

Groundwater 101

We never know the worth of water
till the well is dry.

- Thomas Fuller

Heather Dodson
Groundwater Data Team Lead
Groundwater Division

09/26/2011

Texas Water
Development Board

TWDB Groundwater Monitoring Programs

Real-time Recorders



Water-level measuring



Springs Initiative

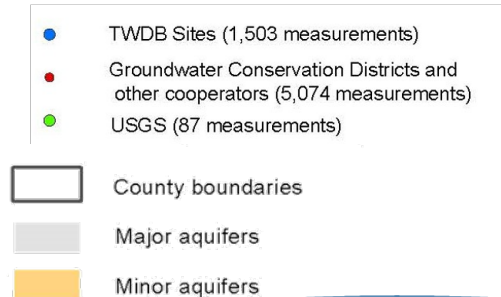


Water-quality sampling

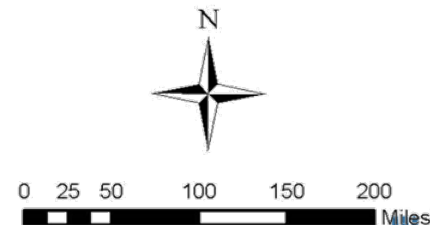


TWDB Water Level Monitoring Wells

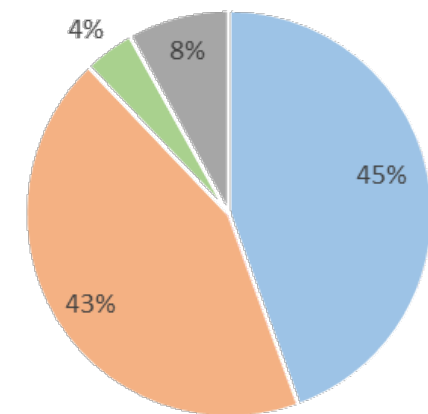
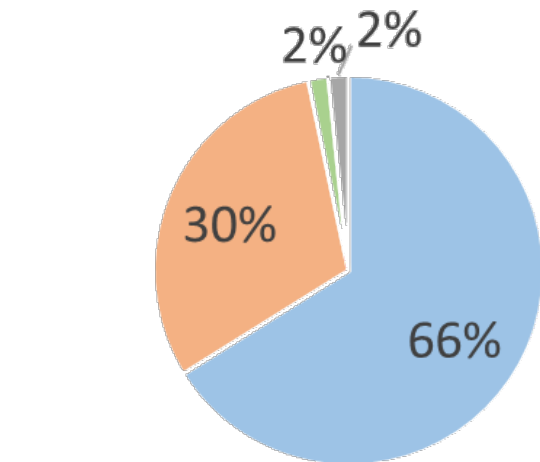
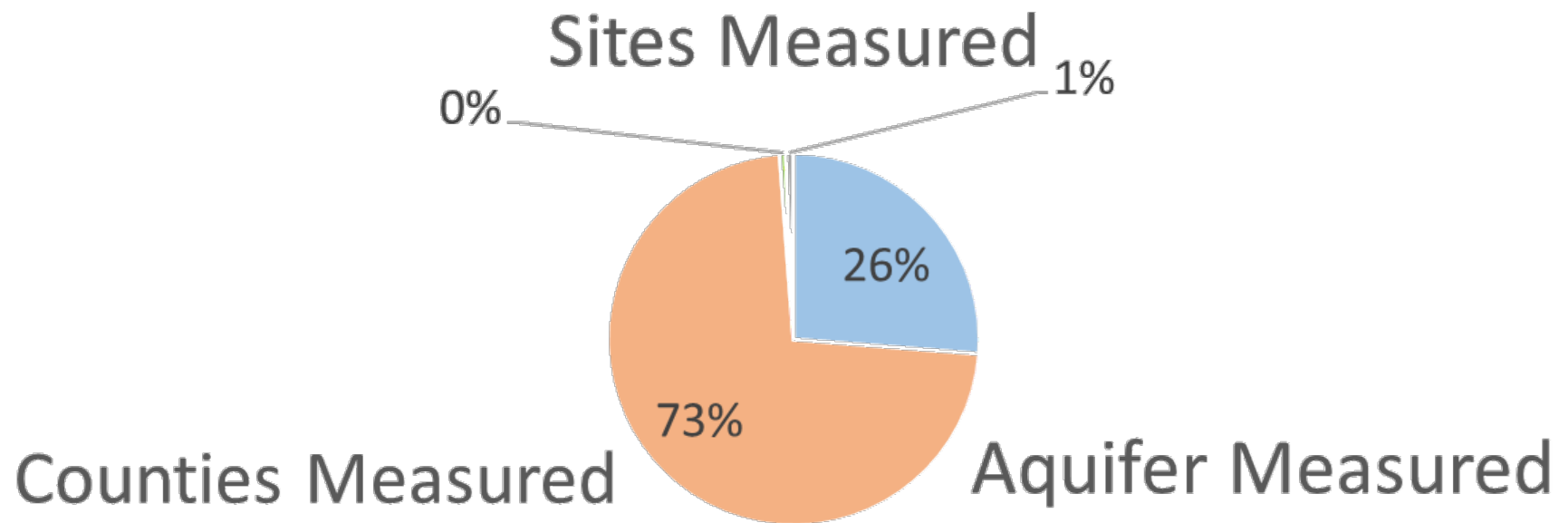
Groundwater level measurements
sites (per entity) entered into the TWDB
Groundwater Database in FY2022
(does not include recorder well measurements)



There were a total of 6,664 wells measured in FY2022.



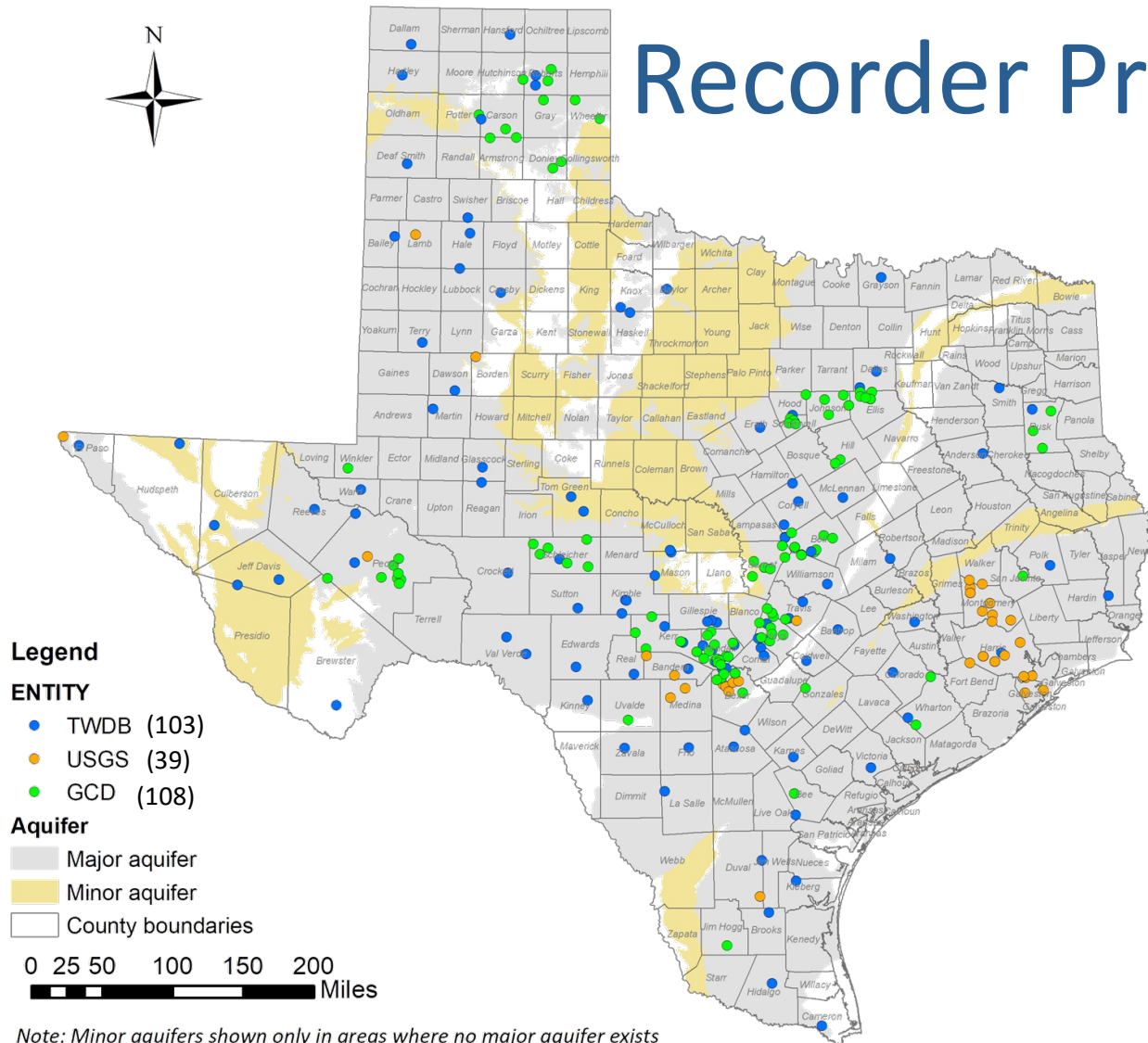
- TWDB Sites (1,503 measurements)
- Groundwater Conservation Districts and other cooperators (5,074 measurements)
- USGS (87 measurements)



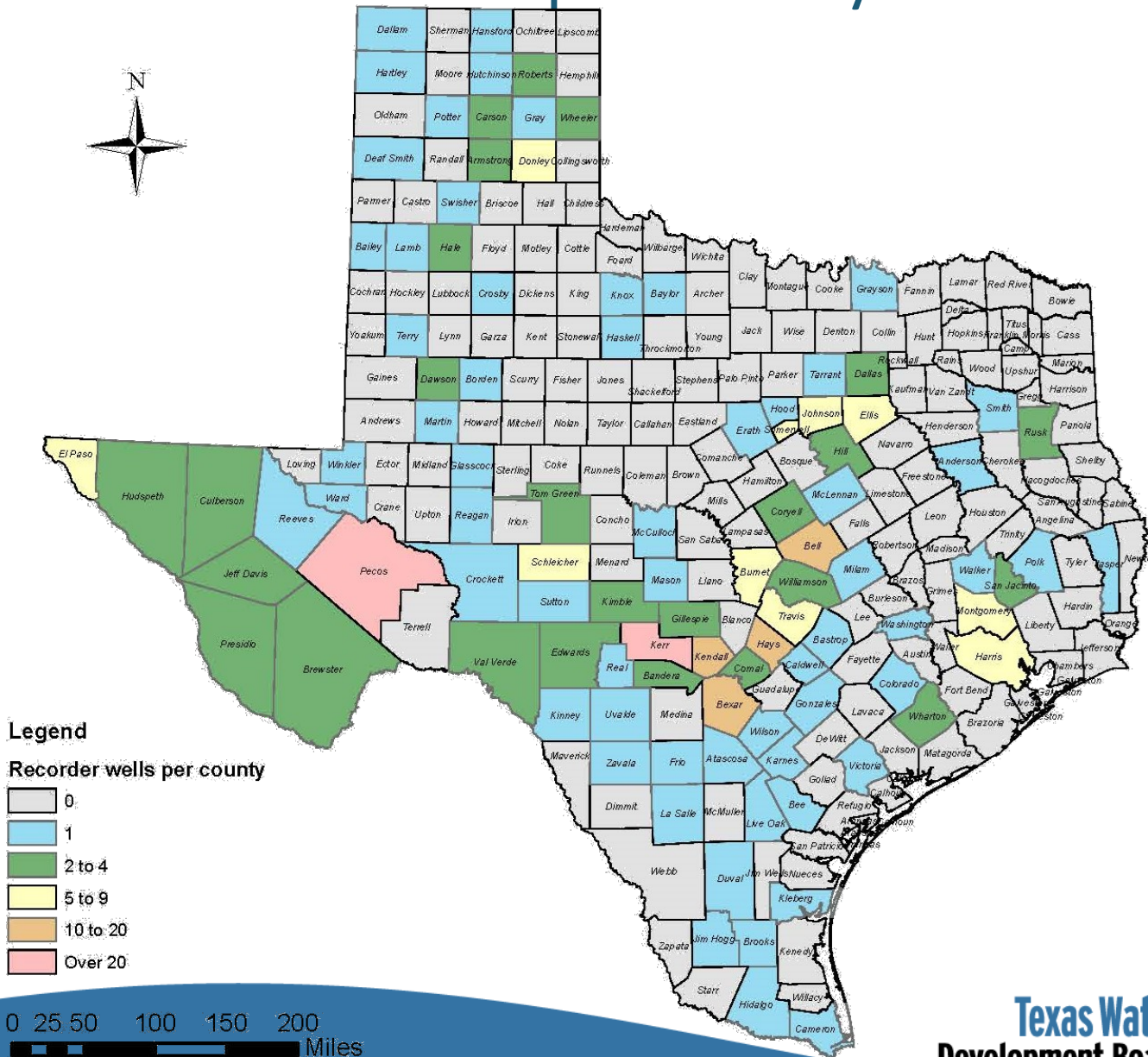
■ Texas Water Development Board
■ GCD
■ U.S. Geological Survey
■ Other Cooperator



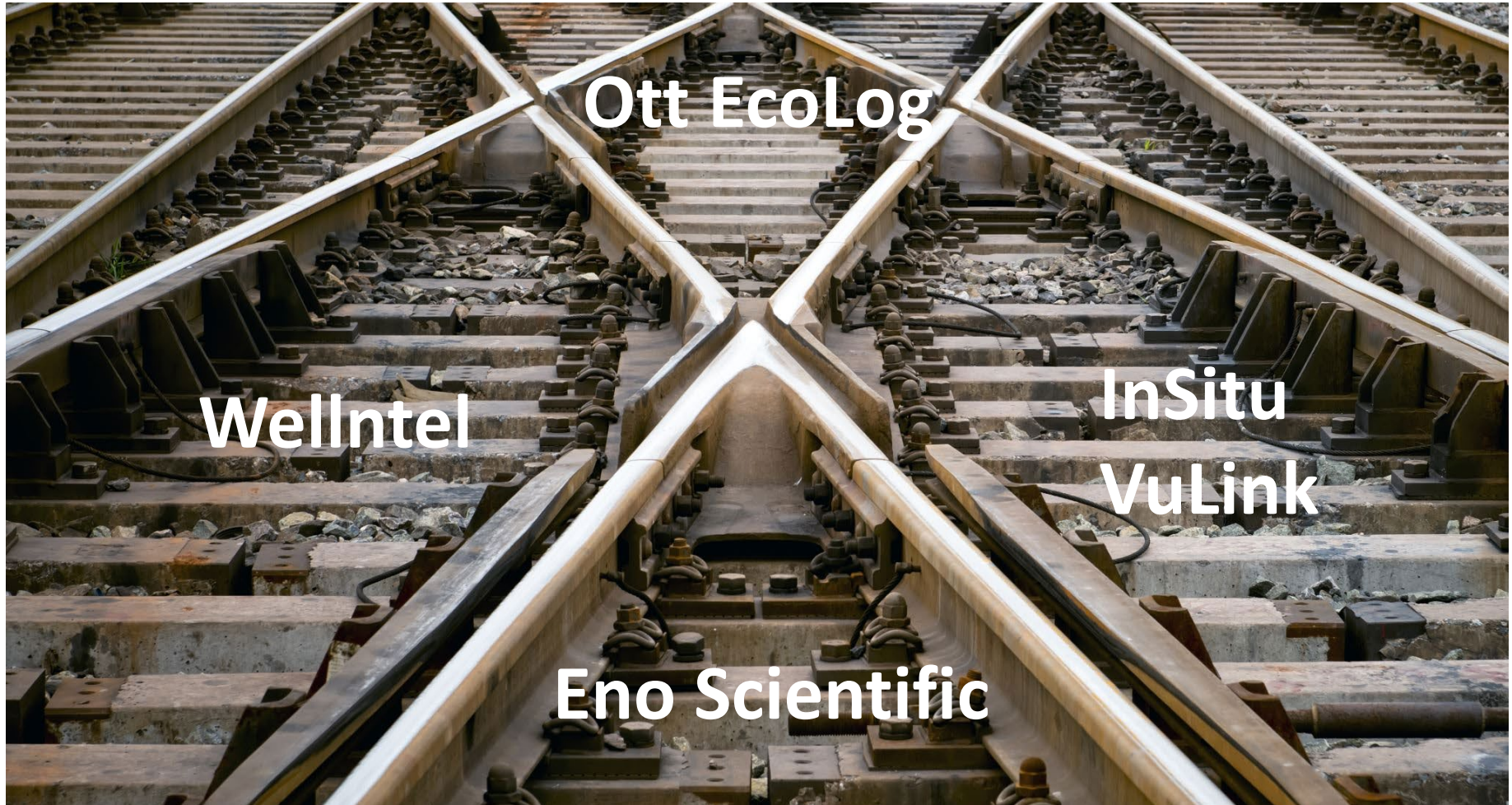
Recorder Program



Number of Recorder wells per County as of Dec 2021

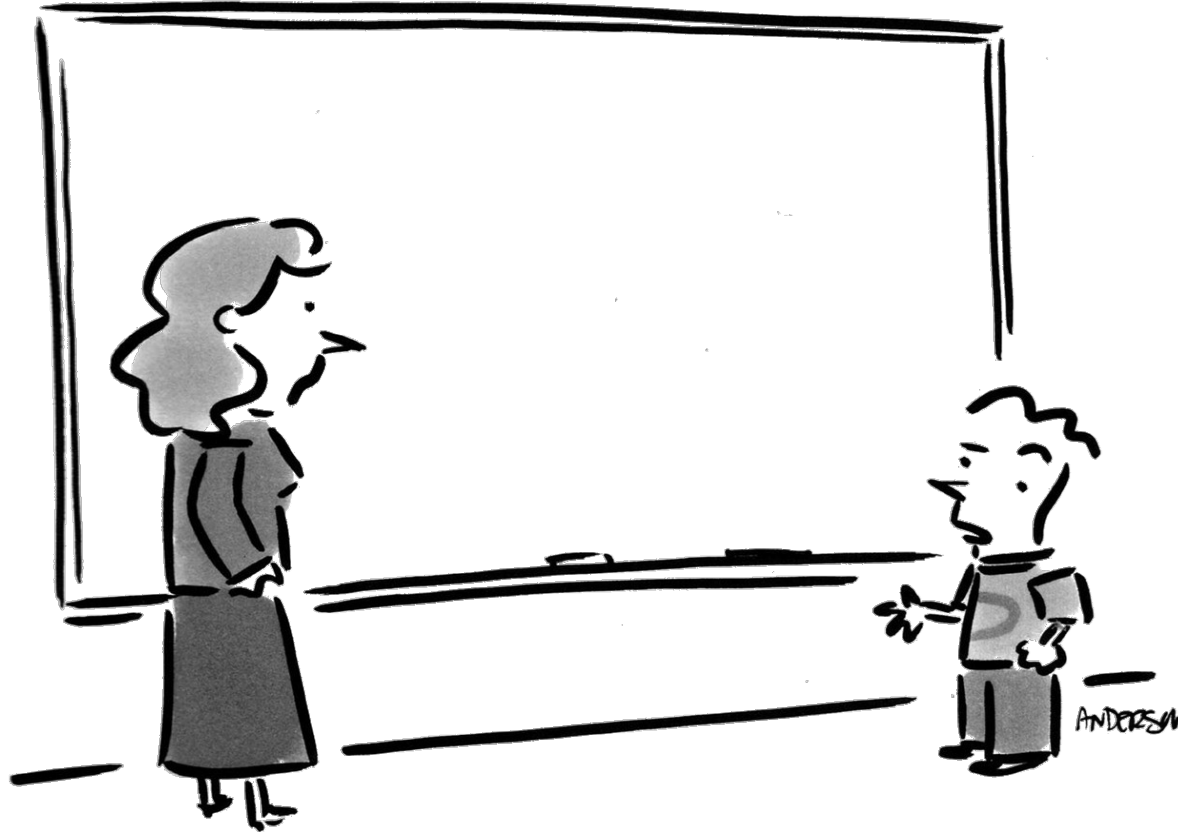


Variety of Networks

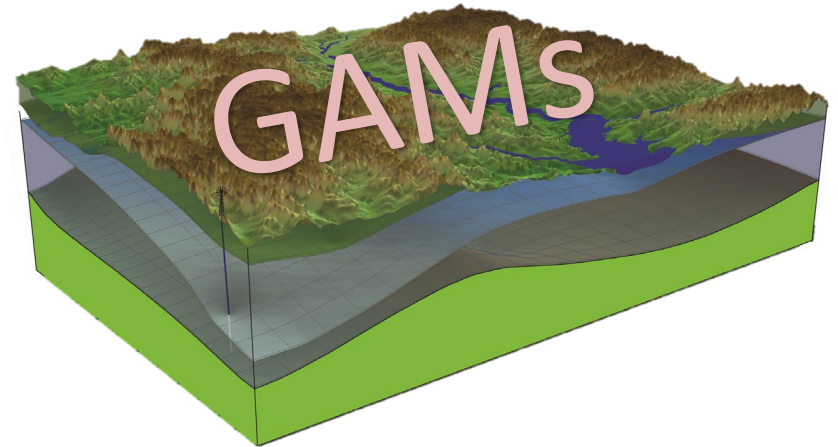
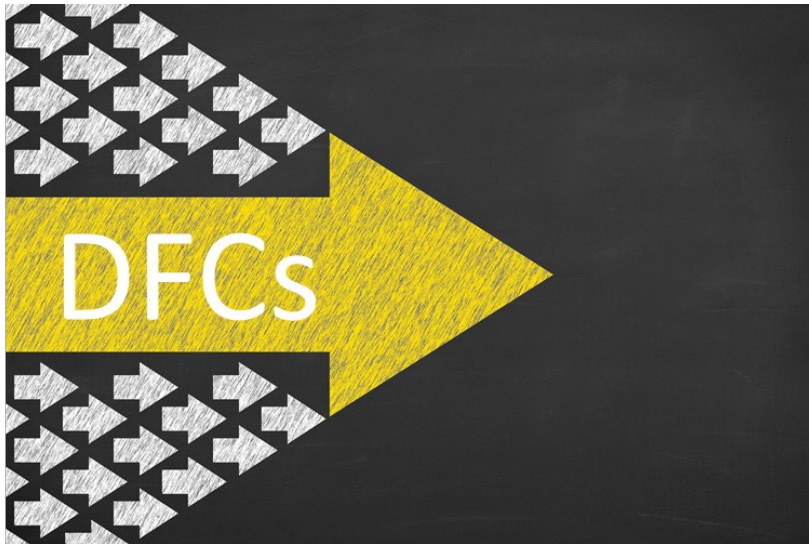
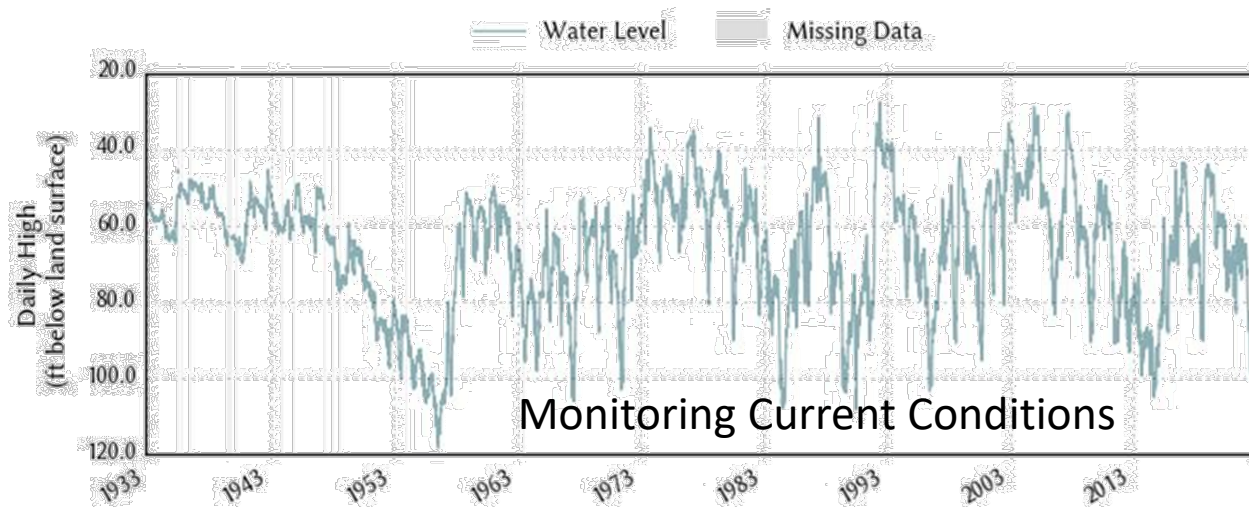


What do we do with the data?

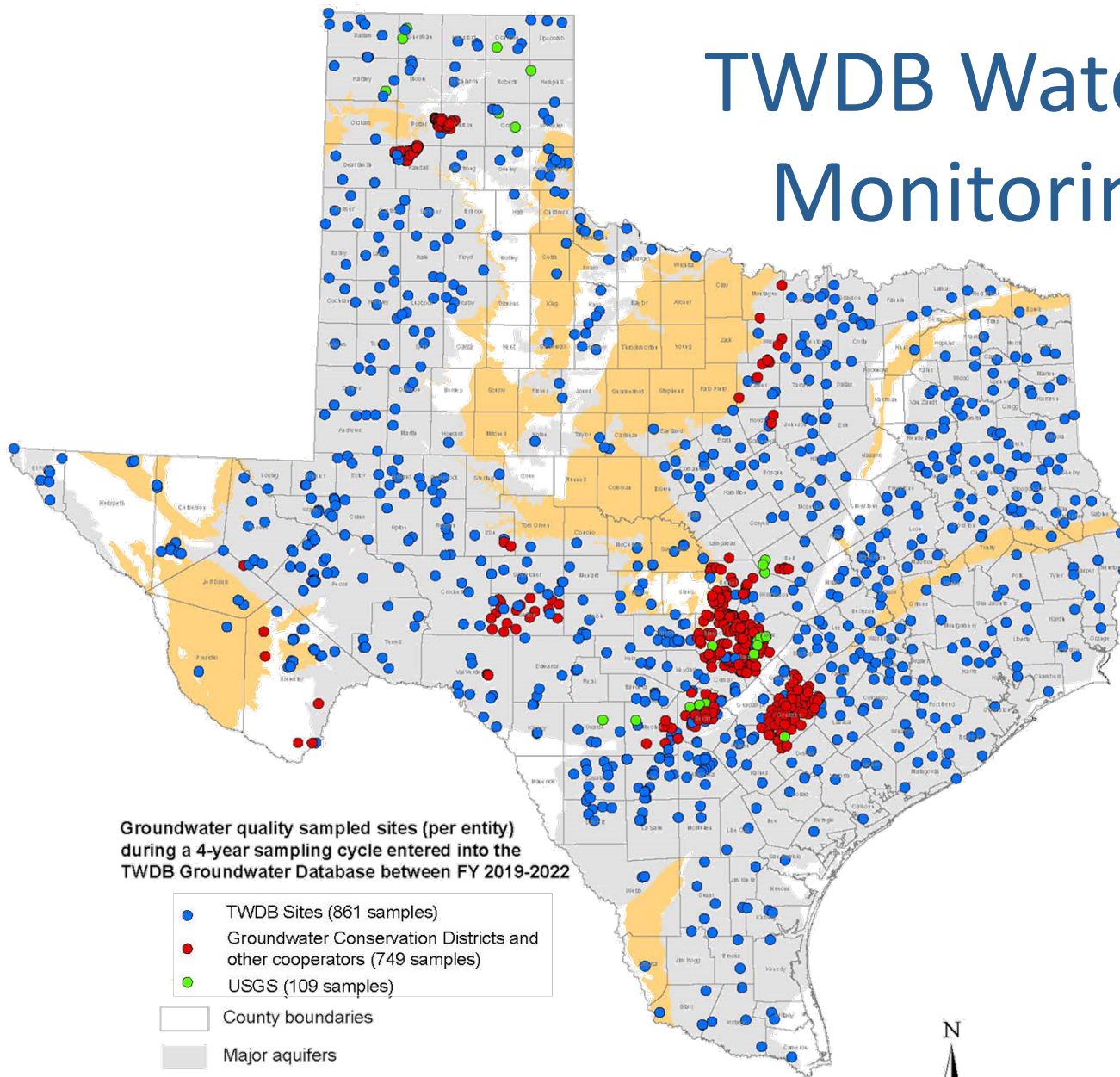
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"Before I write my name on the board, I'll need to know how you're planning to use that data."



TWDB Water Quality Monitoring Wells

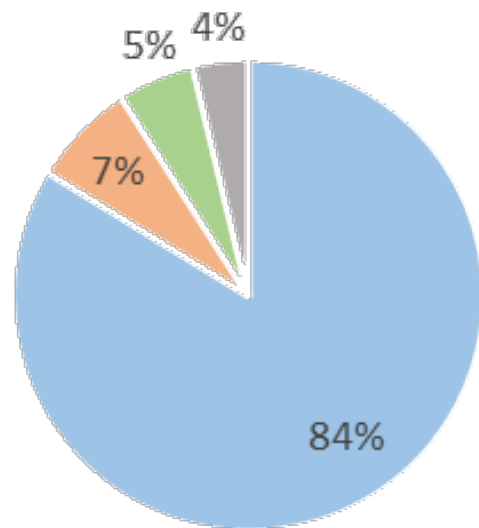


0 25 50 100 150 200
Miles

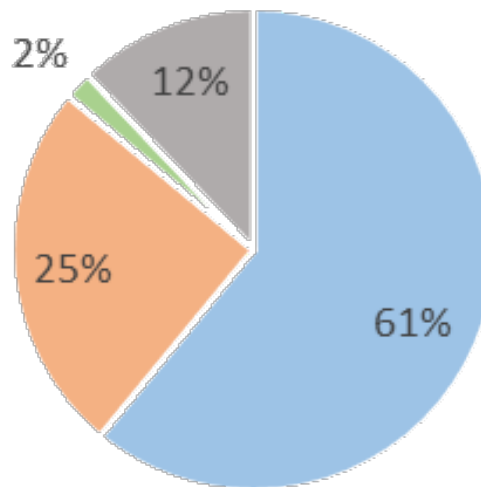
There were 1,719 total samples taken from 1,320 sites.
Note: Minor aquifers only shown in areas where no major aquifer exists.

- TWDB Sites (861 samples)
- Groundwater Conservation Districts and other cooperators (749 samples)
- USGS (109 samples)

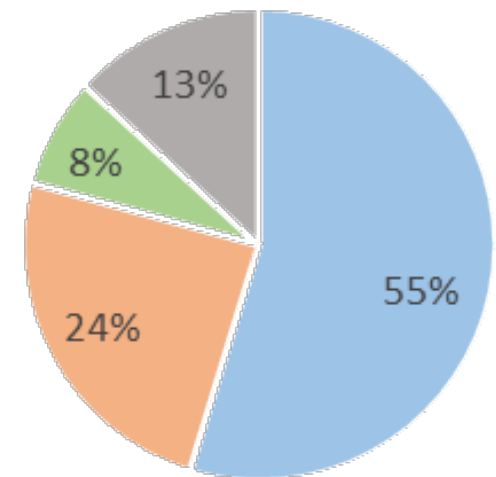
Counties Sampled



Sites Sampled

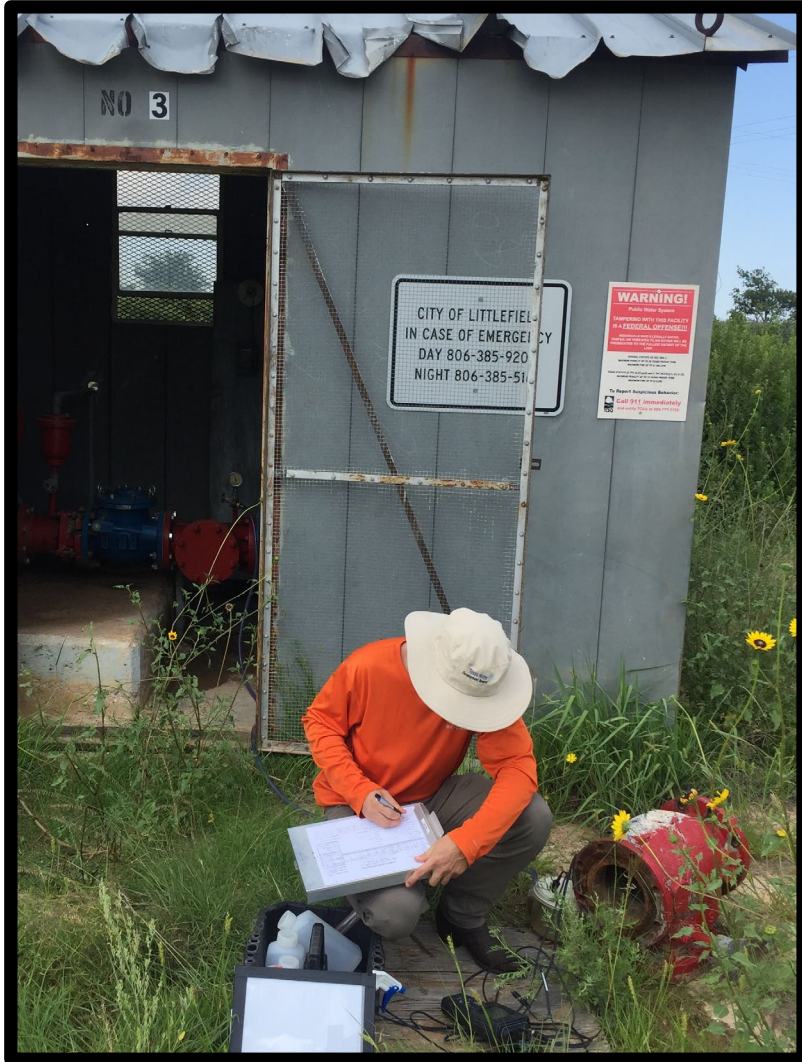


Aquifers Sampled



■ Texas Water Development Board ■ GCD ■ U.S. Geological Survey ■ Other Cooperator

What do we sample for?



Springs Initiative



Submitting Groundwater Data to the TWDB



Aquifers

Groundwater Management Areas

Desired Future Conditions

Groundwater Conservation Districts

Groundwater Data

- Groundwater Reports
- Automated Groundwater Level Wells
- Springs Monitoring Program

How to Submit Data

<https://www.twdb.texas.gov/groundwater/data/submitdata.asp>

Tips for Data Submissions

...or how to stay on our good side

- 👍 Don't reuse state well numbers
- 👍 Include full dates
- 👍 Provide comments



How can we improve our outreach?



Questions/Contacts

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How to Submit Data

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Springs Monitoring Program

<https://www.twdb.texas.gov/groundwater/data/springs.asp>