



Texas Water Development Board

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.

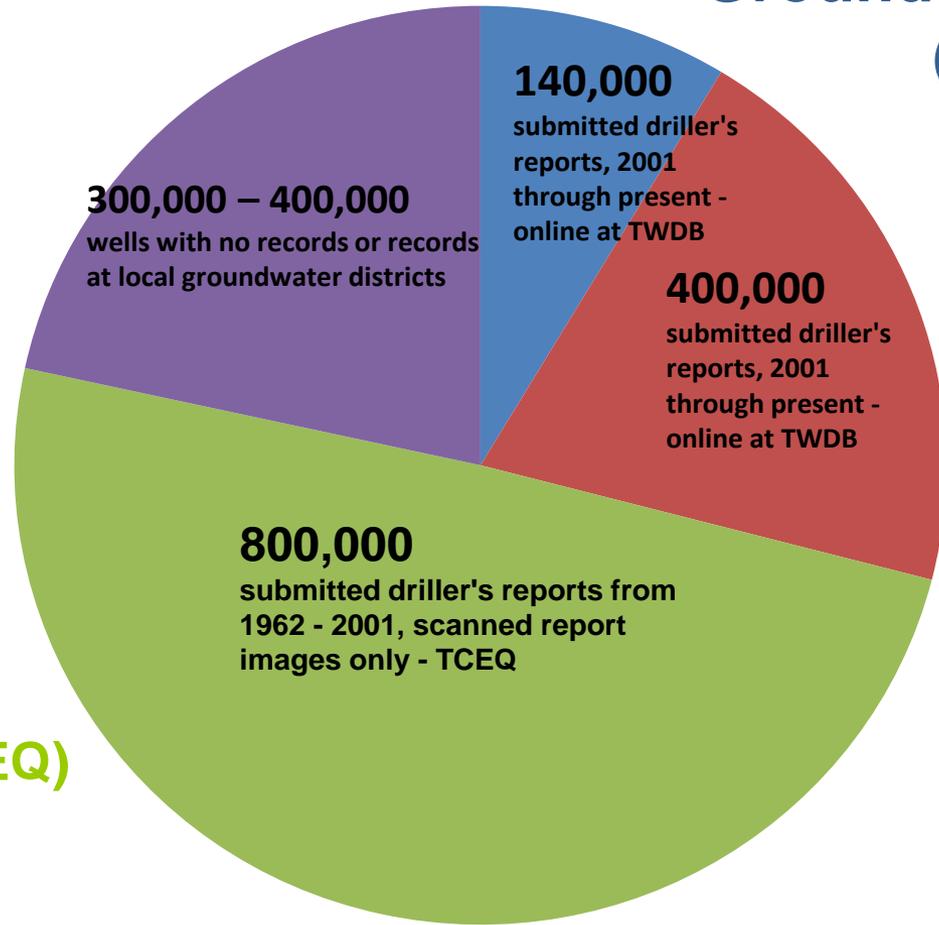
- Water planning
- Data collection and dissemination
- Financial and technical assistance



The statements contained in this presentation are my current views and opinions and are not intended to reflect the positions of, or information from, the Texas Water Development Board, nor is it an indication of any official policy position of the Board.

Location of records for estimated 1.5+ million water wells in Texas, drilled since the late 1890s

Groundwater Database (TWDB)



Submitted Driller's Report Database (TWDB)

Water well viewer (TCEQ)

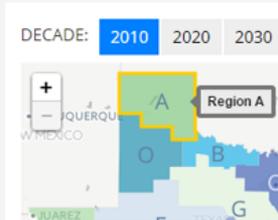
WATER DATA Interactive



[Groundwater Data Viewer](#)

This interactive mapping application provides access to water-related data for Texas. The viewer contains several GIS datasets relating to water resources, including TWDB groundwater data, brackish groundwater

[click to show more](#)



[2012 State Water Plan](#)

This application displays water planning information on which the 2012 State Water Plan is based. Each water user group is mapped to a single point near its primary location; therefore, an entity with a large or multiple

[click to show more](#)



[Water Data for Texas](#)

This website is a product of the Texas Water Development Board (TWDB) Water Science Conservation Division and is made possible by the support of management and staff at TWDB. This project is part of

[click to show more](#)



[GEMSS/2](#)

The Geospatial Emergency Management Support System (GEMSS) was developed by the Texas Natural Resources Information System (TNRIS), a part of the Texas Water Development Board, using the Hazard Mitigation Grant

[click to show more](#)

[Interactive Apps and Maps](#)

[TWDB Maps](#)

[GIS Data](#)

[GIS Order Form](#)

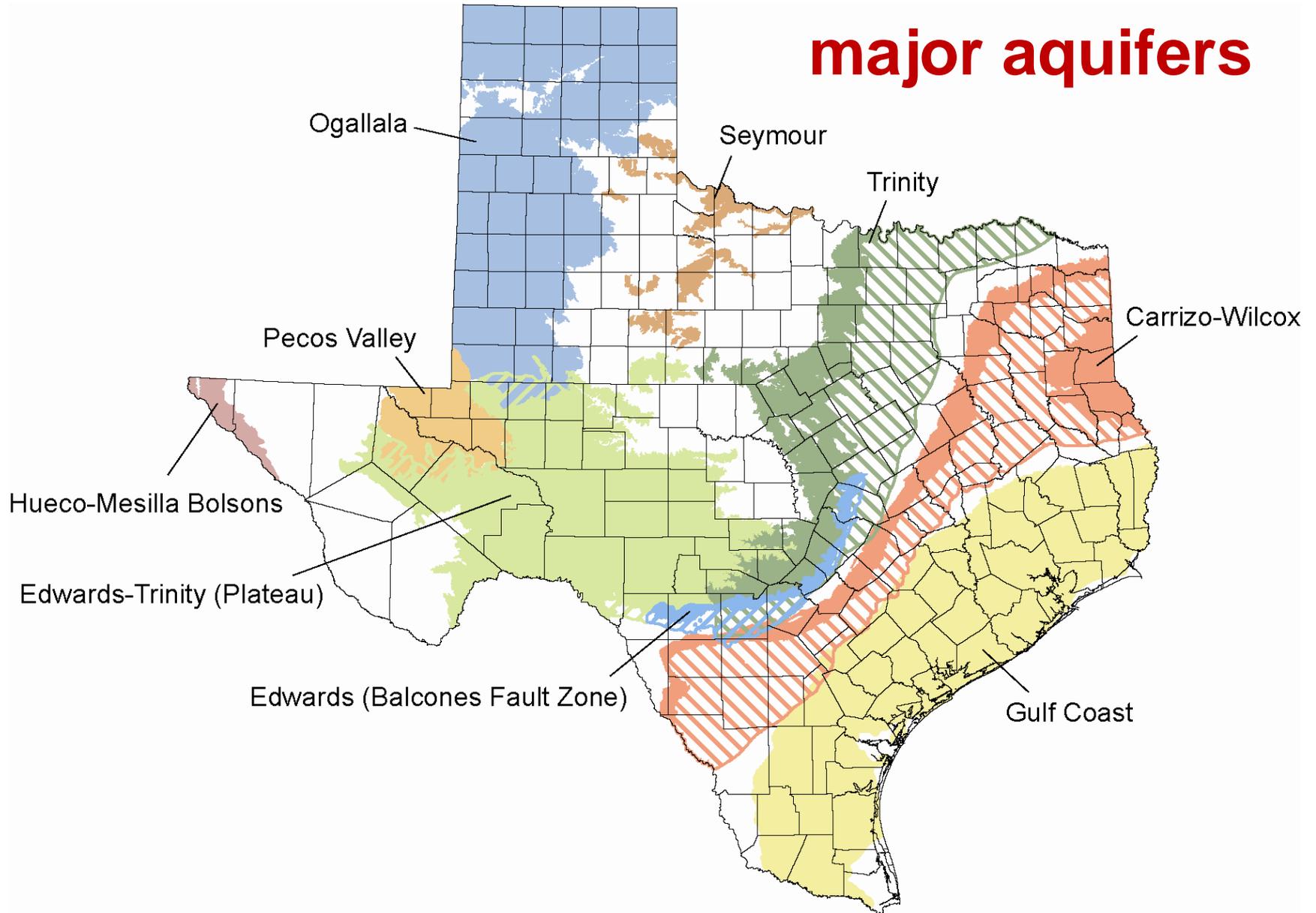
[Map Resources](#)

[About Data, Apps and Maps](#)

[State Water Implementation Fund for Texas \(SWIFT\)](#)



major aquifers



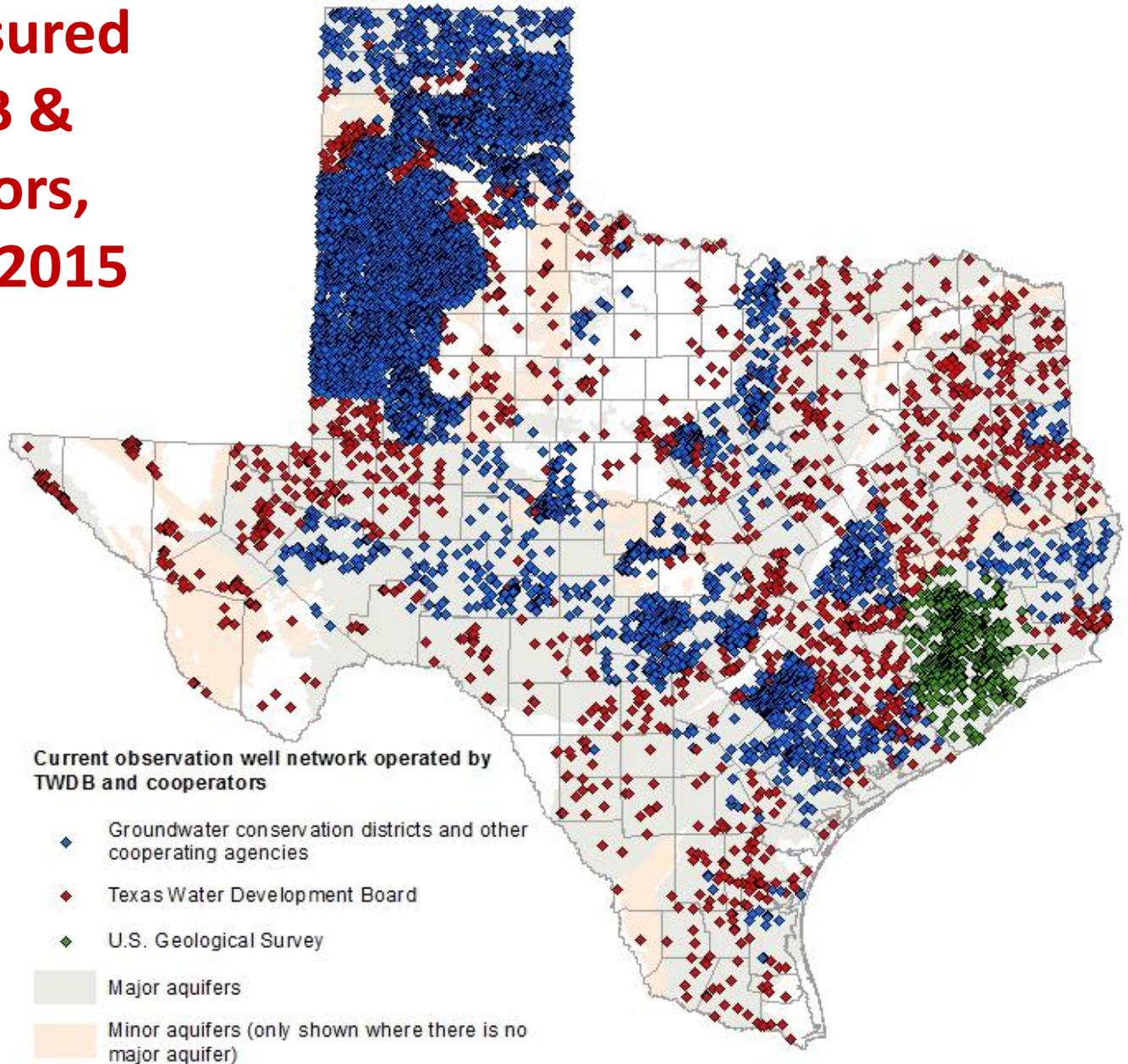
Principal aquifers of the U.S.



TWDB monitoring networks collect data from:

- **~8500 water-level network wells and ~1600 water-quality network wells (all privately owned)**
- **in 9 major, 21 minor, and several “undesigned” aquifers**
- **to publish real-time levels, determine groundwater-level trends, and characterize naturally occurring groundwater quality and any changes that may have occurred over time**

**wells measured
by TWDB &
cooperators,
fiscal year 2015**



<http://www.waterdatafortexas.org/groundwater/>

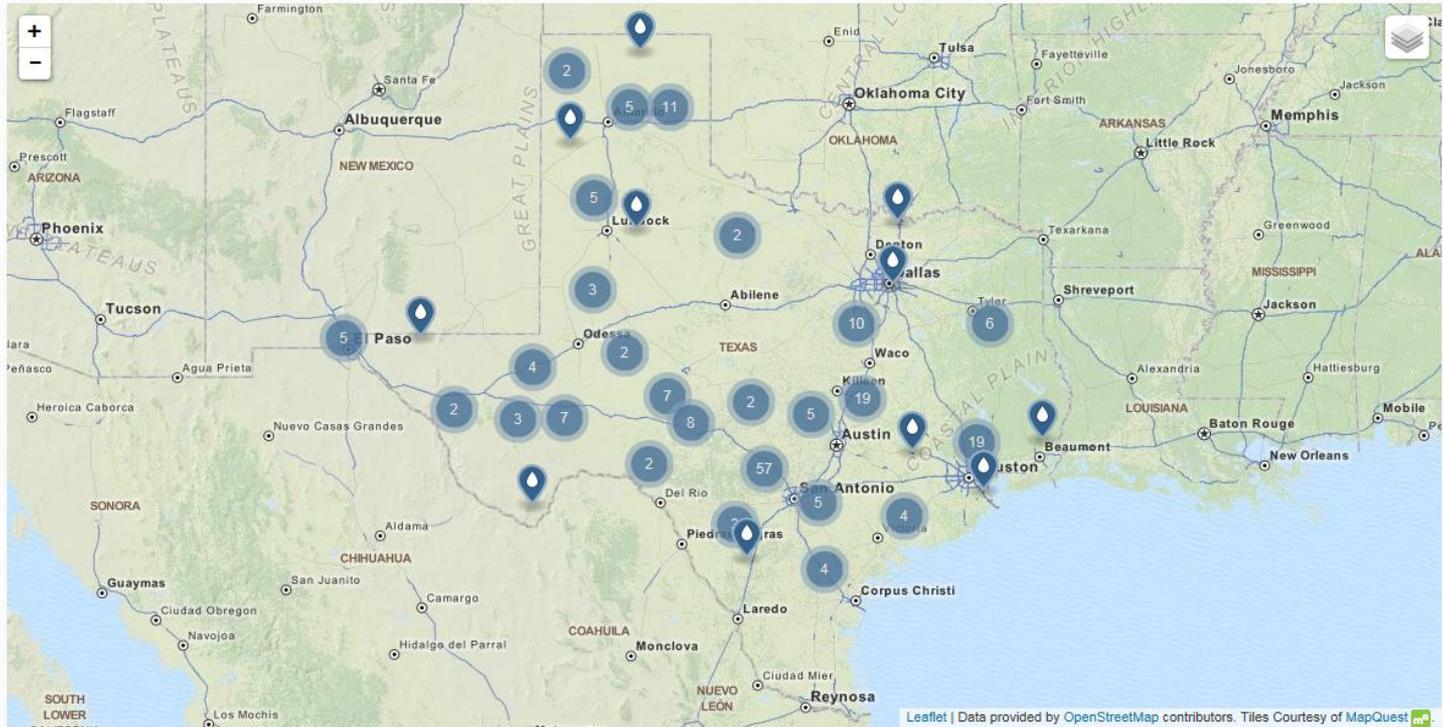
Water Data
for Texas

Texas Water
Development Board

RESERVOIRS GROUNDWATER DROUGHT

STATEWIDE DOWNLOAD DATA FREQUENTLY ASKED QUESTIONS ABOUT

Automated Groundwater Level Wells

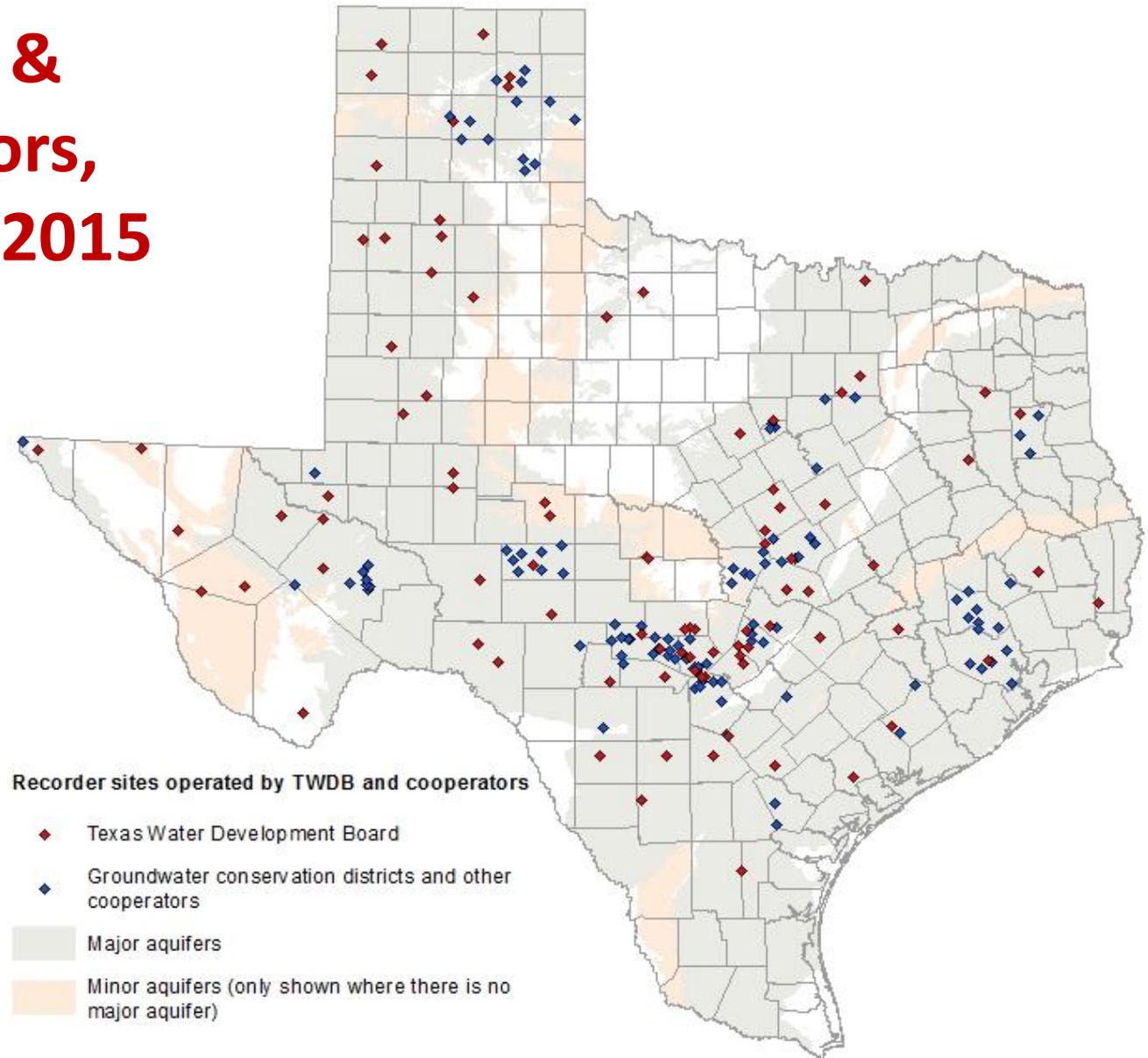


All data are provisional and subject to revision. The Texas Water Development Board (TWDB) specifically disclaims any and all liability for any claims or damages that may result from providing these data.

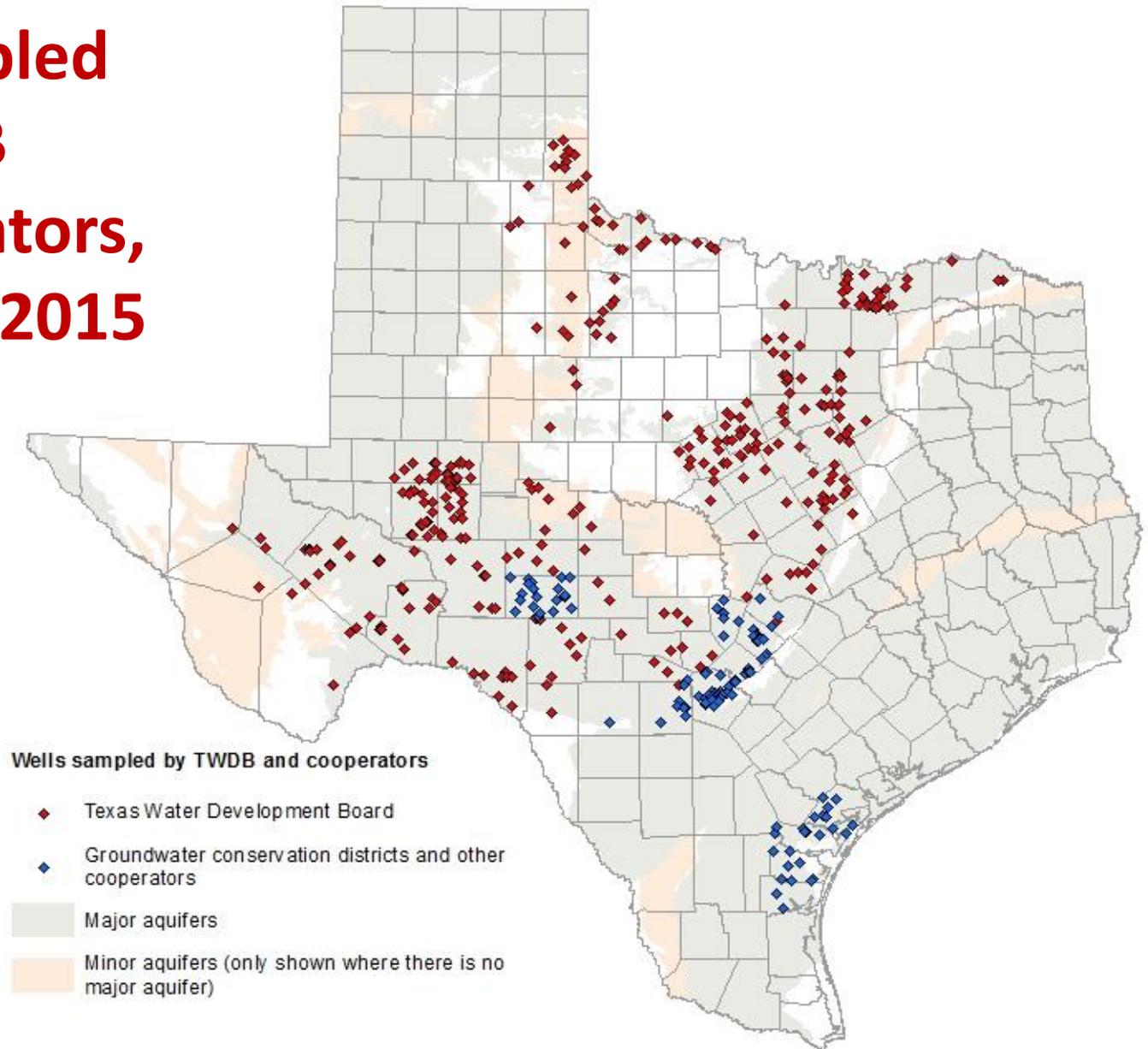
Download Recent Conditions (only active wells): [csv](#), [json](#)

Download Well Metadata: [kmz \(Google Earth\)](#), [geojson](#)

recorders operated by TWDB & cooperators, fiscal year 2015



wells sampled by TWDB & cooperators, fiscal year 2015



Existing NGWMN sites in the TWDB Water-Level Subnetwork

- 425 wells in 8 major aquifers (5 principal aquifers)
 - 57 surveillance
 - 368 trend

To be provided in FY 16

- 150+ in the Ogallala (High Plains) Aquifer
 - 20 trend
 - additional Seymour, Pecos Valley (and Rio Grande Alluvial?) surveillance wells

NGWMN sites in the TWDB Water-Quality Subnetwork to be Provided in FY 16

- **150+ surveillance sites in the Ogallala (High Plains) Aquifer**
- **425+ surveillance sites in the other 8 major aquifers**
- **?trend sites in the Edwards (BFZ) Aquifer?**

Additional TWDB NGWMN Tasks

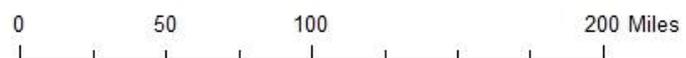
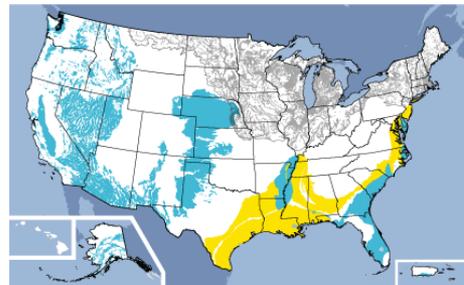
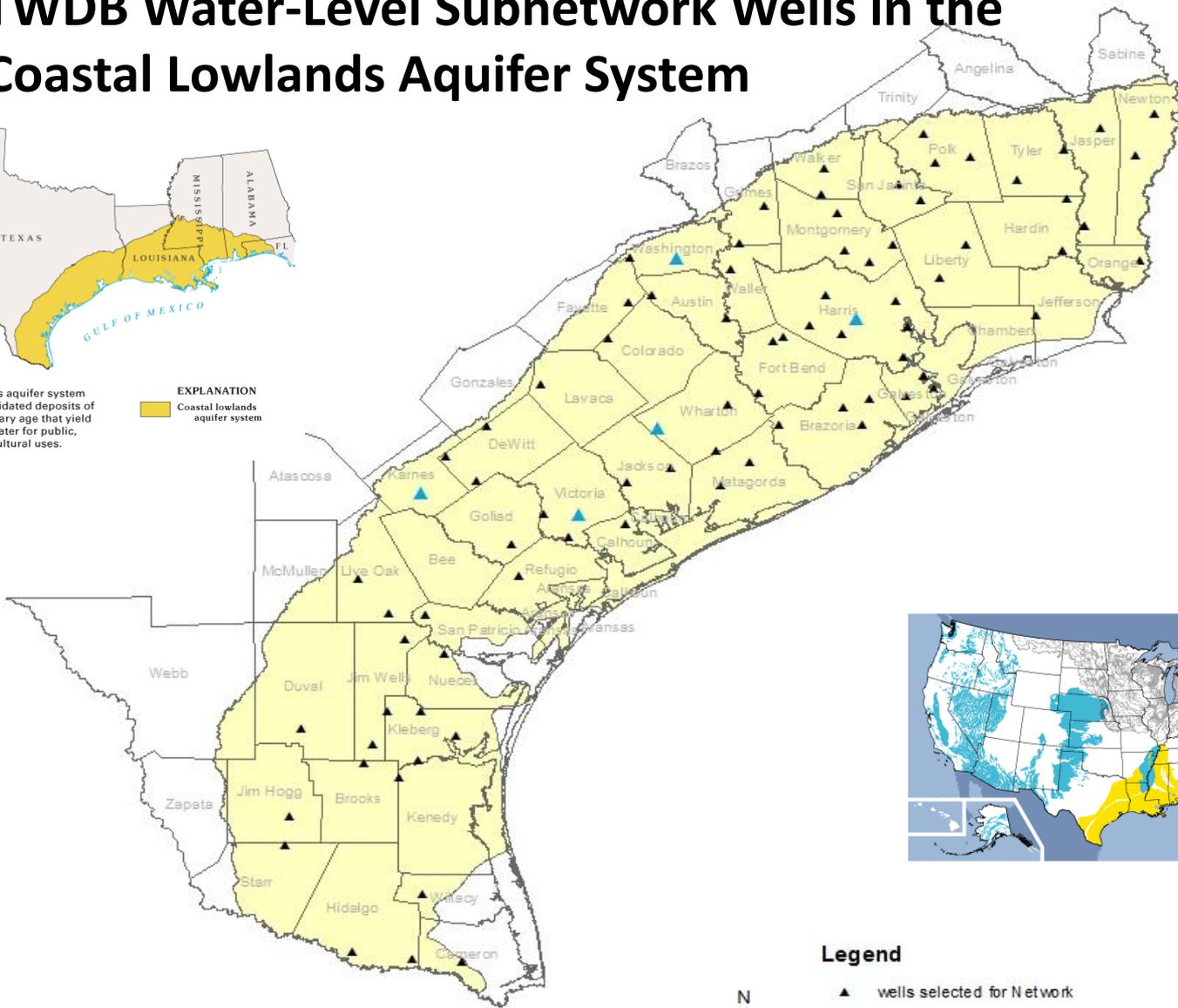
- **Review water-level subnetwork, differentiate confined vs unconfined, and add recorder (trend) wells**
- **Update web services**

TWDB Water-Level Subnetwork Wells in the Coastal Lowlands Aquifer System



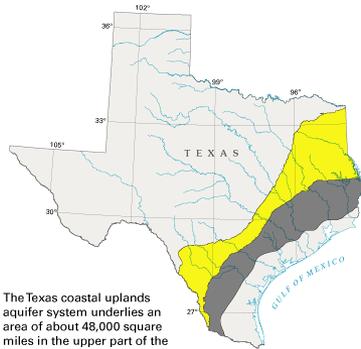
The Coastal lowlands aquifer system consists of unconsolidated deposits of Tertiary and Quaternary age that yield large quantities of water for public, industrial, and agricultural uses.

EXPLANATION
 Coastal lowlands aquifer system



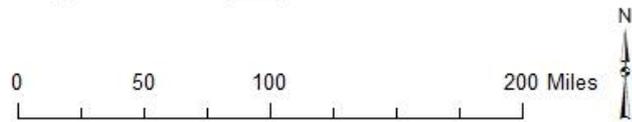
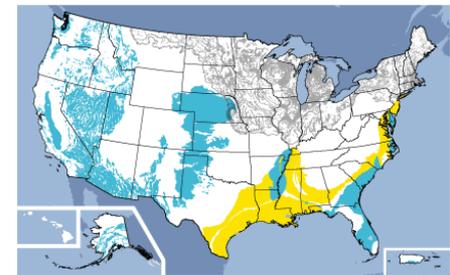
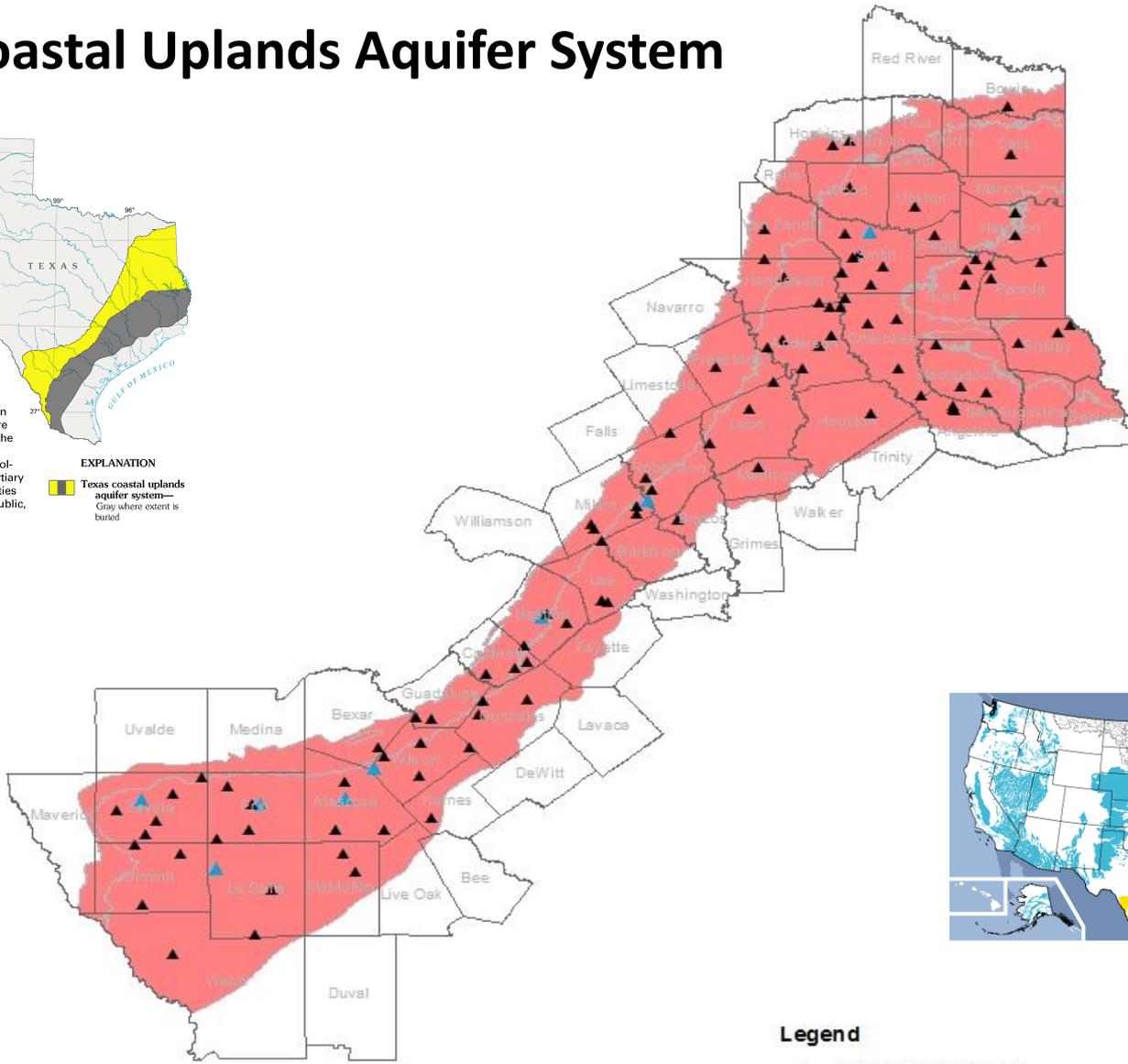
- Legend**
-  wells selected for N Network
 -  recorder wells
 -  county boundaries
 -  Gulf Coast Aquifer

TWDB Water-Level Subnetwork Wells in the Texas Coastal Uplands Aquifer System



The Texas coastal uplands aquifer system underlies an area of about 48,000 square miles in the upper part of the Coastal Plain. The aquifer system consists of unconsolidated deposits of early Tertiary age that yield large quantities of water for agricultural, public, and industrial supplies.

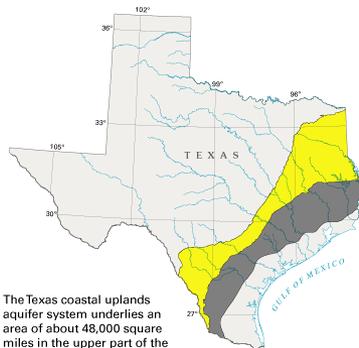
EXPLANATION
 Texas coastal uplands aquifer system—Gray where extent is buried



Legend

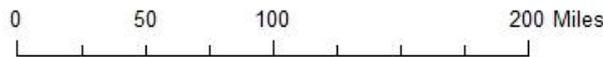
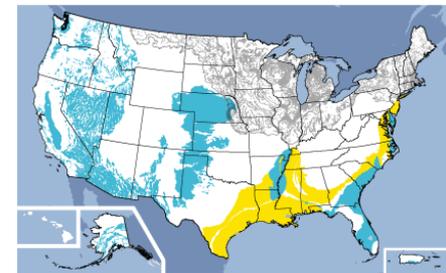
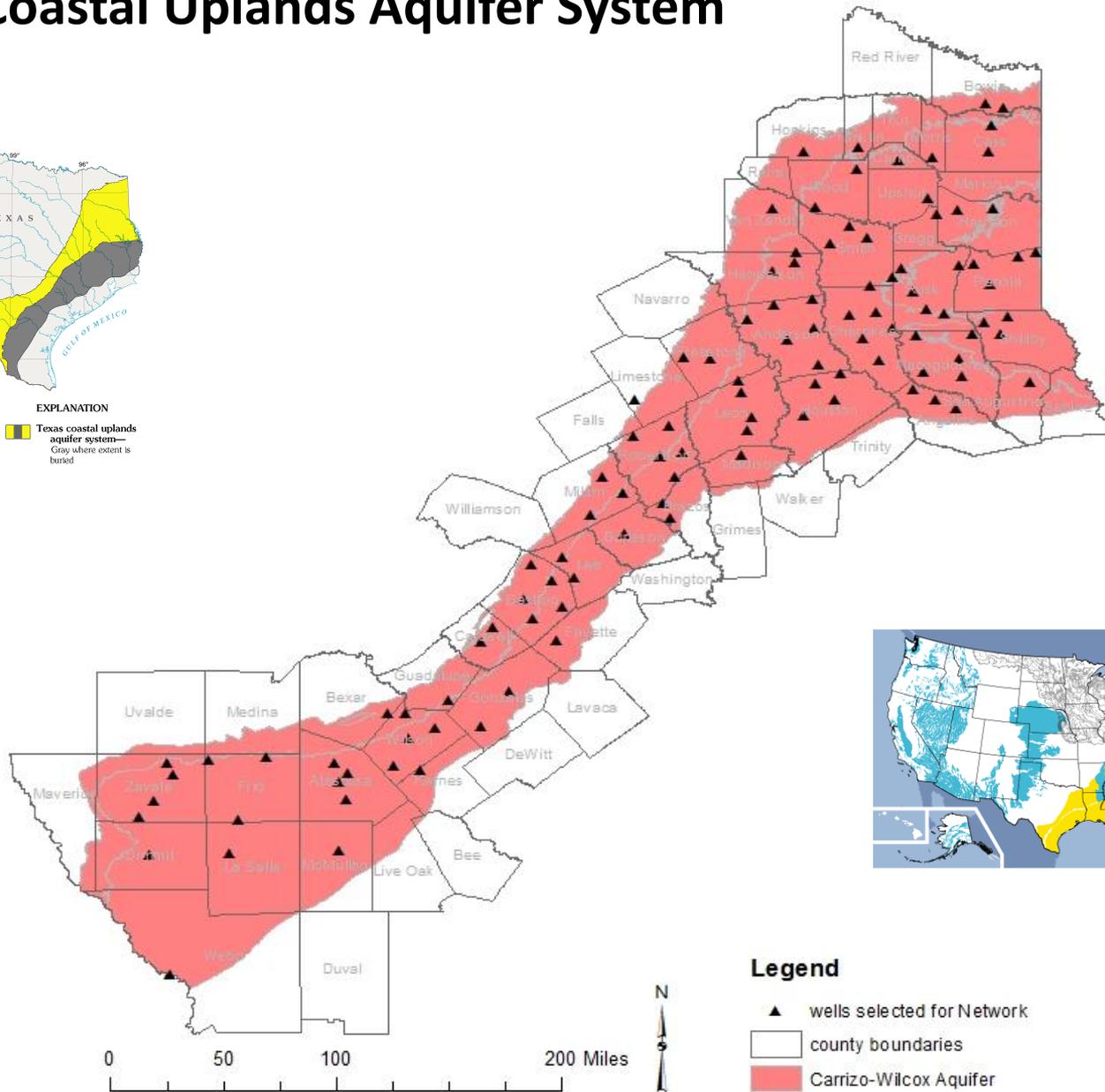
-  wells selected for Network
-  recorder wells
-  county boundaries
-  Carrizo-Wilcox Aquifer

TWDB Water-Quality Subnetwork Wells in the Texas Coastal Uplands Aquifer System



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EXPLANATION
 Texas coastal uplands aquifer system—
 Gray where extent is buried



Legend

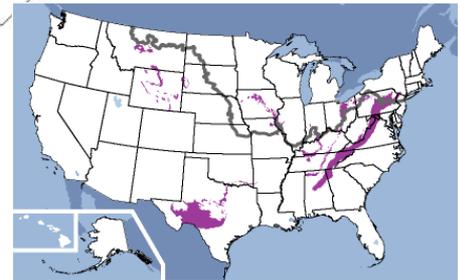
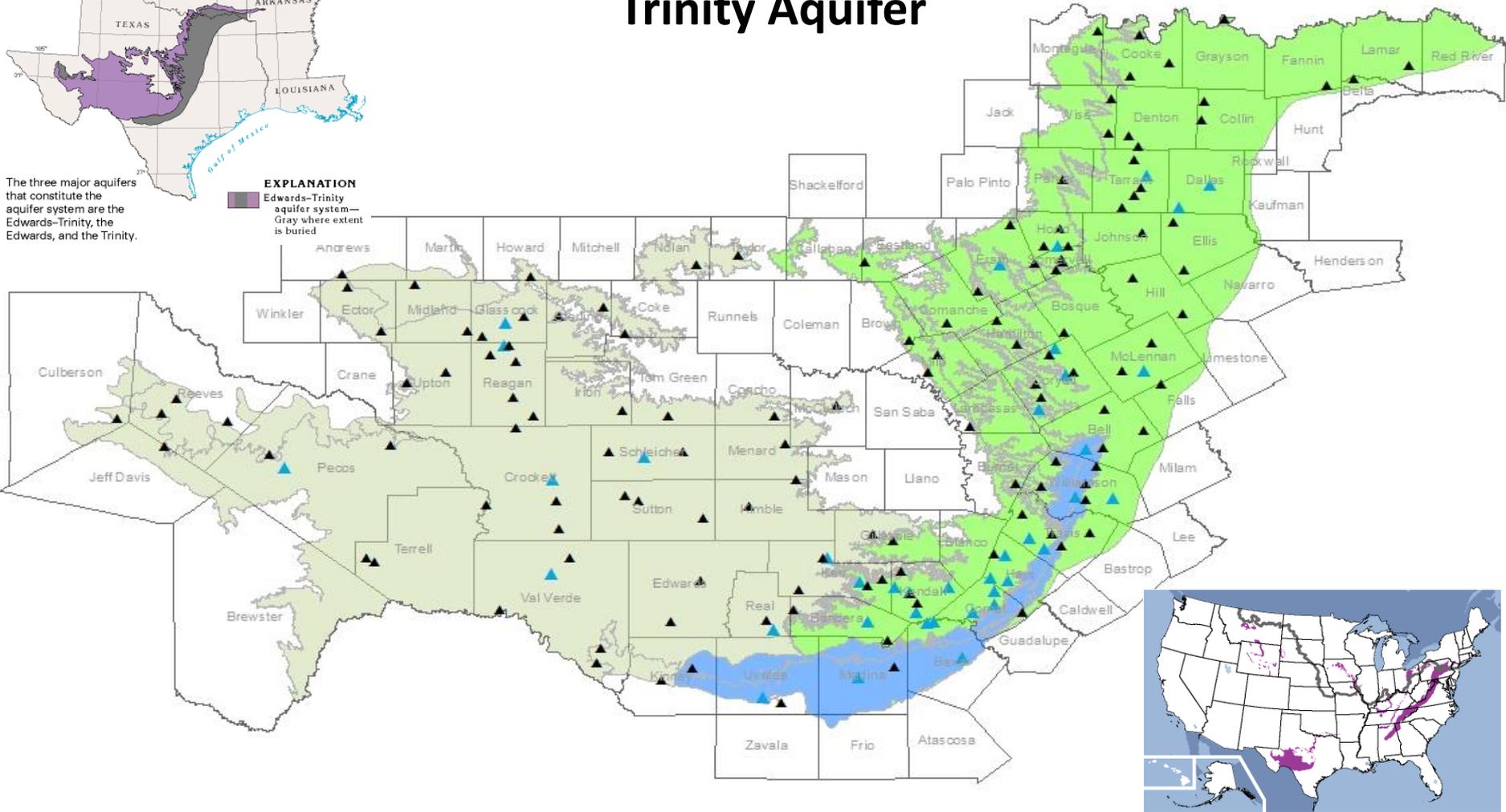
- wells selected for Network
- county boundaries
- Carrizo-Wilcox Aquifer

TWDB Water-Level Subnetwork Wells in the Trinity Aquifer



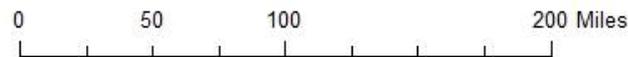
The three major aquifers that constitute the aquifer system are the Edwards-Trinity, the Edwards, and the Trinity.

EXPLANATION
 Edwards-Trinity aquifer system— Gray where extent is buried



Legend

- ▲ wells selected for Network
- ▲ recorder wells
- Edwards (Balcones Fault Zone) Aquifer
- Edwards-Trinity Plateau Aquifer
- Trinity Aquifer
- county boundaries

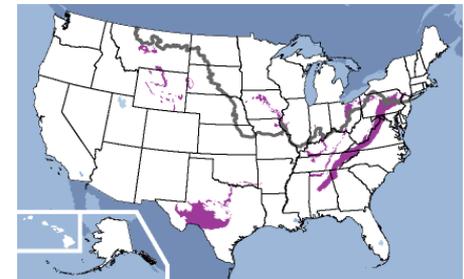
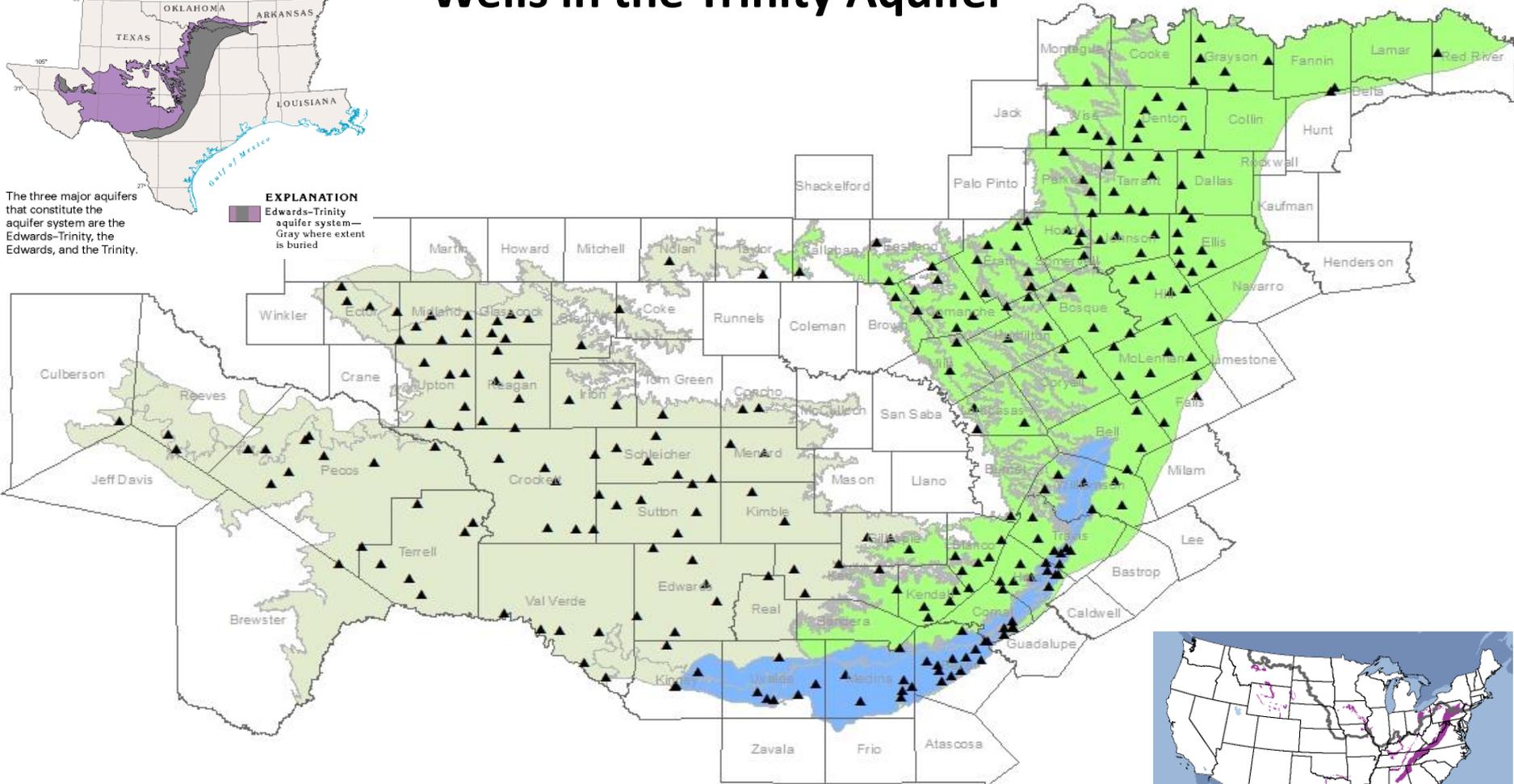


TWDB Water-Quality Subnetwork Wells in the Trinity Aquifer



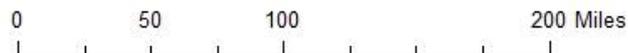
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EXPLANATION
 Edwards-Trinity aquifer system—
 Gray where extent is buried

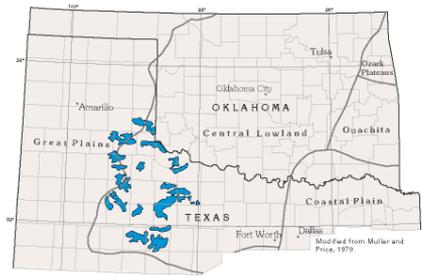


Legend

- ▲ wells selected for Network
- county boundaries
- Edwards (Balcones Fault Zone) Aquifer
- Edwards-Trinity Plateau Aquifer
- Trinity Aquifer

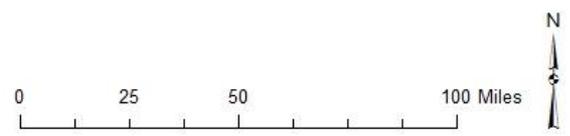
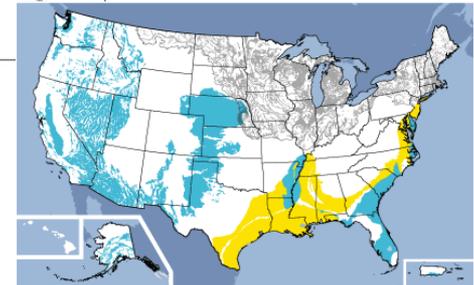
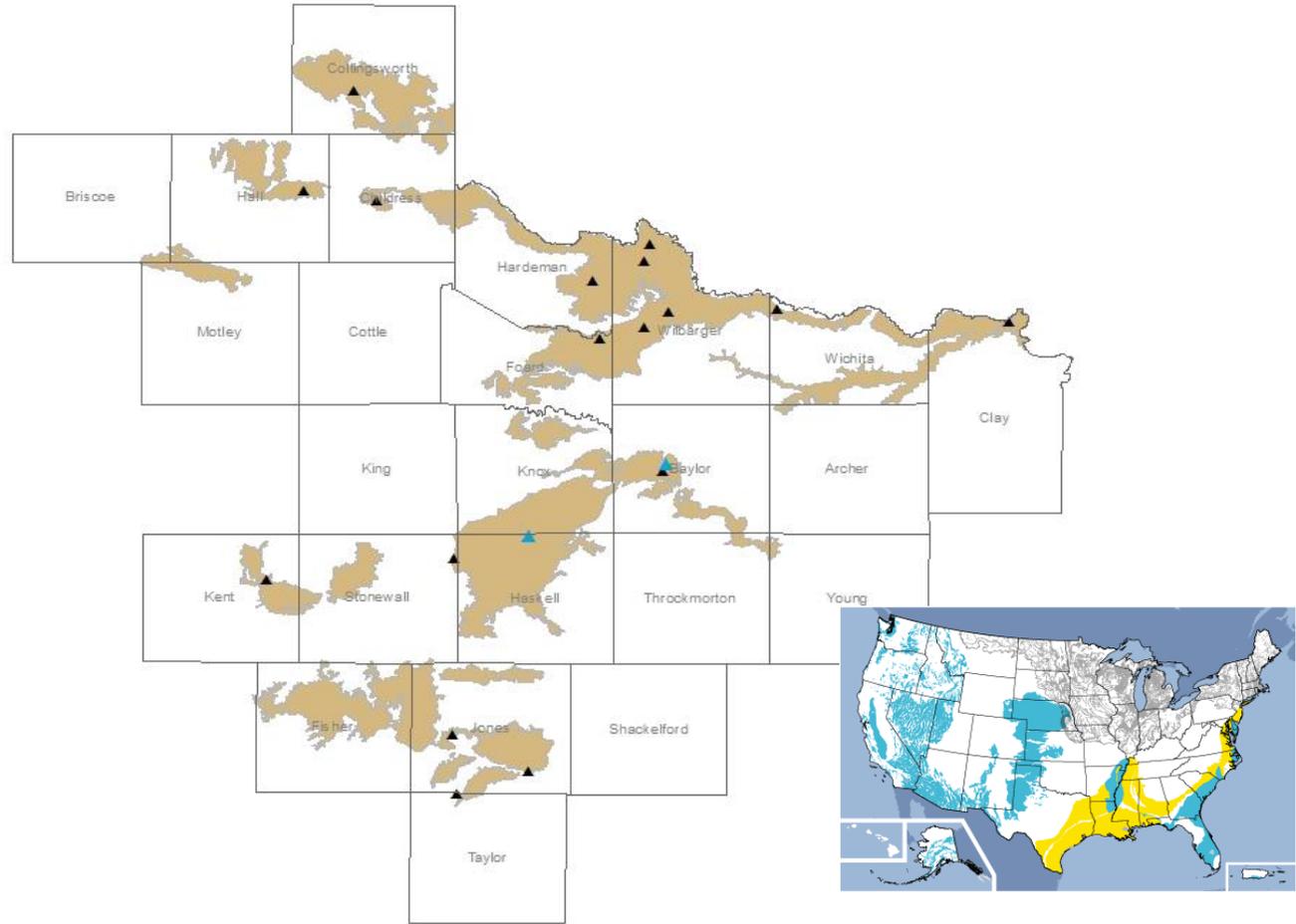


TWDB Water-Level Subnetwork Wells in the Trinity Aquifer



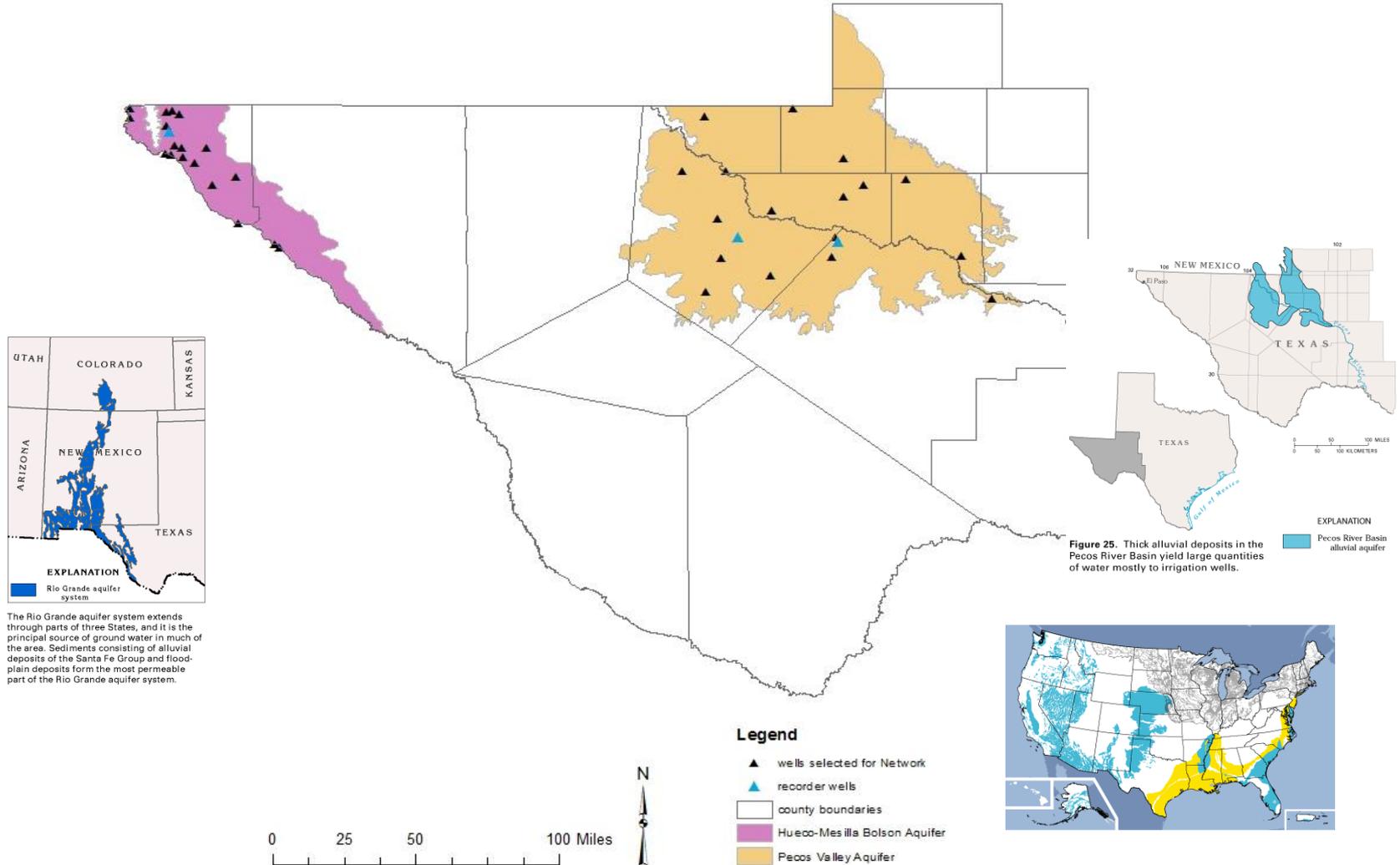
EXPLANATION
 Seymour aquifer
 Physiographic province boundary and name

Figure 32. Isolated patches of alluvial deposits in 20 counties in north-central Texas form the Seymour aquifer. The deposits are erosional remnants of the Seymour Formation.



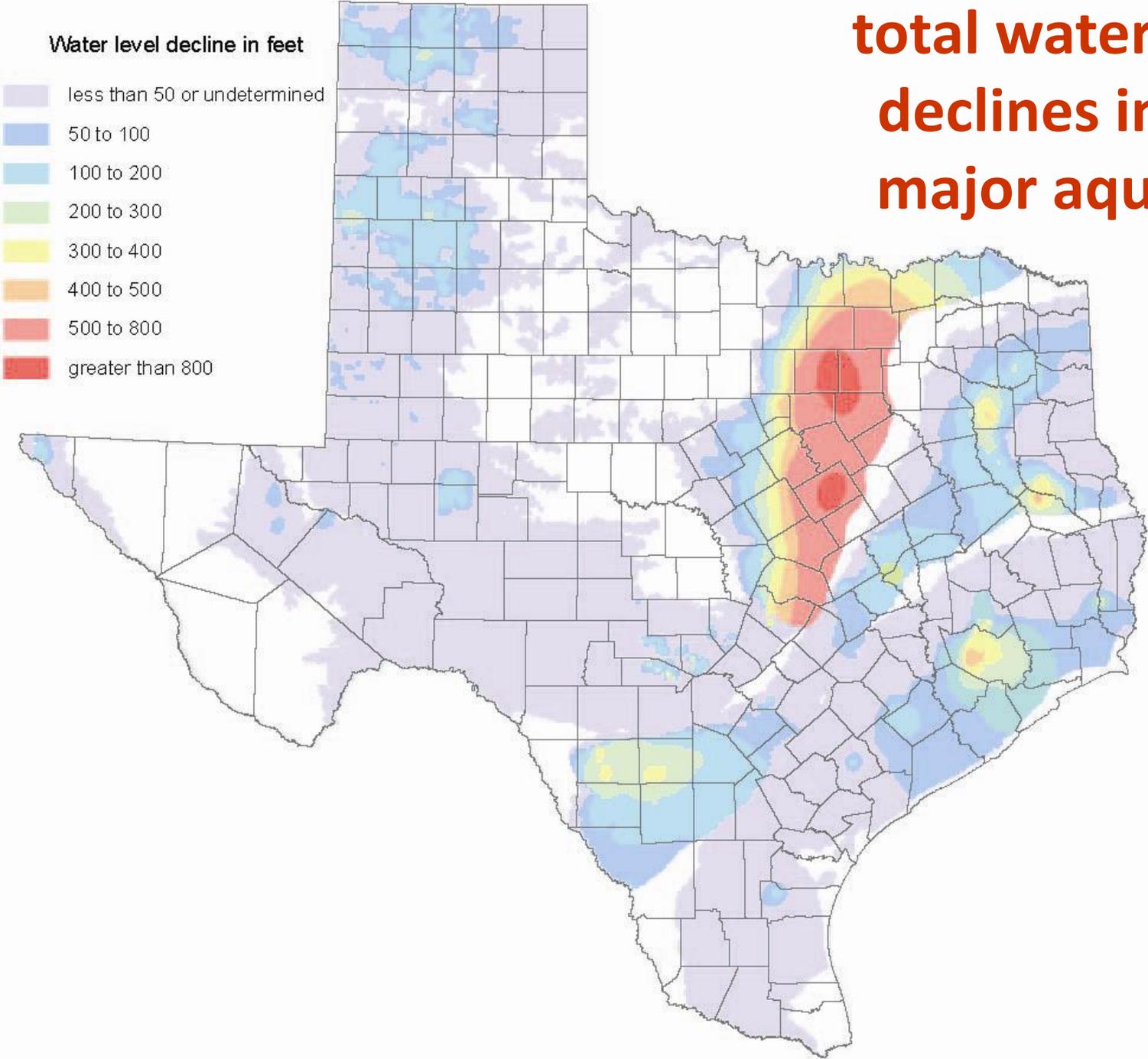
Legend
 ▲ wells selected for Network
 ▲ recorder wells
 county boundaries
 Seymour Aquifer

TWDB Water-Level Subnetwork Wells in the Rio Grande and Pecos River Basin Alluvial Aquifers

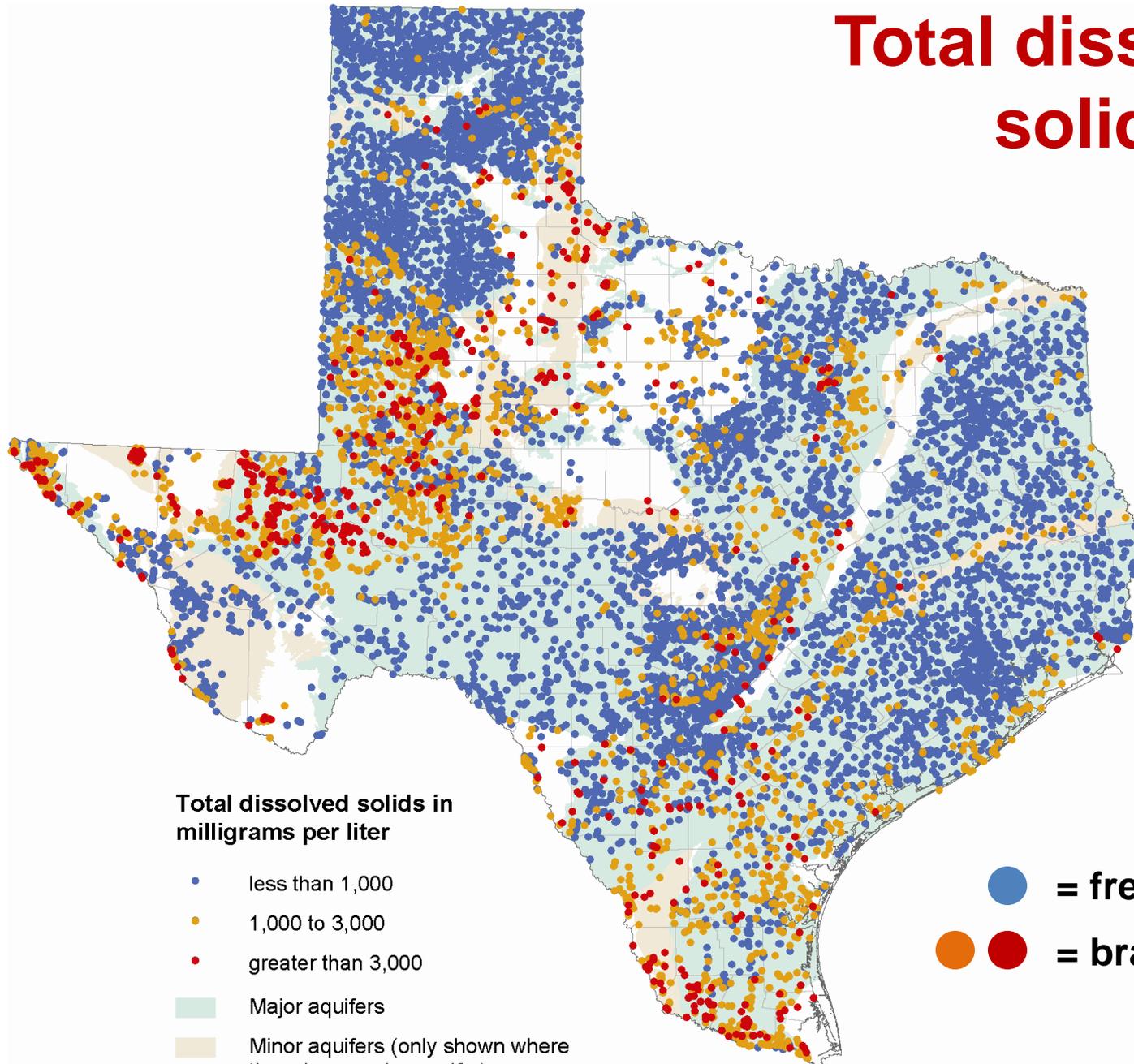


The Rio Grande aquifer system extends through parts of three States, and it is the principal source of ground water in much of the area. Sediments consisting of alluvial deposits of the Santa Fe Group and flood-plain deposits form the most permeable part of the Rio Grande aquifer system.

total water level declines in the major aquifers



Total dissolved solids



Total dissolved solids in milligrams per liter

- less than 1,000
- 1,000 to 3,000
- greater than 3,000

- Major aquifers
- Minor aquifers (only shown where there is no major aquifer)

- = fresh groundwater
- ● = brackish groundwater