

My Water ... Your Water ... Our Water...

Why a County-wide Groundwater Conservation District is needed in Comal County

A Public Service Announcement from the League of Women Voters – Comal Area



“I must say as to what I have seen of Texas, it is the garden spot of the world, the *best land* and the *best prospects for health* I ever saw, and I do believe it is a fortune to any man to come here.”



Davey Crockett

Introduction

All water is connected hydrologically. Your water is my water is our water.



Picture source:
[http://virtualfieldwork.org/
Canyon_Lake_Gorge.html](http://virtualfieldwork.org/Canyon_Lake_Gorge.html)

Canyon Gorge – exposed the Glen Rose Formation, springs are formed from water from the Trinity Aquifer and create base flow of the creek in Canyon Gorge



Water Regulation in Texas

- Texas is only one of two states in the country that regulates ground and surface sources of water separately
- The State of Texas ‘owns’ all the surface water on behalf of all citizens of Texas
- Texas Constitution says land owners are entitled to all the underground water below their property that they wish to pump = “Rule of Capture”



Why did Legislators create the Groundwater Conservation District Process?

- In the last century, aquifers were depleted by too much pumping.
- Big pumpers depleted their neighbors water source.
- Chapters 35 & 36 of the Texas Water Code covers groundwater conservation districts to modify the “Rule of Capture” for aquifers at risk



What is a Groundwater Conservation District (GCD)?

The State's "preferred method of groundwater management"

GCD's Purpose: "protect, preserve and conserve groundwater" for all property owners



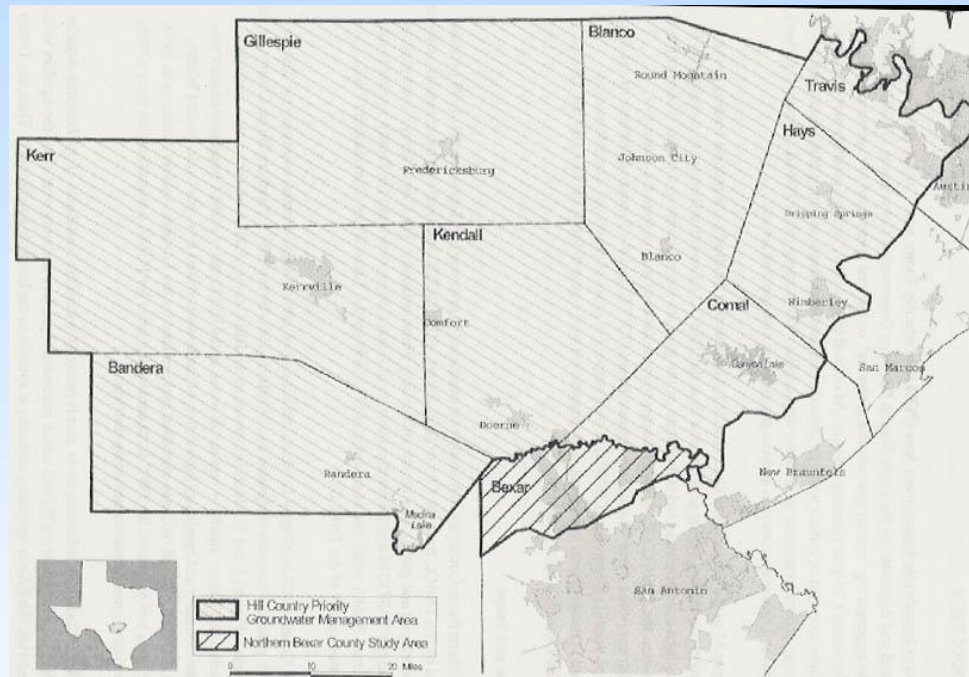
GCD Process

- Scientific studies by Texas Water Development Board identifies aquifers at risk
- Texas Commission on Environmental Quality (TCEQ) Creates “Priority Groundwater Management Areas (PGMA)”
- Once an area has been designated a PGMA, they must create a locally elected and operated GCD
 - Landowners can petition for one (voters must confirm)
 - Legislators can create GCD in regular session
 - If landowners or the legislature doesn’t create one, THE STATE WILL DO IT FOR US



Comal County History

1990 – Eight Hill Country Counties were designated a Priority Groundwater Management Area (PGMA) by the TNRCC (now called TCEQ). Northern Bexar county was added later.



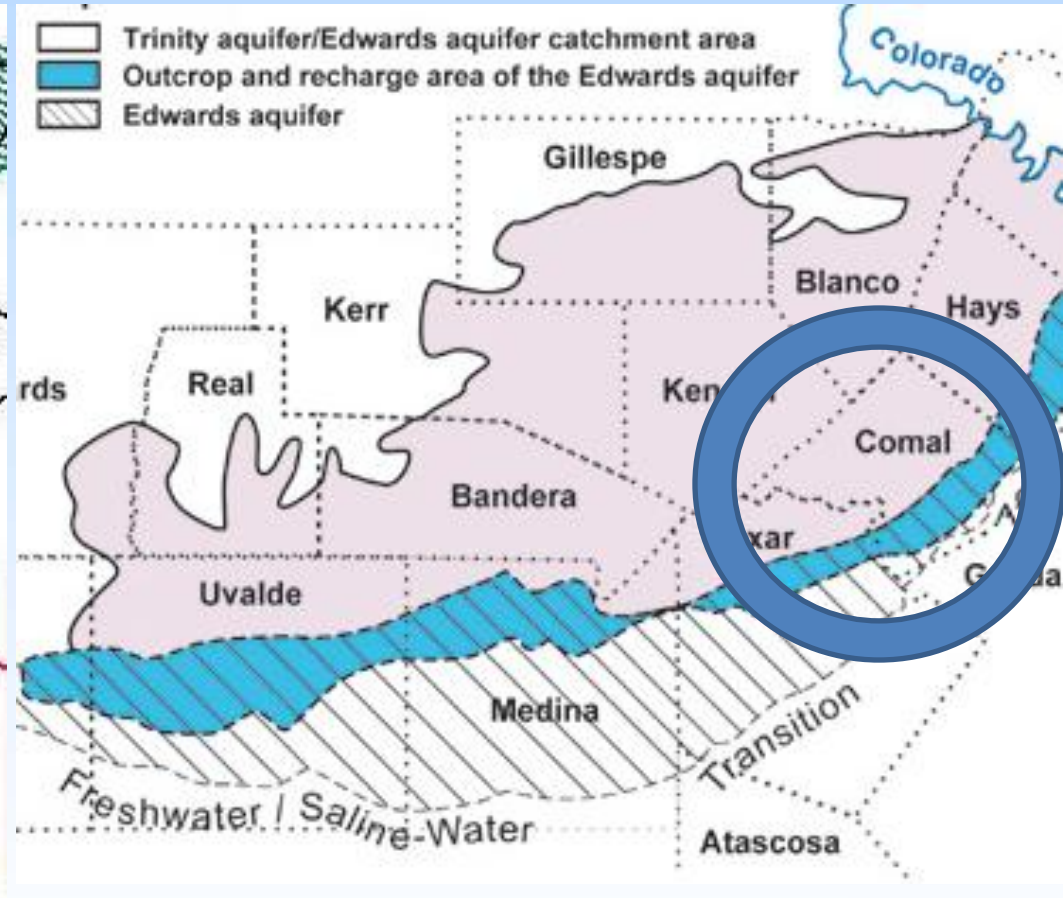
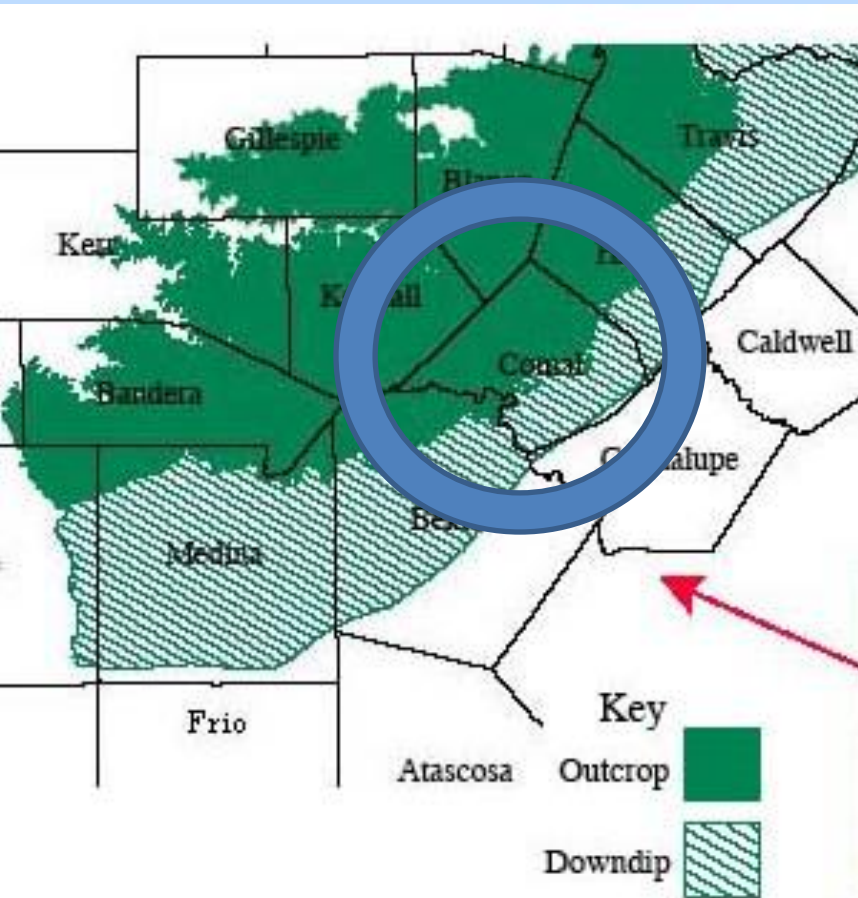
Trinity Aquifer underlies Edwards Aquifer in southeast Comal County

TRINITY AQUIFER

Downdip (cross-hatch) is under Edwards
Aquifer

EDWARDS AQUIFER

Outcrop overlies Trinity
(in blue)



Comal County History (continued)

- 1995 – Landowner effort to create GCD was unsuccessful (defeated by voters)
- 1999 – Legislature voted to form 13 “temporary” GCDs as a result of Senate Bill 1911 in 1999 session
- 2001 – Voters defeated confirmation of Southeast Trinity GCD
- 2010 – **THE STATE WILL DO IT FOR US** if we don’t do it ourselves:
 - “In accordance with Texas Water Code, Chapters 35 and 36, and Title 30 Texas Administrative Code, §293.19(b) and §294.44, the Executive Director respectfully petitions the Texas Commission on Environmental Quality for actions to establish groundwater management in the Hill Country PGMA territories that have not created a GCD or joined an existing GCD.”

(from: Groundwater Conservation District Recommendation for Hill Country Priority Groundwater Management Area – Western Comal and Southwestern Travis Counties, TCEQ, July 2010)

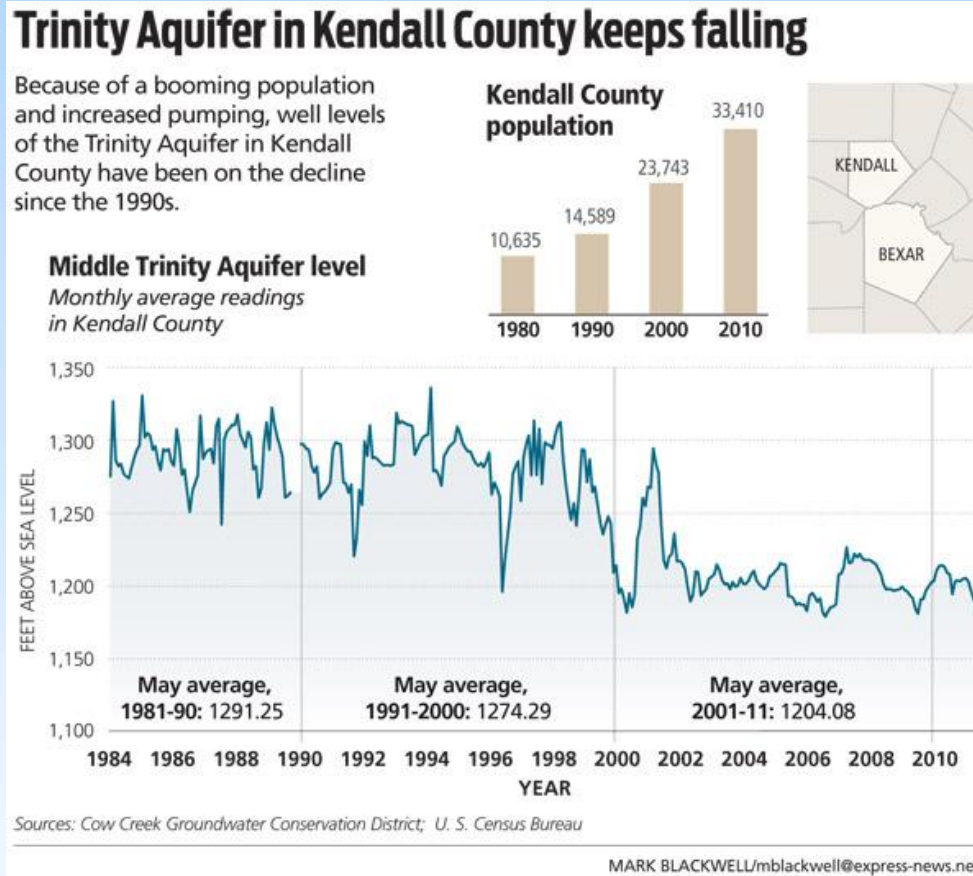


Current well regulations in Comal County

- Well drilling according to state standards by licensed well drillers
 - Minimum state standards, but no inspection, so homeowners 'caveat emptor'
 - Wells in several subdivisions experienced contamination when there was a gasoline leak at the Ram Store on 281 in Northern Bexar County which would have been prevented with higher construction standards.
- Comal County requires minimum lot sizes for new subdivisions
 - 5 acres for lots with well and septic
 - 1 acre for lots with central water and septic
 - Unregulated for lots with central water and sewage
- Comal County requires new subdivisions to prove water availability for 30 years
 - Takes word of geologist/ engineer hired by developers
 - Large wells in new subdivisions could affect adjacent property owners, there is no restrictions on their pumping
- Edwards Aquifer Authority must give permission for drilling through the Edwards to Trinity aquifer, but has no authority for water that is pumped from the Trinity.



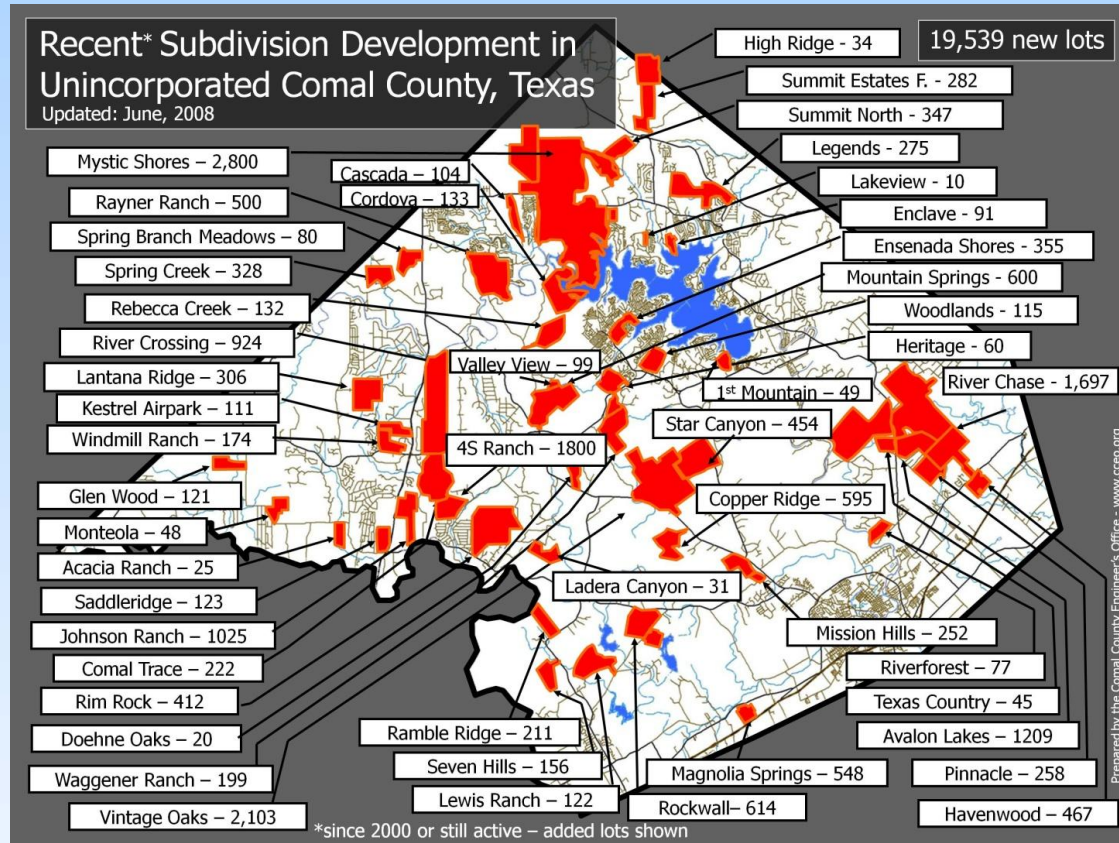
Trinity Aquifer Levels Are Dropping in Adjacent Counties



Cow Creek GCD created in 1999. They have set up monitoring wells and have a professional geologist on staff. We don't know what is happening in Comal County because we have no GCD.



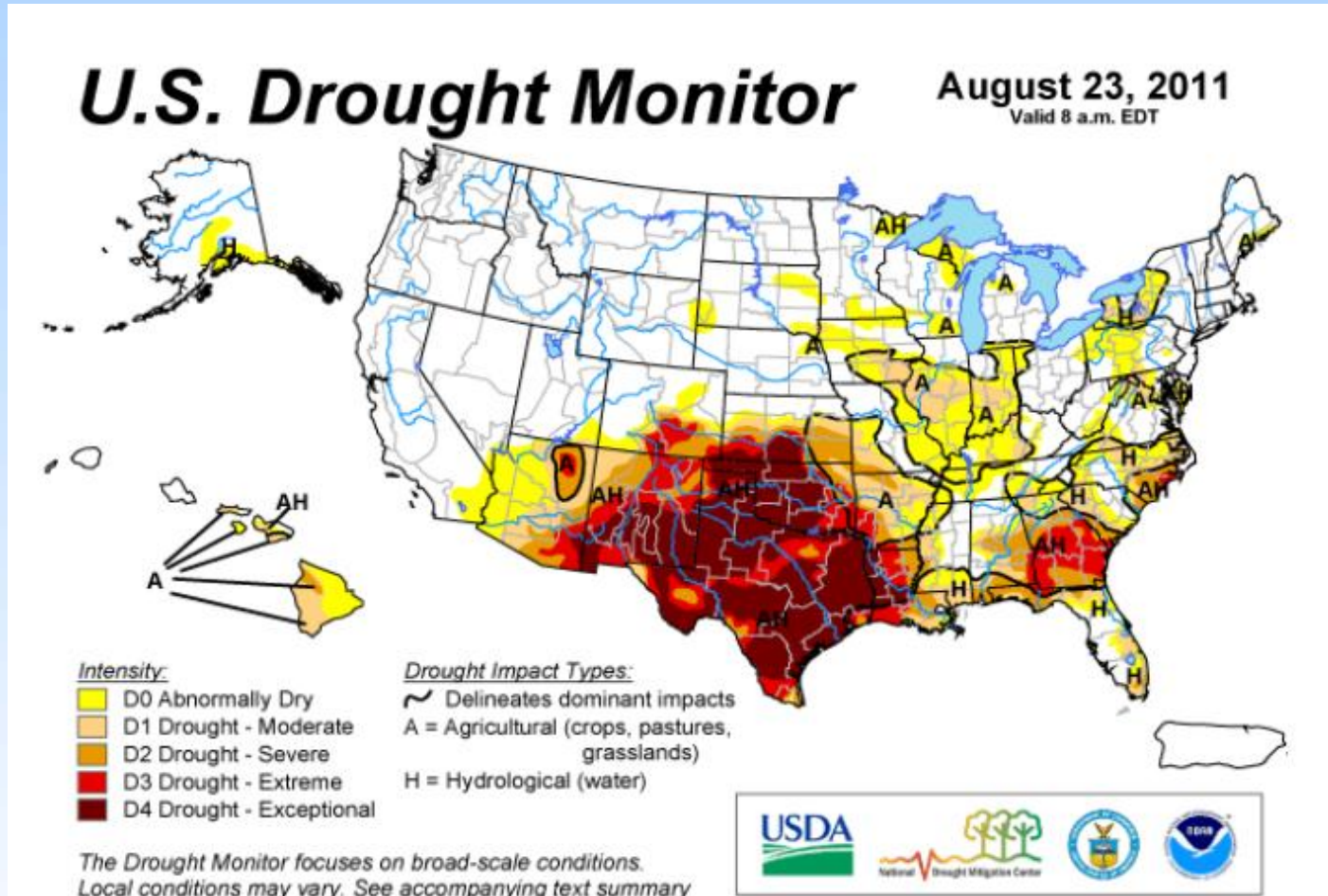
Comal County is experiencing rapid growth



These plats are only in the area regulated by Comal County. New Braunfels, Schertz, and Garden Ridge are also experiencing growth and have plans to drill through the Edwards into the Trinity Aquifer to supply their cities.



Comal County experiences periodic drought... like right now



How would a GCD help preserve our groundwater?

- Research & Monitoring
- Education
- Prevent waste and degradation of water quality
- Setting pumping limits and minimum distances between new wells
 - Need permit : 25,000 gal per day or more
 - Typical family: 180 gal per day
 - GCDs regulate BIG WATER USERS



Possible funding

- new well fee
- commercial well production fee
 - Chapter 36 limits that fee to a maximum of
 - (1) \$1 per acre-foot payable annually for water used for agricultural use; or
 - (2) \$10 per acre-foot payable annually for water used for any other purpose. (1 acre foot = 325851 gallons)
- property tax
 - **MUST BE APPROVED BY VOTERS IN DISTRICT!**
 - Chapter 36 limits the tax to a maximum of \$0.50/ \$100 valuation.
 - Most districts charge less than \$0.03/\$100 valuation



What can Comal County do?

- **TAKE CONTROL OF OUR OWN DESTINY!**
- The LWV-Comal Area recommends that a county-wide district be proposed to the next legislature in two years
 - That a stakeholders group proposes the legislation that will reflect local needs and concerns
 - Local government entities (state representatives and senators, city, county)
 - Local water purveyors (subdivisions, water districts)
 - Local developers
 - Local homeowners
 - Other interested parties and organizations
- This would protect ALL users of the Trinity Aquifer and give everyone a voice in the protection of our most valuable resource.
 - We can limit our GCD to certain kinds of powers that we need for us
 - We can cap the tax rate or not authorize taxing ability



Objections to a GCD and responses

(borrowed from Hill Country Alliance)

- **“GCD will meter and monitor my well.”**
 - Individual household wells are exempt if they pump less than 25,000 gpd
- **“GCD will mean high taxes.”**
 - The funding source will be voted on by the residents.
 - For Comal County, LWV is recommending fees on the largest users as long as the cities of NB, GR, and Schertz are included
- **“A GCD is just a puppet of the TCEQ.”**
 - The governing body of the GCD will be elected and will be local residents who understand local issues.
- **“A GCD has been voted down twice in Comal County. The residents do not want this.”**
 - We believe that circumstances have changed, and that most residents who understand the benefits of a GCD and maintaining local control are now willing to vote in favor.



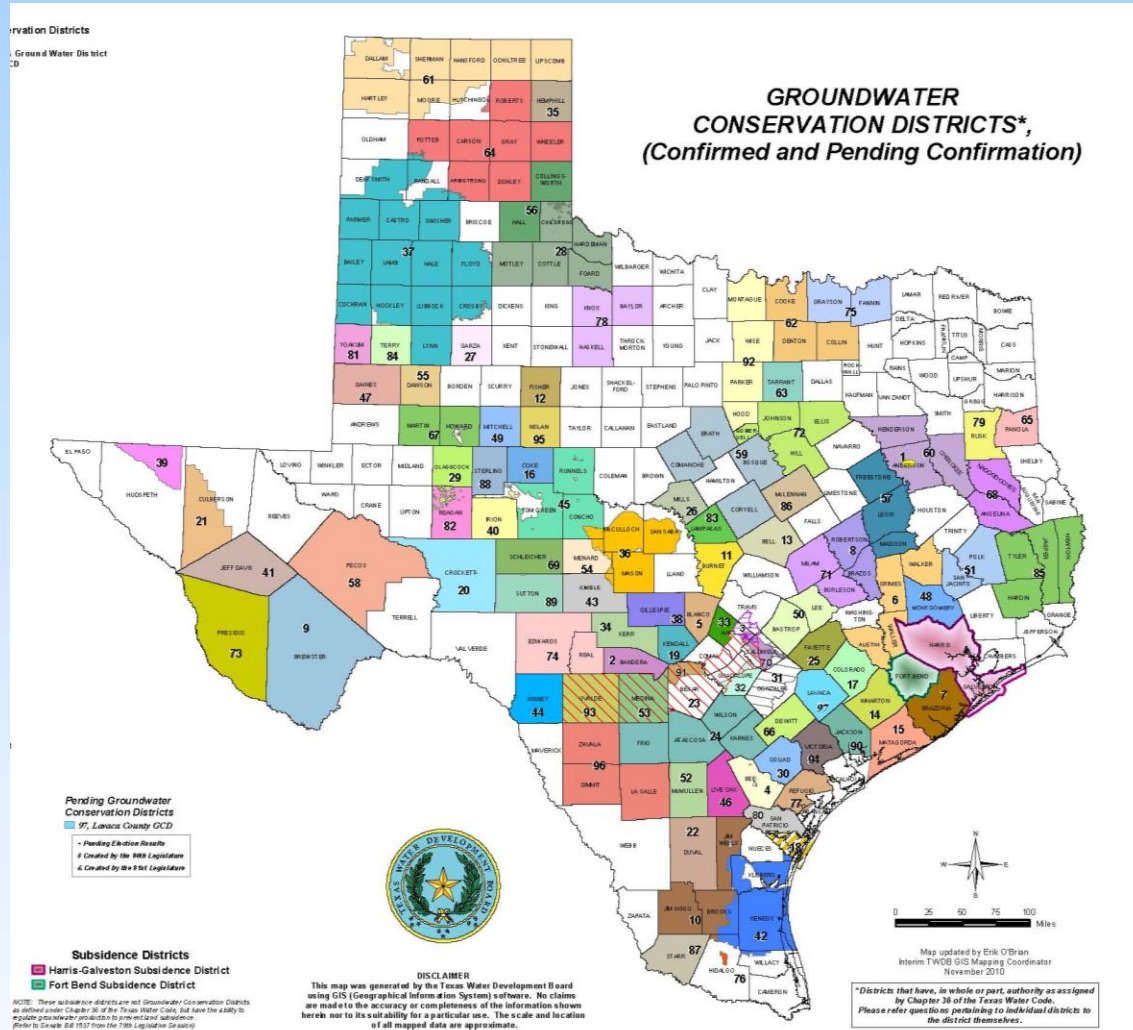
“Groundwater is and will continue to be a major source of water for Texans. However, in many parts of the state, more groundwater is being used than is being replenished through natural means. If this practice continues, Texas water costs will rise, land could subside, water quality could decline and people in some areas could run out of water.”

Quote from a publication titled: Questions about Groundwater Conservation Districts in Texas, written by the Texas Cooperative Extension at Texas A&M University

Questions?



Existing Texas GCDs (colored counties)

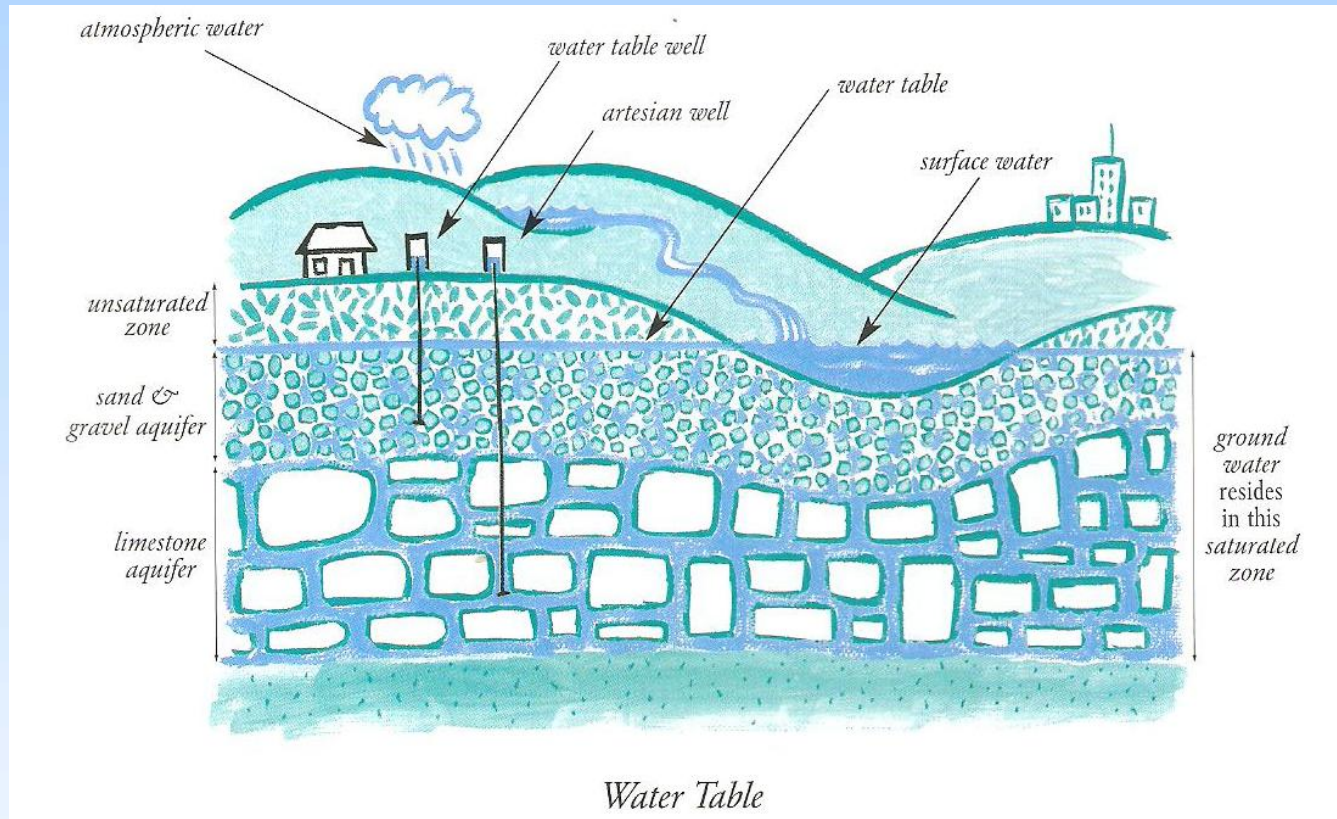


(as of Nov 2010)

The majority of aquifers in Texas are protected by GCDs.



Wells are like straws into the groundwater



The water table can be lowered by drought (=lack of recharge) or by pumping more than what is coming in. Note that the neighbor with the more shallow well can be sucked dry by the neighbor with the deeper well.



Comal County History (continued)

All counties in the PGMA except Comal and part of Travis now have GCDs

- Gillespie: Hill Country UWCD approved 1987
- Bandera: Springhills WMD approved 1989
- Kerr: Headwaters UWCD approved 1991
- Medina: Medina UWCD approved 1991
- Kendall: Cow Creek GCD approved 1999
- Hays: Hays Trinity GCD approved 2001
- Blanco: Blanco GCD approved 2001



Activities of a GCD

- **Permits wells** with pump capacities >25,000 gpd
- Sets well **spacing standards**
- Sets **production limits** on permitted wells
- Sets well **construction standards**
- Ensure **plugging** of unused/abandoned wells
- **Monitors aquifer** water quality and quantity
- Encourages aquifer water **conservation**
- Improves **understanding** of the local aquifer
- Develops **drought** contingency rules



How much does a GCD cost?

- The TCEQ estimated \$500,000 to finance our District operations and maintenance expenses
 - funds all the personnel, monitoring, regulating, and educational activities
- The Executive Director suggests that a tax rate of \$0.003 to \$0.004 per \$100 assessed valuation might be needed for start-up of a GCD in this area.
 - District revenue needs may decrease once administrative start-up actions such as well inventory, registration, and permitting programs are completed.
 - An estimated tax rate of \$0.00206 per \$100 assessed valuation (\$2.06 per \$100,000) assessed valuation would be enough to generate ongoing expenses
- If the tax were not approved, the District would have to find alternative methods to finance fully its operations.
 - It is estimated that only \$41,123 can be generated by the well production fees authorized by TWC, Chapter 36.

