

## NEW STUDY OF GROUNDWATER IN SOUTHWESTERN TRAVIS COUNTY

In November 2019 Travis County and Barton Springs Edwards Aquifer District will publish the results of a yearlong study of the Trinity Aquifer in southwestern Travis County (SWTC). The last study of the area was published in 1978.

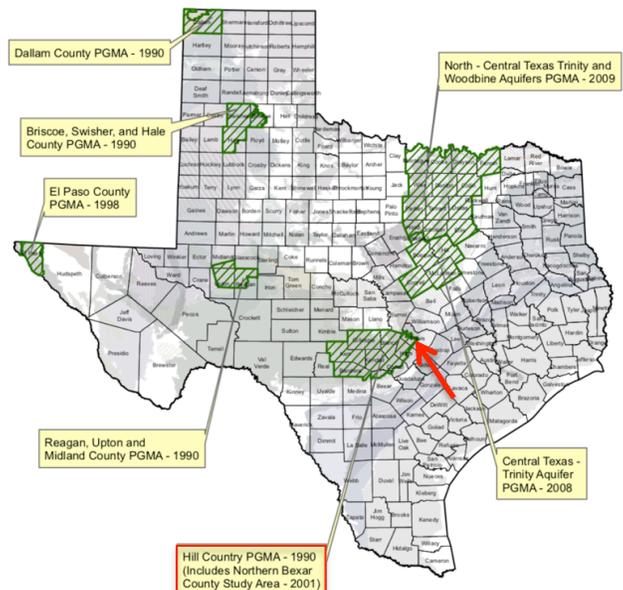
Upon hearing the results on October 1<sup>st</sup>, Travis County Commissioner Brigid Shea said: *“This trend is alarming, if the Middle Trinity is depleted and the Lower Trinity data show long and progressive water level declines – and that trend will likely continue – I think it is important that this information be widely disseminated so people understand the threat.”*

Commissioner Shea continued: *“It’s important to remind people of the drought of 2011 when Lake Travis and other drinking water supply reservoirs largely dried up. If the groundwater is also being depleted, people need to know both those water supplies are being stressed. And the projection for our region is hotter and drier ... there needs to be aggressive education for reducing unnecessary water use.”*

Here are some conclusions:

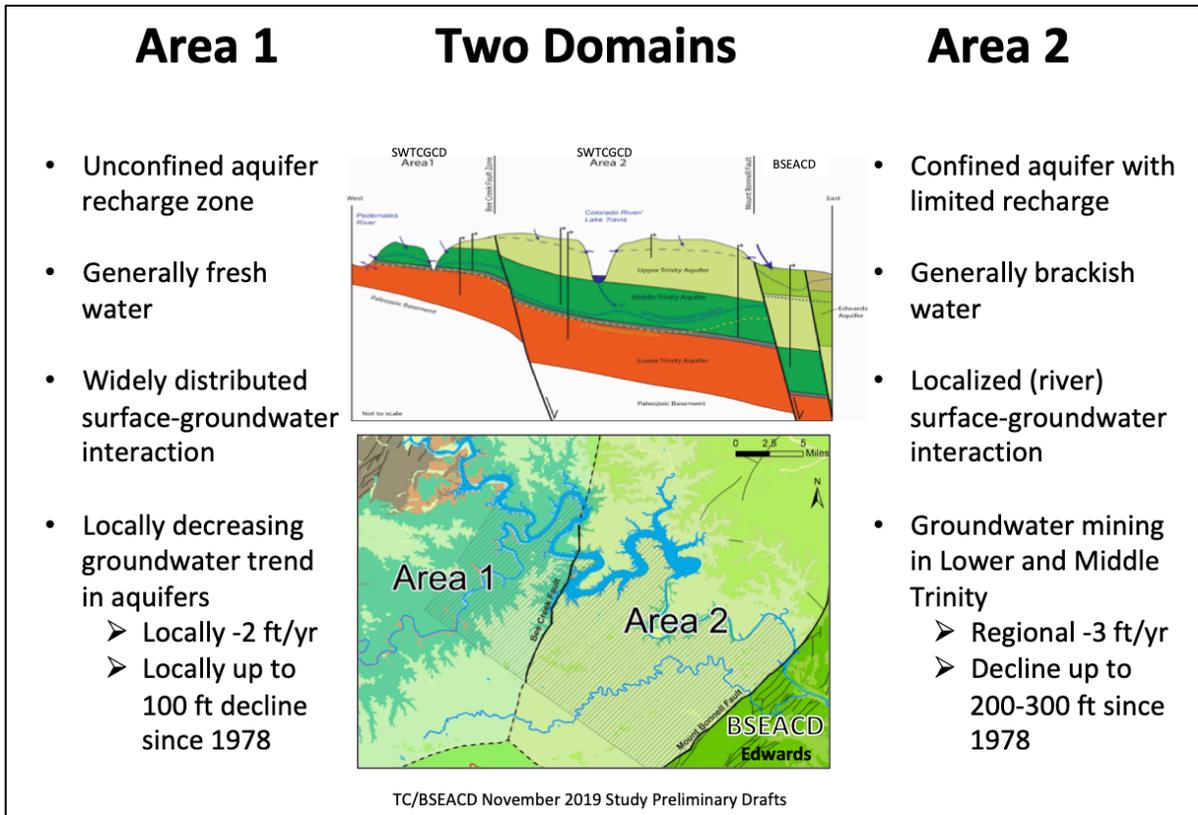
- The designation of SWTC as a Priority Groundwater Management Area was valid.
- SWTC consists of 2 domains, roughly separated by a transition along a faulted area that runs from Lago Vista down Bee Creek to RM12/HPR.
- Trinity water in SW Travis County is not being actively recharged at a pace that keeps up with demand – we are depleting or “mining” both the Middle and Lower Trinity aquifer water in this area.

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 20-50 years as **Priority Groundwater Management Areas, or PGMA's**. The Texas Water Commission designated the **Hill Country Priority Groundwater Management Area** in June of 1990, one of the first 4 PGMA's in the state. The SWTCGCD is at its northeastern corner.



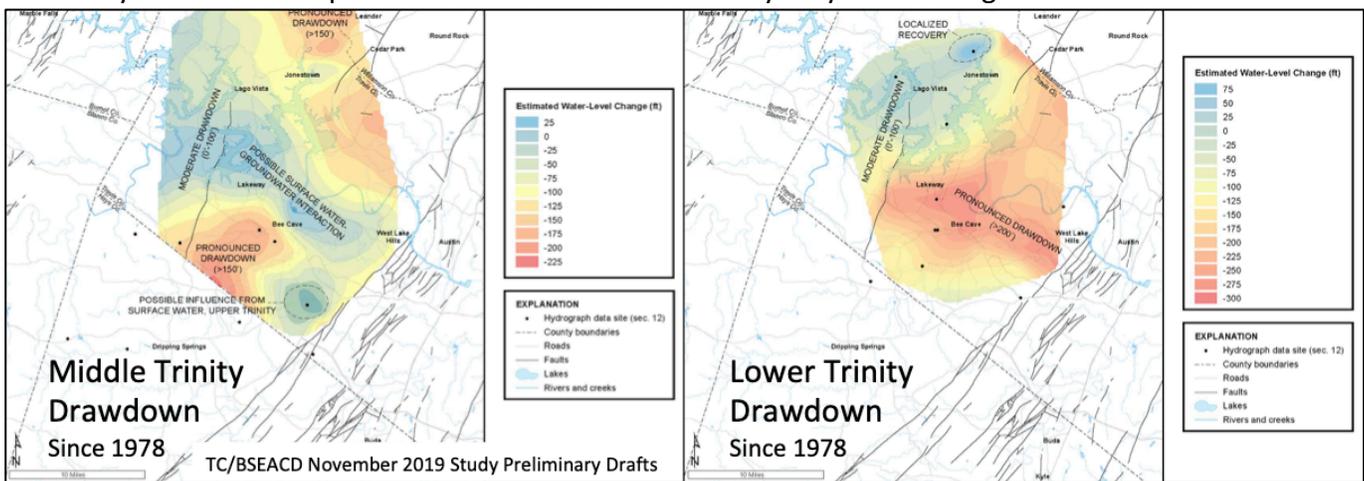
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Southwestern Travis County can be divided into two domains where the Trinity aquifers respond to drought, recharge and production differently.



- The western 1/3 of the Trinity is unconfined and recharges with modern fresh water.
- The eastern 2/3 is confined with more brackish water that is thought to be much older based on <sup>14</sup>C isotopes, lack of nuclear-age tritium presence, and brackish water quality – very little new surface water is percolating into it, and drought recovery is challenged.

Trinity well yields in Travis County have long been known to be lower than yields from Hays County wells, reflecting geological differences. In Area 2 recharge areas are limited, and recharge rates are extremely slow. These aquifers are limited resources – they may not recharge in our lifetimes.



The SWTCGCD is statutorily prohibited from collecting ad-valorem taxes to fund its work. No production fees, metering or regulation of domestic wells capable of producing less than 10,000g/d.