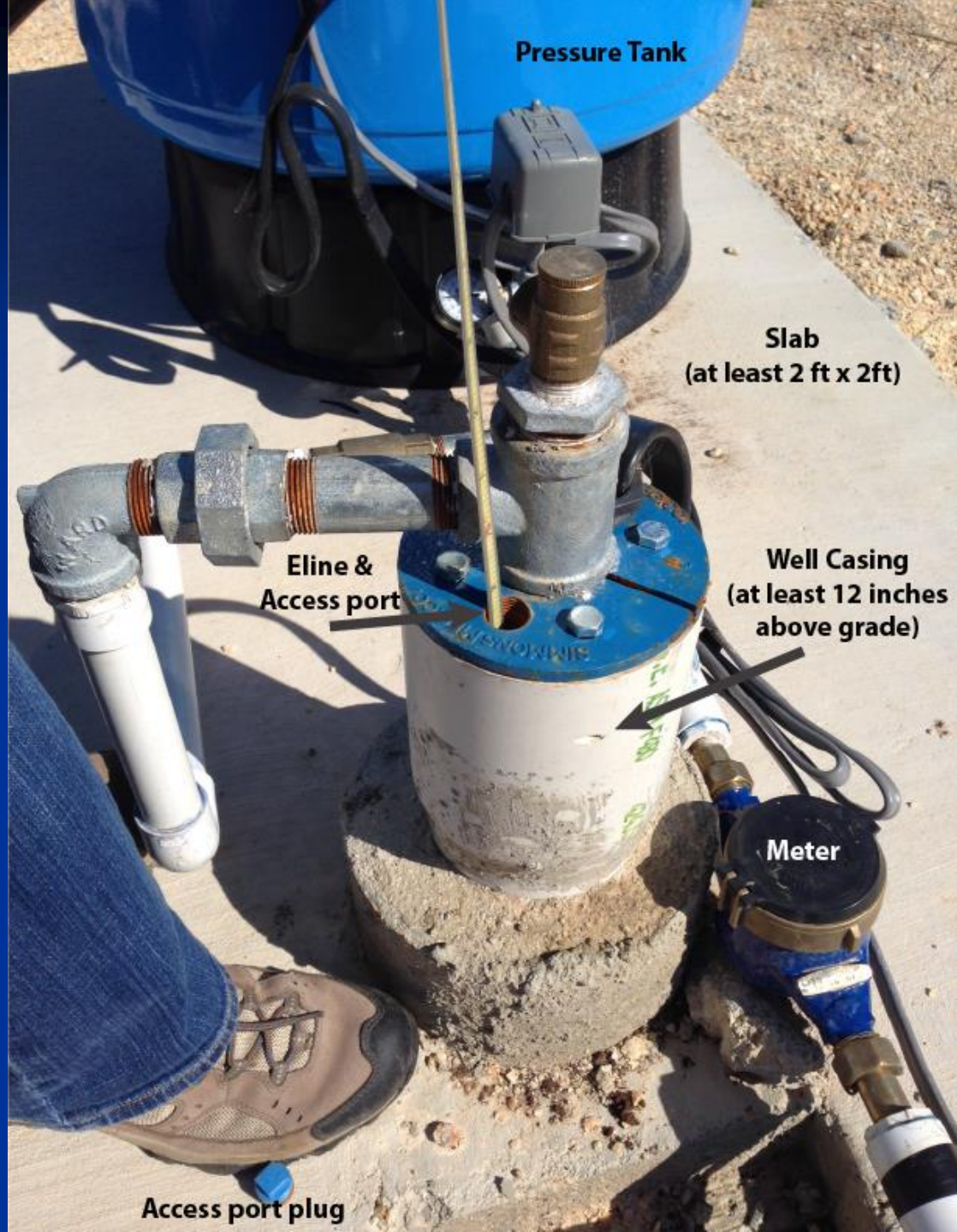


Exit groundwater system here

Exit groundwater system here



# Well?





# Downhole Camera





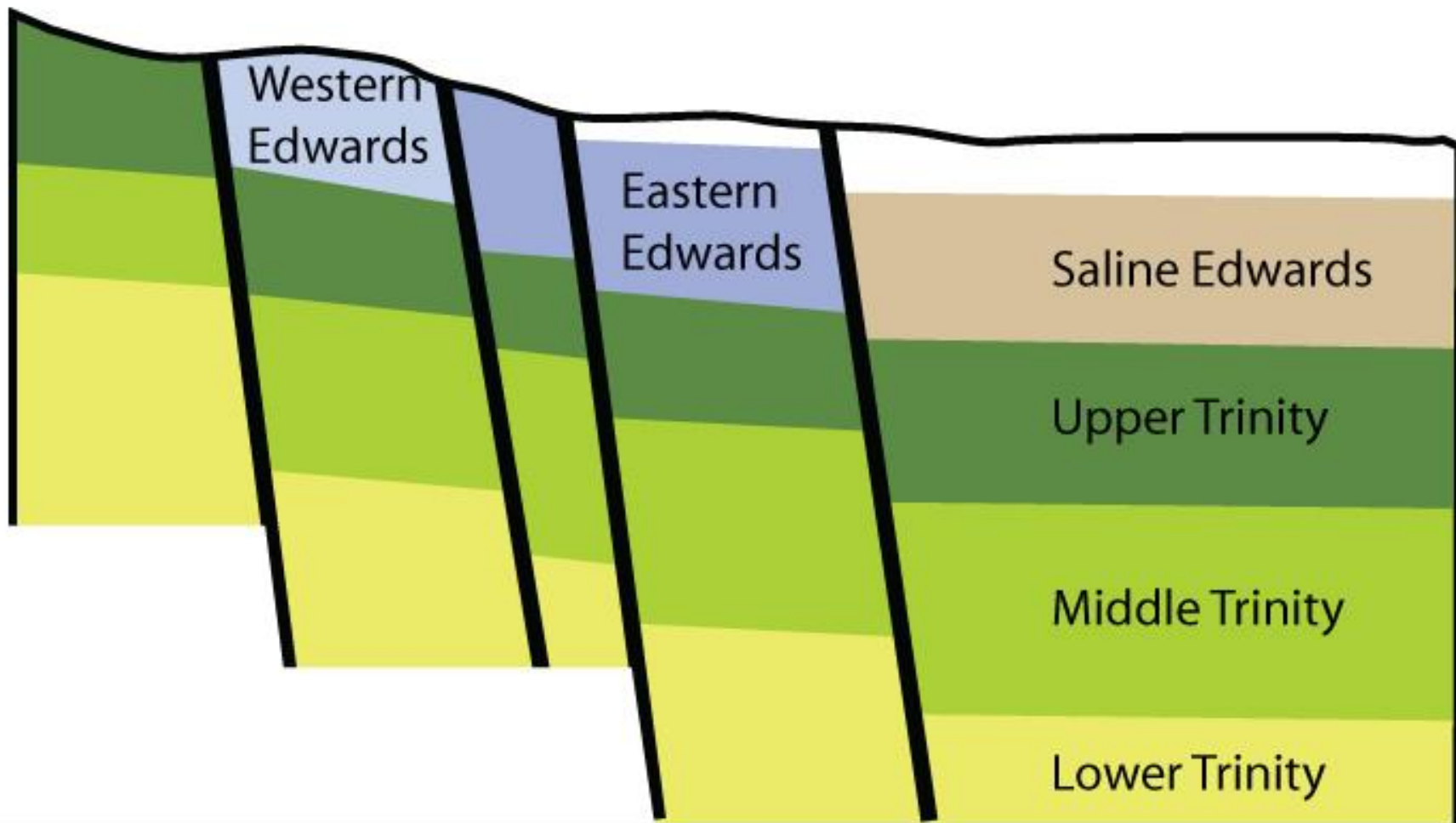
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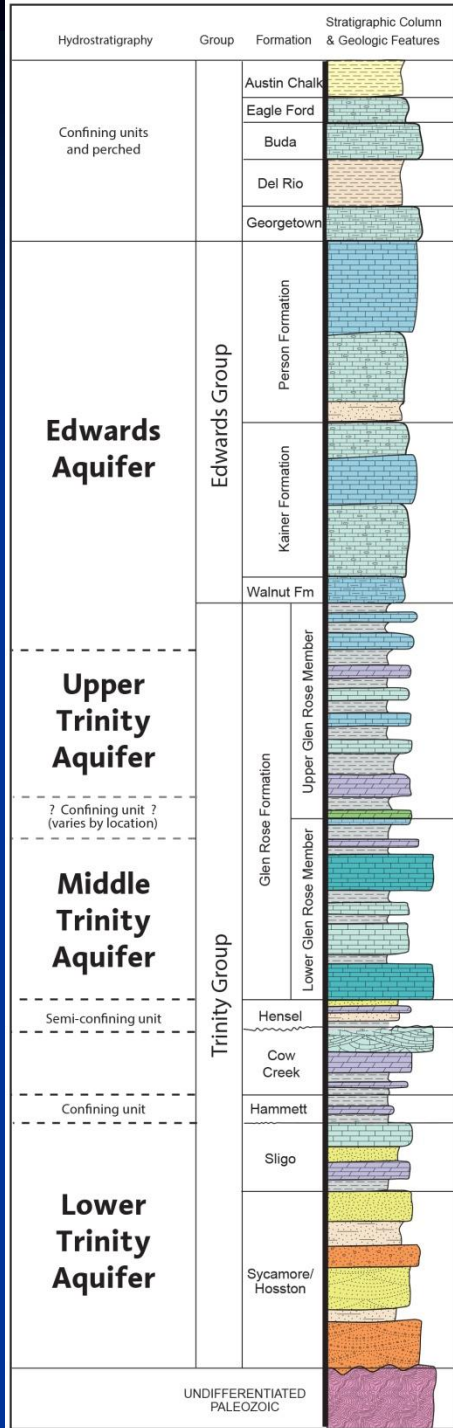
West

# Cross Section View

East



not to  
scale



## Generalized Stratigraphy of the Edwards and Trinity Aquifers

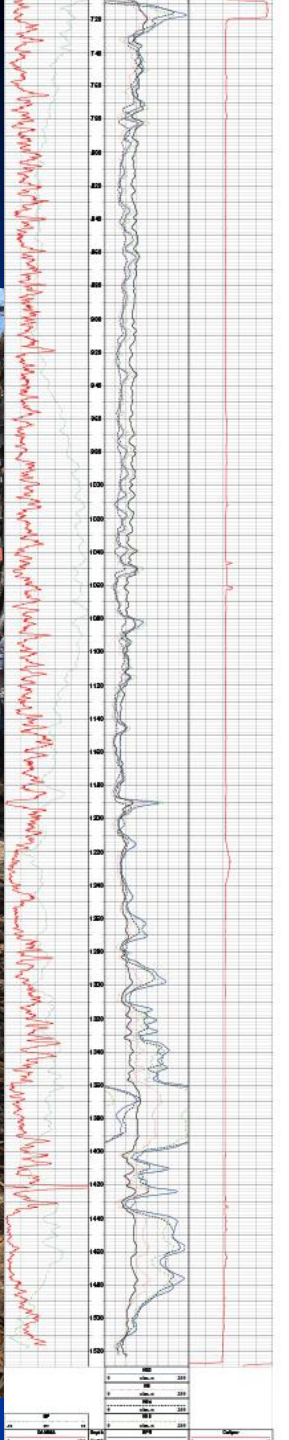
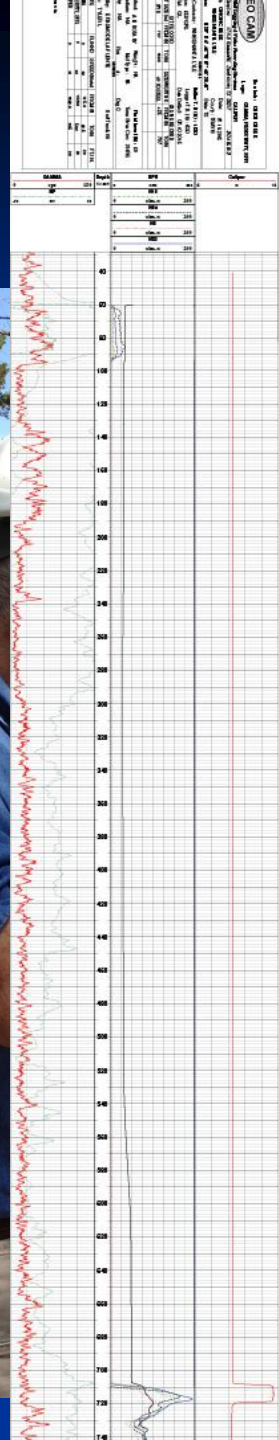
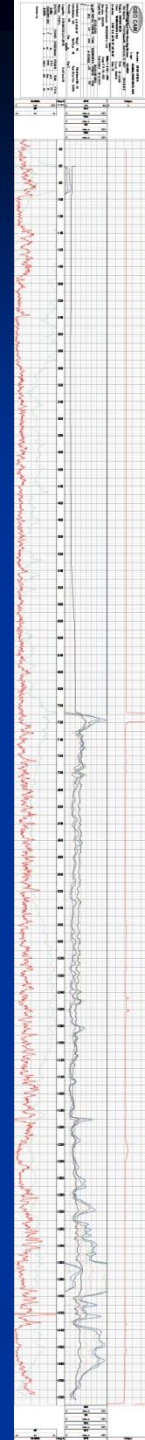
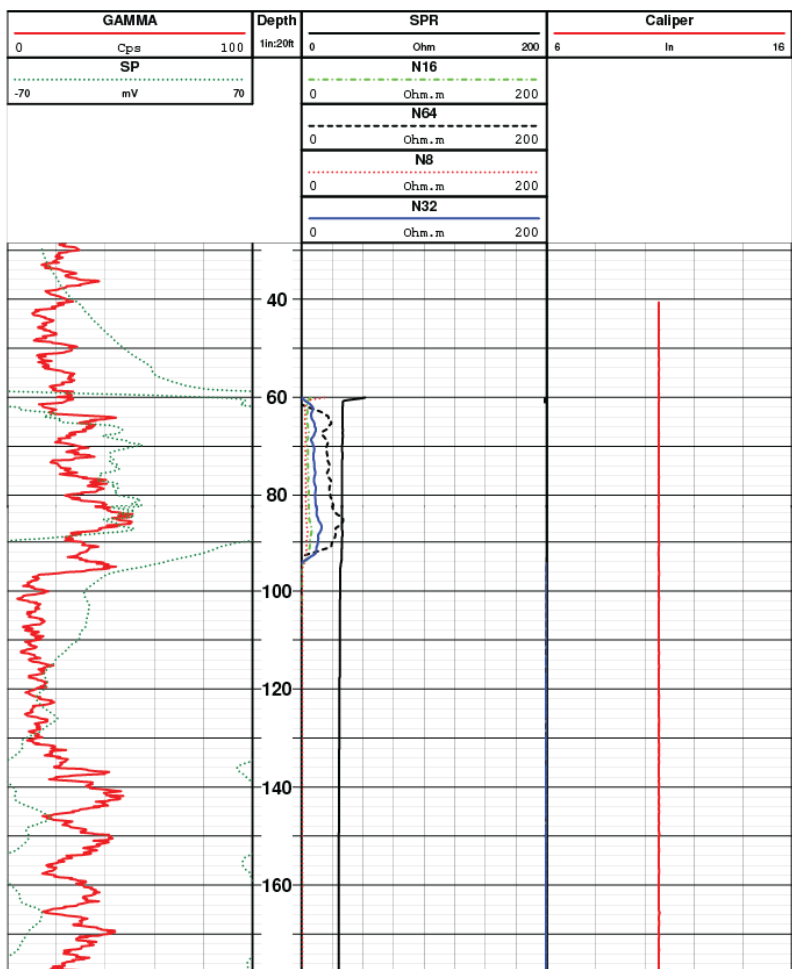
Available as a handout at our booth



Figure modified from Wierman et al., 2010  
 Stratigraphic notes:  
 1 - Edwards Group, Kainer Fm. as defined by Rose (1972).  
 2 - Ages and sequence boundaries from Scott et al. (2007).

For additional detail, see Hydrogeologic atlas of the Hill Country Trinity Aquifer, Blanco, Hays and Travis Counties, central Texas, Plate 2: Stratigraphic Column and Type Geophysical Logs  
<http://repositories.lib.utexas.edu/handle/2152/8977>

# Geologs & Cuttings

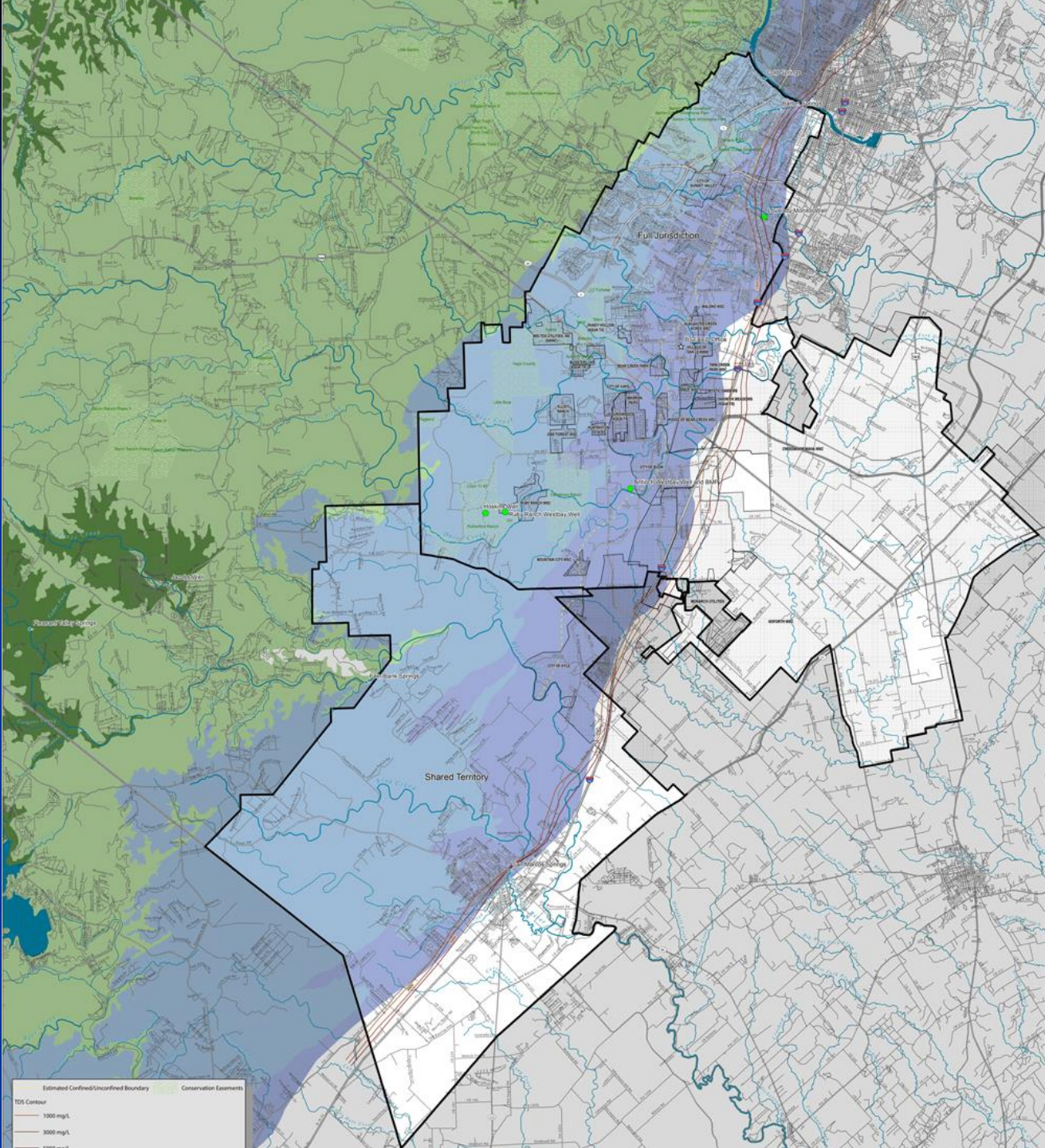


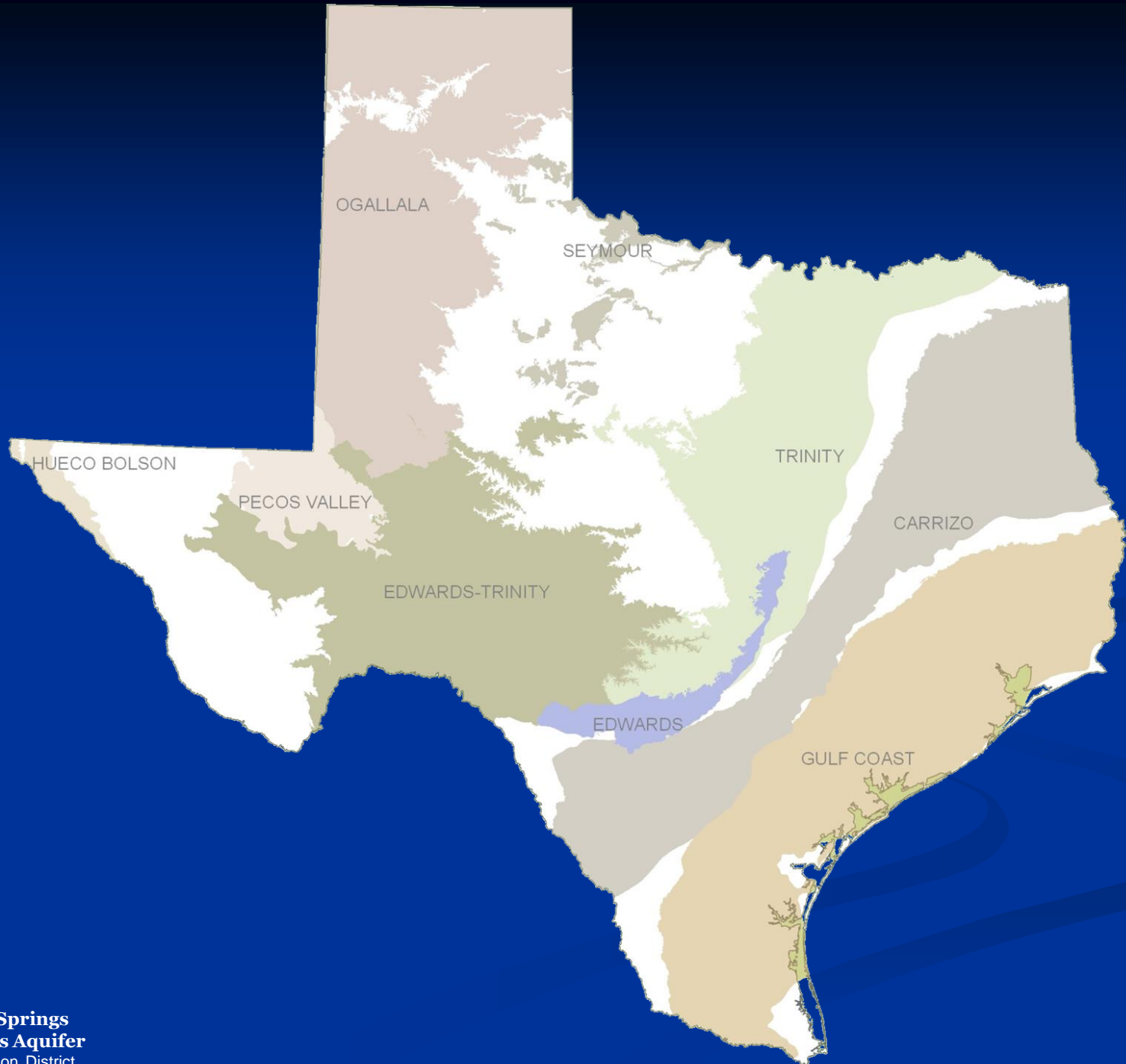
# Water Quality Sampling



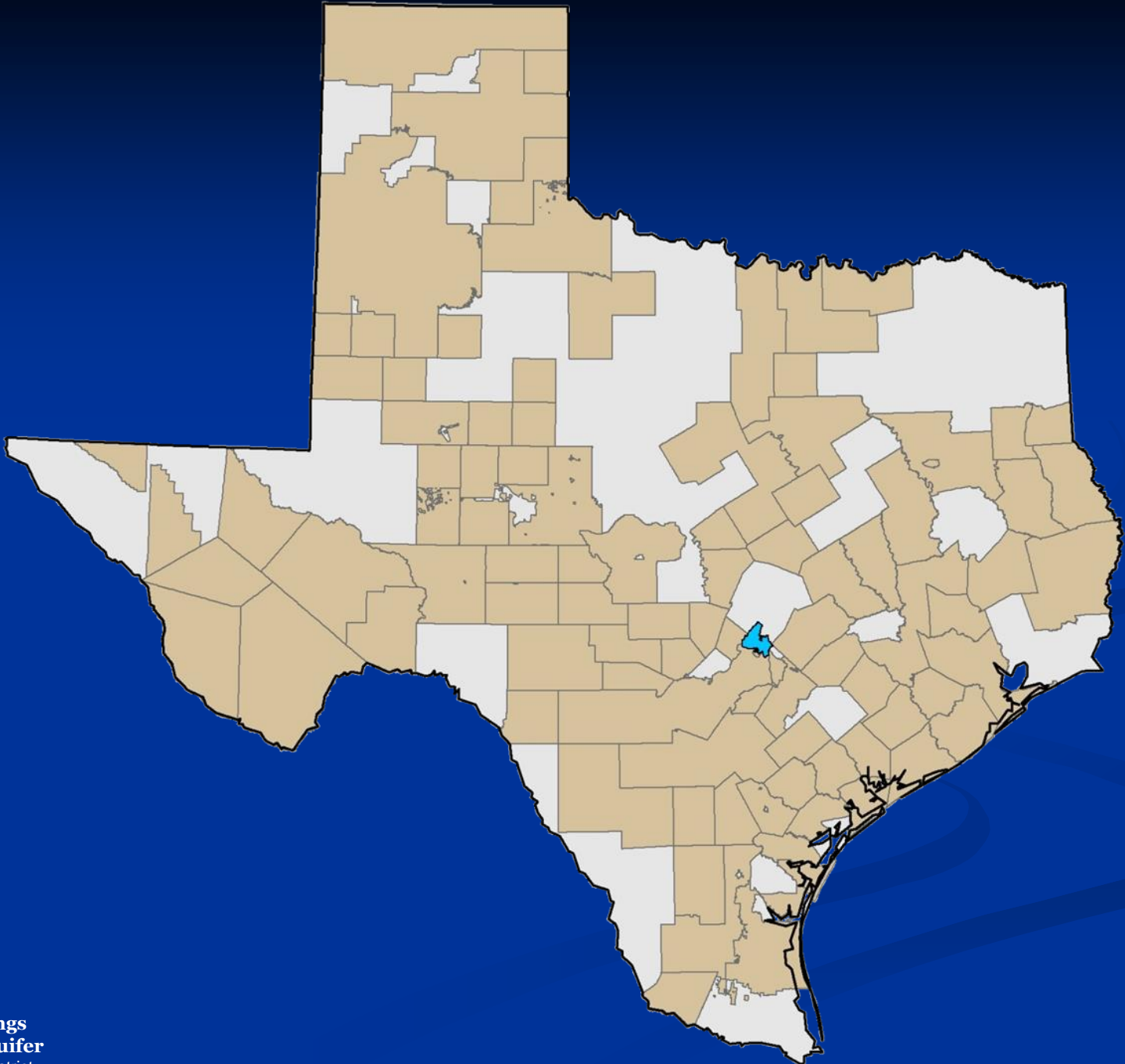
# Water Level Monitoring



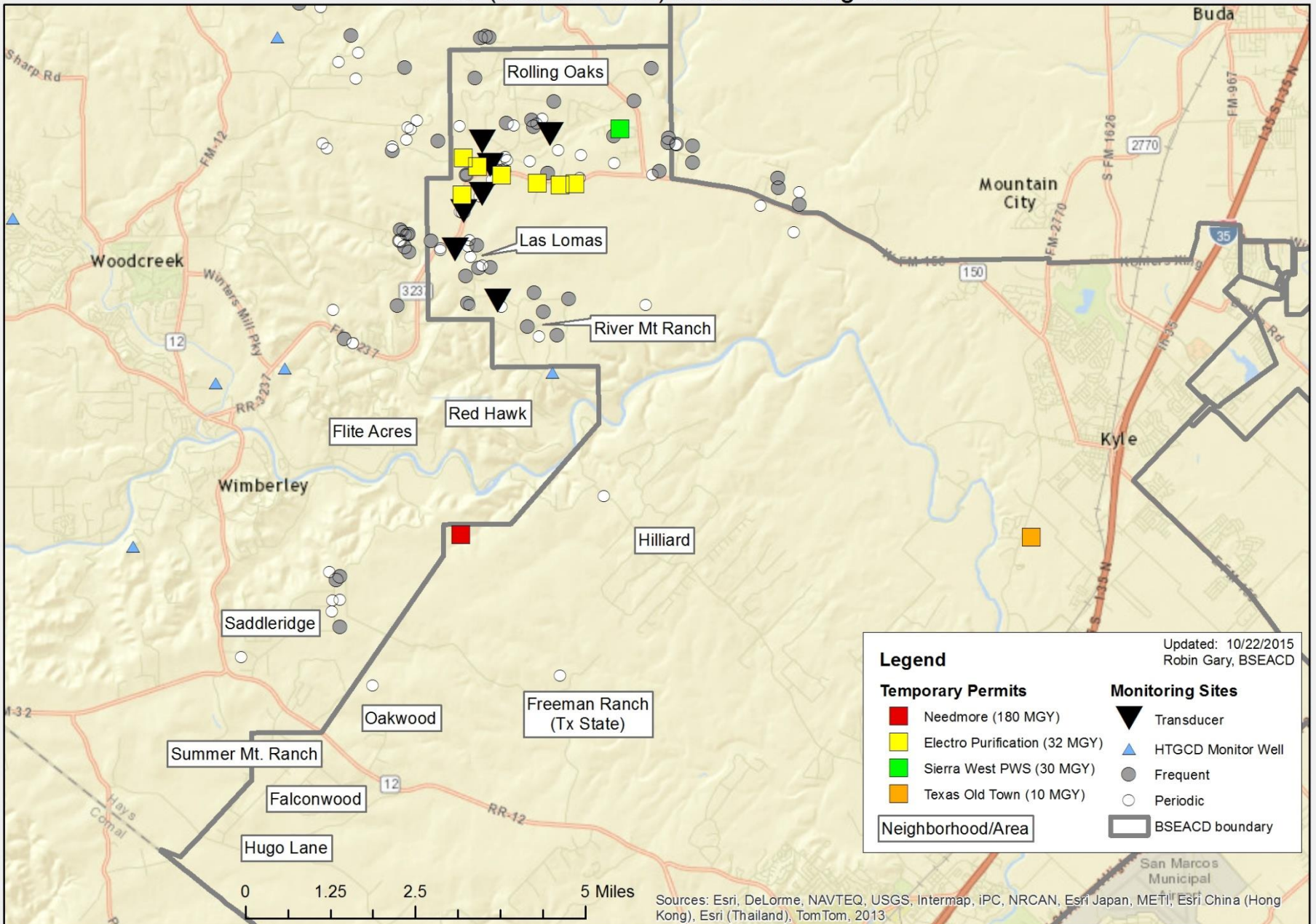








# Permits (over 2 million) and Monitoring Sites



Updated: 10/22/2015  
Robin Gary, BSEACD

Legend	
<b>Temporary Permits</b>	<b>Monitoring Sites</b>
<span style="color: red;">■</span> Needmore (180 MGY)	▼ Transducer
<span style="color: yellow;">■</span> Electro Purification (32 MGY)	▲ HTGCD Monitor Well
<span style="color: green;">■</span> Sierra West PWS (30 MGY)	● Frequent
<span style="color: orange;">■</span> Texas Old Town (10 MGY)	○ Periodic
<span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Neighborhood/Area	<span style="border: 2px solid black; display: inline-block; width: 10px; height: 10px;"></span> BSEACD boundary

Water level monitoring efforts are a collaboration between Hays Trinity GCD, Edwards Aquifer Authority, and BSEACD. Locations of neighborhoods are approximations.

# Take Aways

- Groundwater is a shared resource.
- Golden rule applies to groundwater use.
- We are all in this together.
- Do your part.
  - Conserve
  - Learn about the aquifer systems
  - Pay attention
  - Share creative solutions

# Acknowledgements

- BSEACD staff
- Hays Trinity Groundwater Conservation District (HTGCD)
- Edwards Aquifer Authority (EAA)
- Well owners
- Area professional geologists

# Find us here... [www.bseacd.org](http://www.bseacd.org)

**Barton Springs/Edwards Aquifer CONSERVATION DISTRICT**

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# AQUIFER DISTRICT NEWS

Subscribe for monthly updates: [bseacd.org/signup](http://bseacd.org/signup)

### District Spotlights

- Next Board Meeting: November 19, 2015 Public Hearing on GMA-9 DFCs
- Press Release: Temporary Permits Finalized
- GMA-9 Public Hearing: DFCs and Non-relevant Aquifers
- Well Registration Quicklink
- Trinity Wells Registration and Permitting

The District is currently in No-Drought Status. Water levels are on the decline, so please conserve. View [current aquifer status](#).

## No Drought

Please, use water wisely

BARTON SPRINGS EDWARDS AQUIFER CONSERVATION DISTRICT

Flow Rate (cfs)	Status	Water Level (ft)
38 cfs	No Drought	478.4 ft
20 cfs	Stage II Alarm	462.7 ft
14 cfs	Stage III Critical	457.1 ft
10 cfs	Stage IV Exceptional	453.4 ft

**Drought Status**

### facebook

**Barton Springs/Edwards Aquifer Conservation District**  
4 hours ago

The November Aquifer District eNews is now available! Read about how large storms (with lots of rainfall) impacts wells, learn what makes a good monitor well, and get an update about the

[View on Facebook](#)