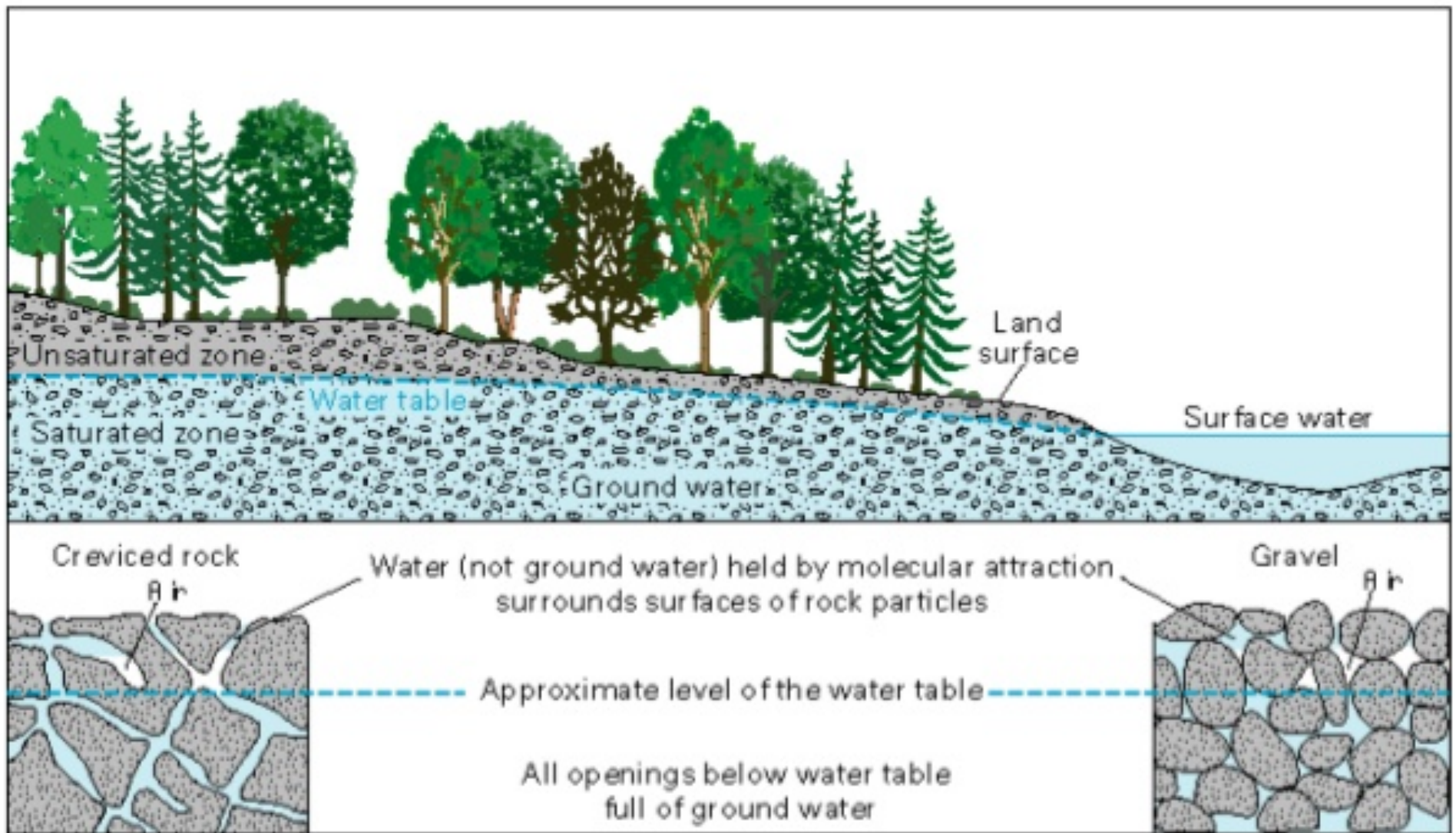
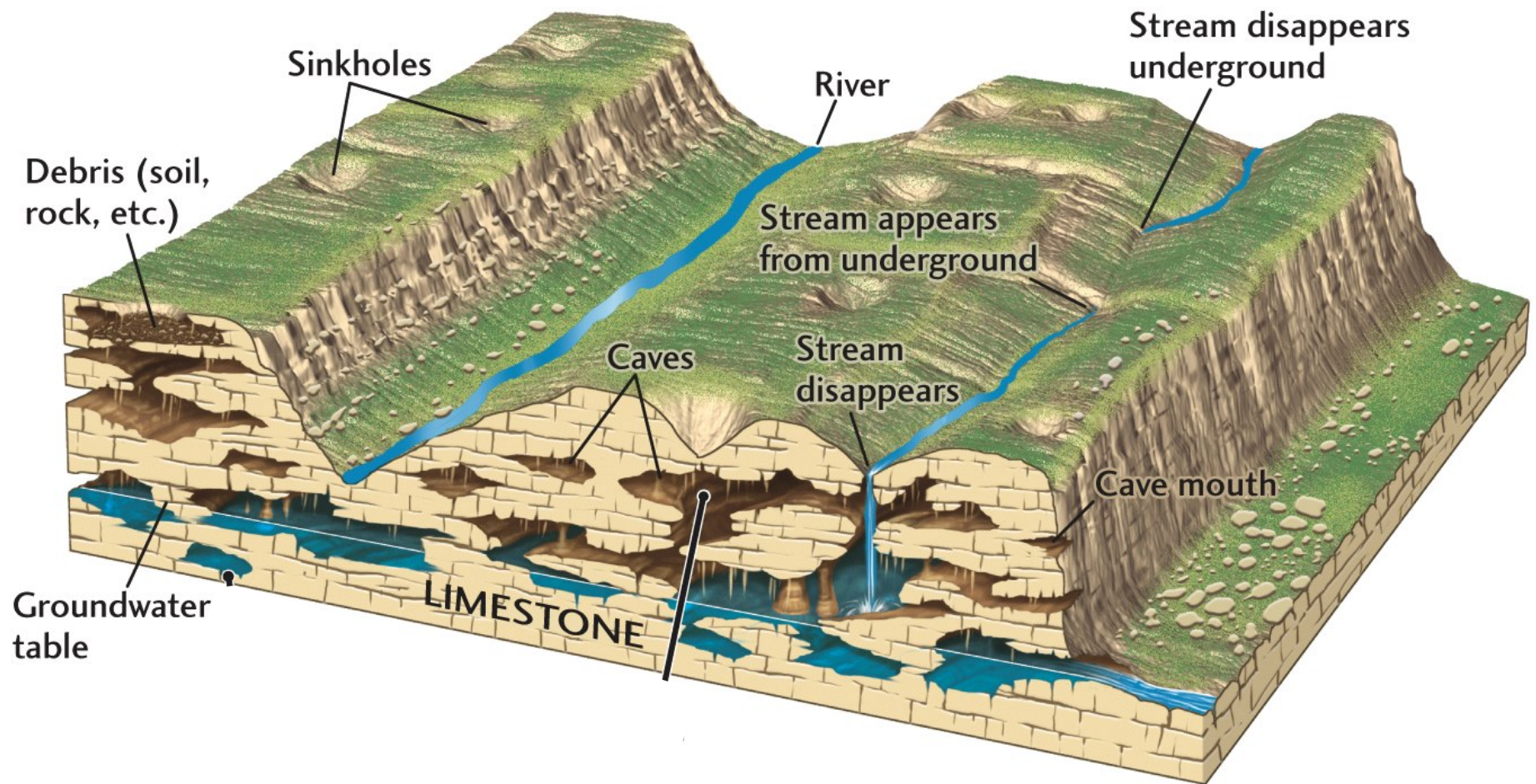


How Groundwater occurs...

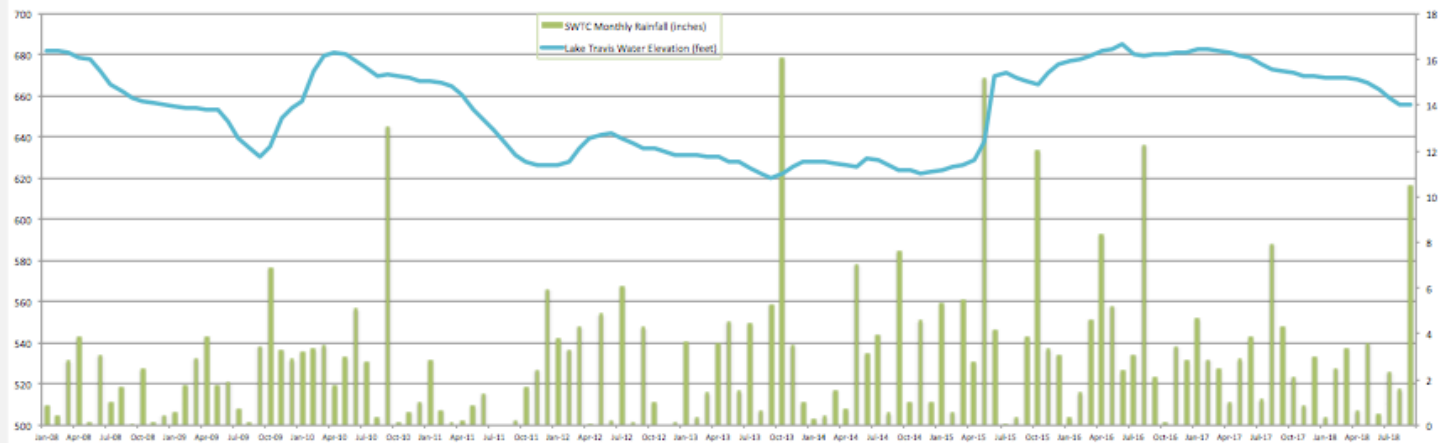


Source: USGS

How Groundwater occurs in Karst Limestones...



Historical Data 2008-2018 Lake Travis Water Elevation and SWTC Monthly Rainfall



Drought Stage and Monitor Well Levels for 2 Middle Trinity and 2 Edwards Wells

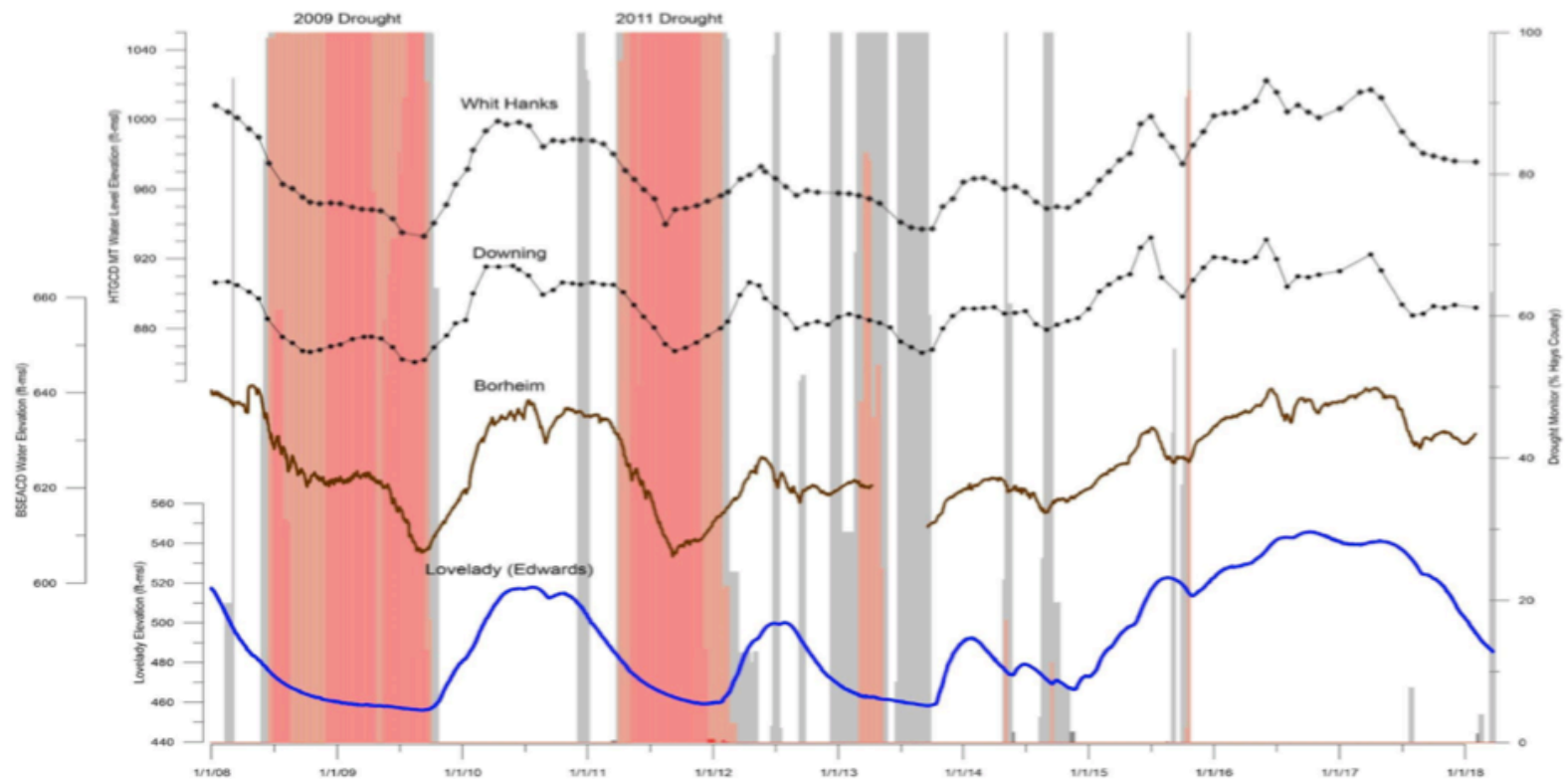
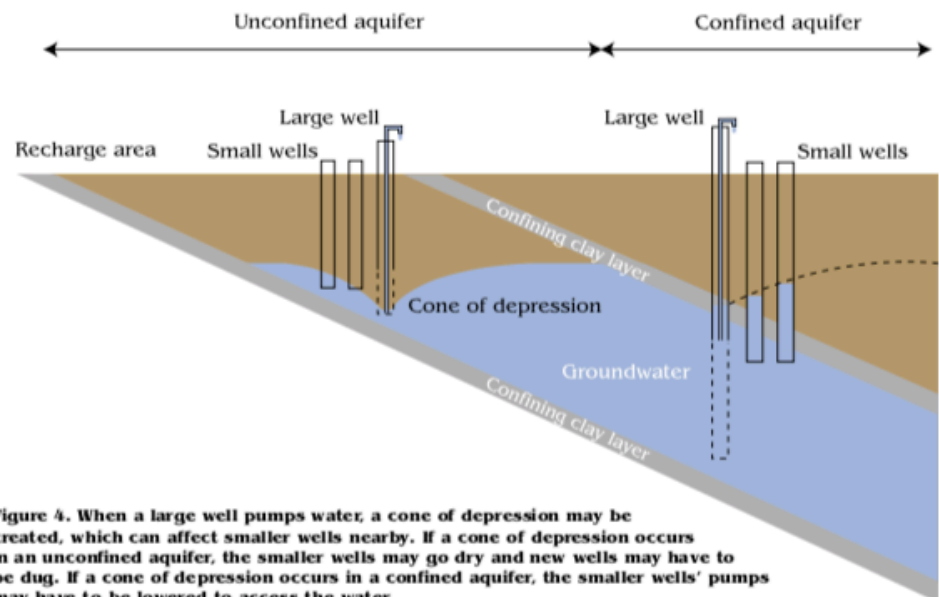
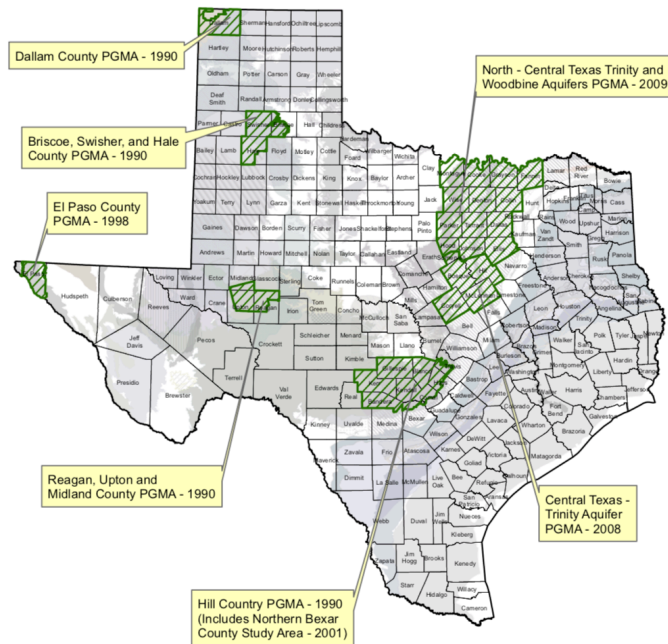


Figure 3. Hydrograph showing select Middle Trinity monitor wells and the Edwards Aquifer drought index well relative to the droughts as indicated by the colored US Drought Monitor stages. Drought stages are indicated as D2 (grey), D3 (orange), and D4 (red).

Texas Water Law Basics and Groundwater Conservation Districts (GCDs)

- **Surface water** belongs to the state of Texas.
 - It can be used by a landowner only with the state's permission.
- **Groundwater** belongs to the landowner and is managed in 2 ways:
 - It may be managed individually by landowners under the rule of capture, adopted in 1904, sometimes referred to as the “law of the biggest pump”.
 - Or it may be managed collectively by landowners via **Groundwater Conservation Districts (GCDs)**.
 - Sometimes pumping causes groundwater to move away from neighboring property, which may cause nearby wells to go dry.
 - GCDs try to maintain a balance between protecting the rights of private landowners and the responsibility to protect the water resource.

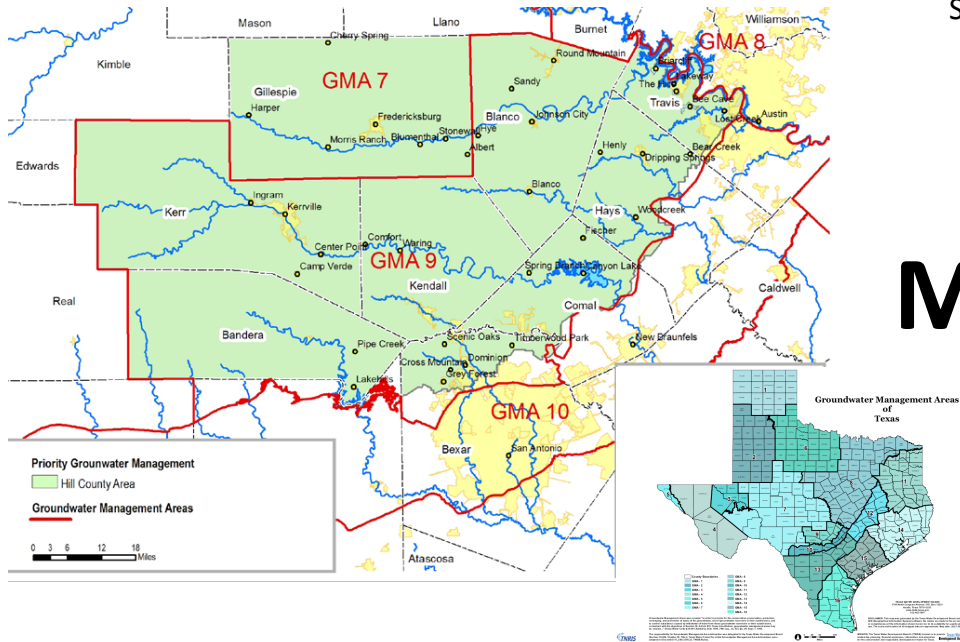




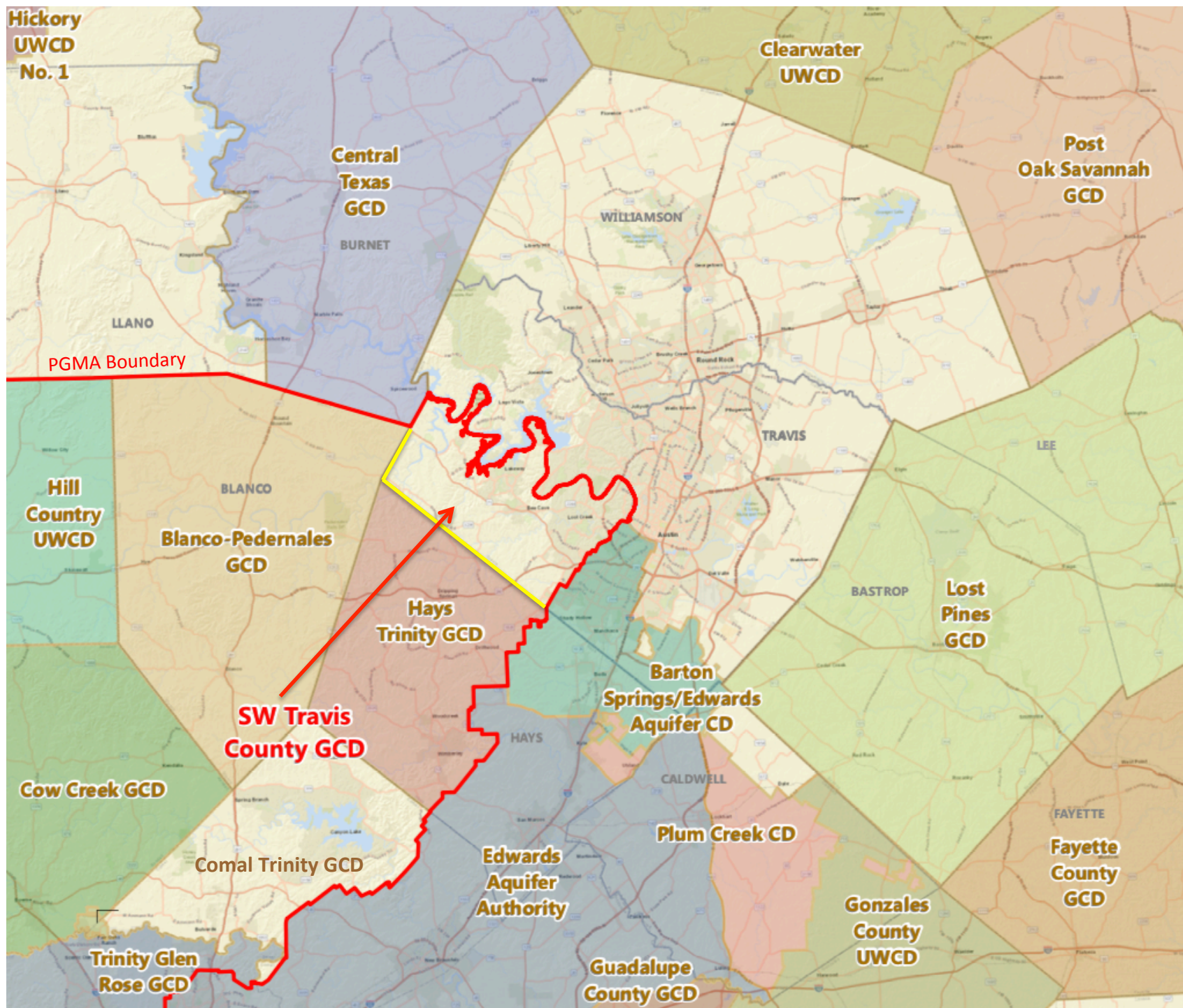
Priority Groundwater Management Areas (PGMAs)

- The Texas Legislature enacted legislation designating certain critical areas expected to experience surface or groundwater shortages, land subsidence or contamination of groundwater in the next 50 years as **Priority Groundwater Management Areas, or PGMAs**.
- The Texas Water Commission designated the **Hill Country Priority Groundwater Management Area** in June of 1990.
- According to state law, if an area is within a designated PGMA, its citizens must form or be annexed into a groundwater conservation district within 2 years, or TCEQ is required to establish a GCD consistent with the original designation.

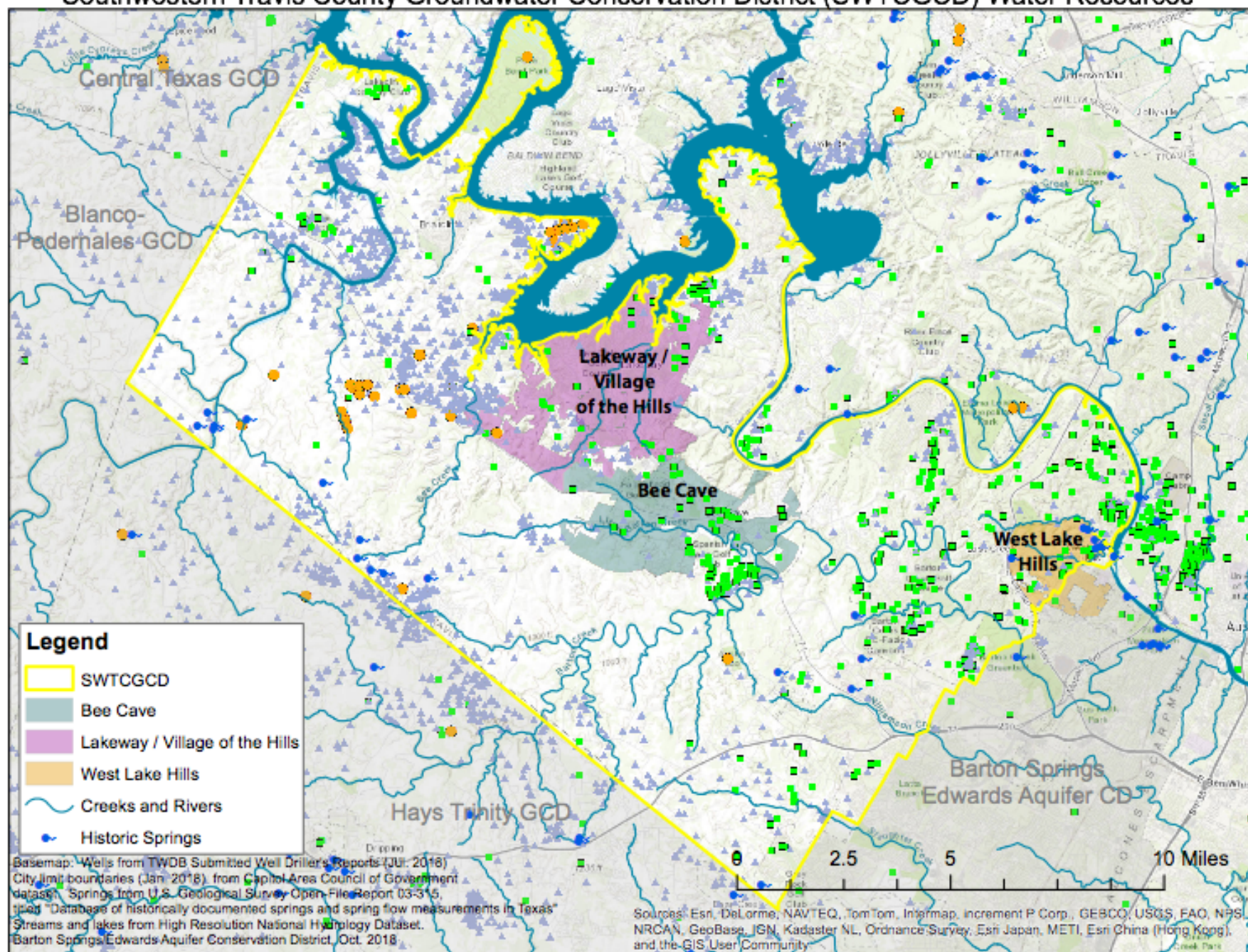
Groundwater Management Areas (GMAs)



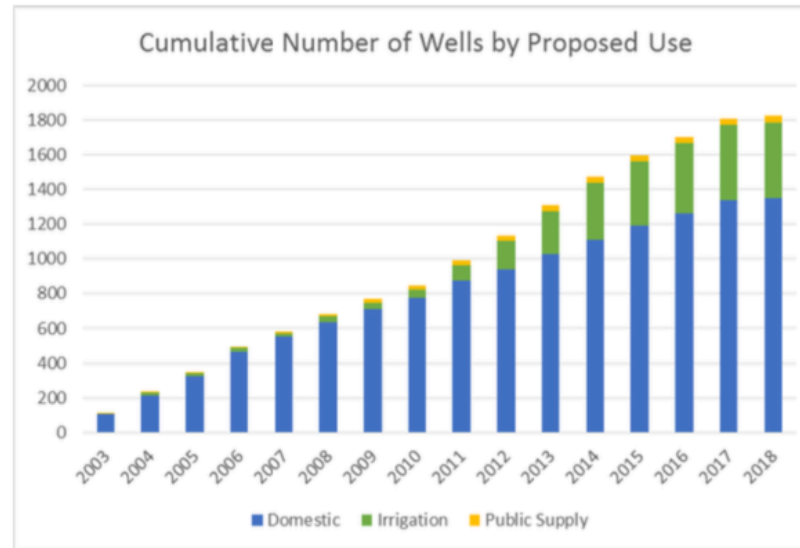
- Because Groundwater Conservations Districts follow political boundaries such as county lines, they are organized into larger entities that are related to specific aquifers called **Groundwater Management Areas (GMAs)**
- GMA9 is concerned with the Hill Country Trinity Aquifer and covers most of the Hill Country PGMA.
- The **SouthWestern Travis County Groundwater Conservation District (SWTCGCD)** is the last district in Texas inside a PGMA that has not yet been confirmed by its constituents through an election. This election will take place in late 2019. If confirmed, SWTCGCD will be the 100th GCD in Texas.
- Until the District is confirmed, SW Travis County does not have voting rights for decisions made by GMA9, although the temporary board is invited to attend by our surrounding GCDs.



Southwestern Travis County Groundwater Conservation District (SWTCGCD) Water Resources



SWTCGCD Well Drilling Trends



1824 wells since 2003

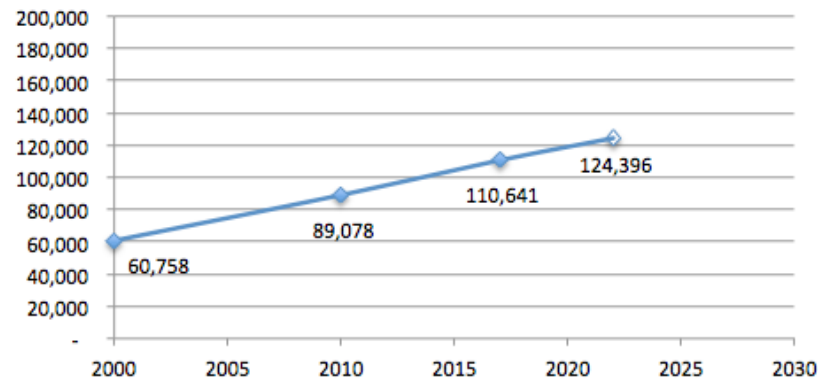
Cumulative total by proposed use:

- Domestic: 1350 wells
- Irrigation: 436 wells
- PWS: 38 wells

Updated March 2018

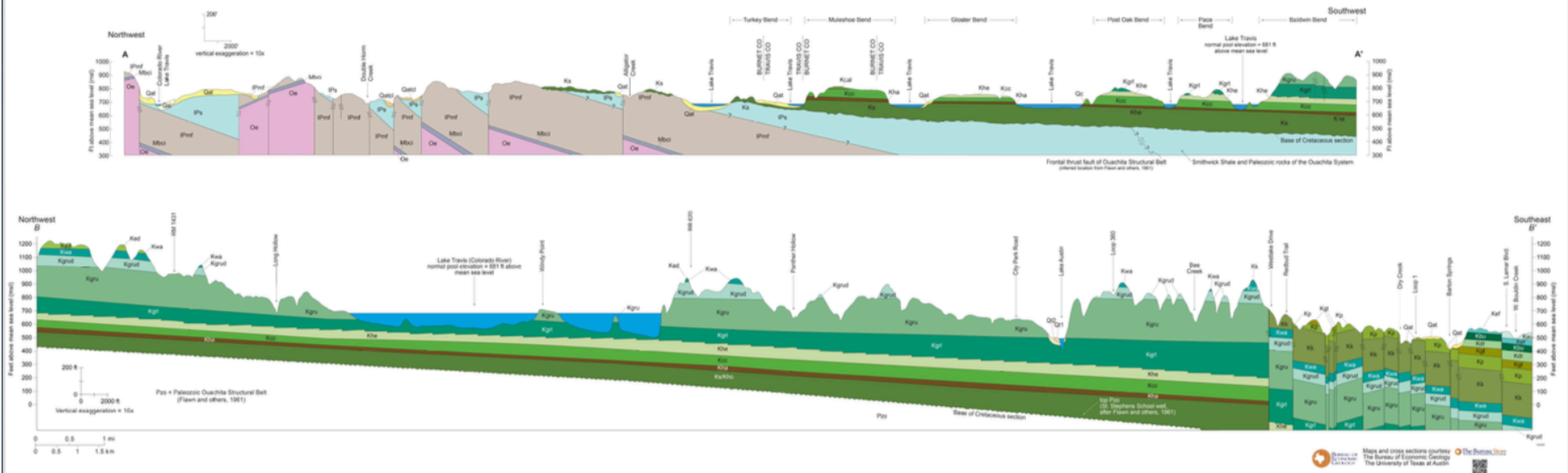
Source: BSEACD from TCEQ Records

SouthWestern Travis County Population Growth (Estimated to 2022)



Source: ESRI from 2010 US Census

Southwestern Travis County Groundwater Conservation District



Geology of Lake Travis Region

