

GCGCD NEWS



FALL 2017 Newsletter

GCGCD 20TH Anniversary

The Guadalupe County Groundwater Conservation District is proud to celebrate 20 years of managing, preserving, protecting, and conserving our most precious resource – our groundwater.

GCGCD was created by an Act of Legislation (SB 1582) in 1997 and later confirmed by the voters of Guadalupe County in 1999.

Subsequent Acts of the 75TH Legislature Regular Sessions (HB 3817 & HB 1947) shaped the District into the entity we are today. Our Board of Directors and staff work to provide the most efficient use of groundwater in the District and provide for the needs of the citizens to ensure growth for future generations. Thank you for doing your part to protect & conserve water!





WWW.GCGCD.ORG



Visit our website for more information. Still have questions?

Give us a call – We're happy to help!

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TEXAS ALLIANCE OF GROUNDWATER DISTRICTS TEXAS GROUNDWATER SUMMIT

Dr. Leyon Greene of TWDB
TexMesonet Program was the keynote speaker at this year's
TAGD Groundwater Summit in
San Marcos.

GCGCD has been busy installing fences to secure the equipment which is set for installation the middle of November!

TAGD Mobile Leadership Training

Texas Alliance of Groundwater
Districts is hosting specialized
training sessions for GCD board
members and staff across Texas –
tailored to region specific issues.
Thank you to our Board Members
for taking the time to stay
informed and for your dedication
to groundwater!

WELL INFORMED

For well owners who want to learn more about groundwater resources and their water wells - from maintenance, water conservation, water quality and treatment and even septic system maintenance — Texas Well Owner Network offers **FREE** classes to educate the well owners of Texas who depend on groundwater wells for their water needs.

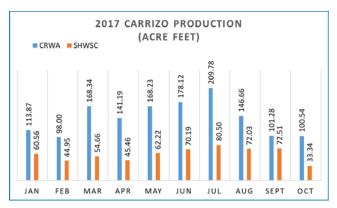
Attendees are welcome to bring a water sample for screening of common contaminates like fecal coliform bacteria, nitrates, arsenic and high salinity. For more information visit their website.

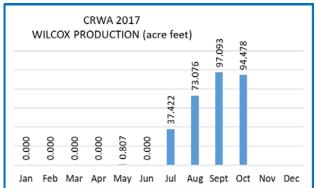


GCGCD attended the Texas Water Owner Network Seminar in New Braunfels this September









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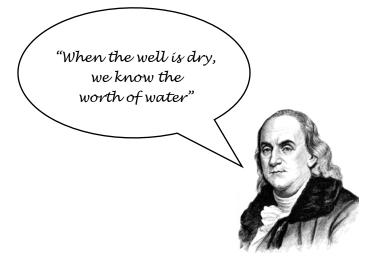
Aquifer Level Report by Bill Klemt for September 2016 – September 2017

Water levels in the Carrizo aquifer have declined about 2 feet (average 9 wells) in Guadalupe County which is a little more than expected. The largest Carrizo measured water-level declines were in the CRWA area. Wilcox aquifer water levels are up slightly for the above time period. Small to moderate long-term water-level declines in the Carrizo aquifer are expected over time because of SSLGC, SAWS, SHWSC, and CRWA well fields in Guadalupe and Gonzales Counties.

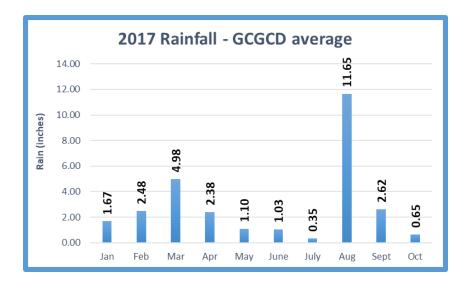
Monitoring Well Project

GCGCD continues to work with landowners to obtain easement agreements to site groundwater monitoring wells within the middle of the Carrizo outcrop. This project is in cooperation with Gonzales County Underground Water Conservation District (GCUWCD) and is funded by the following stakeholders holding permits with GCUWCD: SSLGC, CRWA, SAWS, TWA/GBRA, SAWS, & HCPUA. The purpose of this project is to identify potential impacts of production in the Carrizo Aquifer as related to the recently adopted DFC's. A secondary purpose is to collect hydrogeologic data, such as aquifer thickness, transmissivity, permeability, specific yield and water quality across the Carrizo outcrop. The data collected will be shared with the TWDB to be considered in possible updates to the Groundwater Availability Model (GAM).

For more Information on the Invitation to Bid on the Monitor Well Installation, Electric Logging, Aquifer Testing and Water Quality Sampling for the Carrizo Aquifer Monitoring Well Project refer to GCUWCD



Benjamin Franklin



Annual Average
Across District to date

28.91"

New DFC Officially Adopted

On September 8, 2017 TWDB issued notice that the Desired Future Conditions Explanatory Report and other materials for GMA 13 Area as required by TWC §36.108 (d-3) are administratively complete in accordance with 31 TAC §356.33. On Oct. 12th GCGCD board unanimously voted to adopt the new DFC's.

We just received the new MAG values and will be updating our Management Plan.

 $GAM\ Run\ 17-027\ MAG:\ Modeled\ Available\ Groundwater\ for\ the\ Carrizo-Wilcox,\ Queen\ City,\ Sparta,\ and\ Yegua-Jackson\ aquifers\ in\ Groundwater\ Management\ Area\ 13$

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Groundwater Conservation District	Model Layer (Aquifer)	2012	2020	2030	2040	2050	2060	2070
Guadalupe County GCD	5 (Carrizo)	25,143	25,143	20,771	16,367	16,470	16,783	16,862
Guadalupe County GCD	6 (Upper Wilcox)	0	0	0	0	0	0	0
Guadalupe County GCD	7 (Middle Wilcox)	3,299	6,290	5,978	7,377	8,700	8,435	8,224
Guadalupe County GCD	8 (Lower Wilcox)	19,590	21,094	21,094	22,031	22,825	22,747	22,747
Guadalupe County GCD Total		48,032	52,528	47,844	45,776	47,995	47,965	47,833

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BEFORE YOU DRILL - Check to see if you NEED A PERMIT!*

Only Non-Exempt wells require a permit with GCGCD.

*Irrigation wells require a permit to produce water! Domestic and livestock wells do not.

Any well that is used solely for domestic use or for providing water for livestock or poultry that is either drilled, completed, or equipped so that it is INCAPABLE of producing more than 25,000 gallons (~17.5 GPM) of groundwater a day is EXEMPT from permitting.

Step One



All Non-Exempt wells REQUIRE a PERMIT.

Fee of \$500 must accompany permit application at the time of submission.

Step Two



Only Administratively complete applications will be presented to the Board. GCGCD staff is here to help you with this process.

Step Three



Permits require Proof of Sufficient Water Rights, District Board Approval, Proper Notification, and a Public Hearing. Our RULES are available on our website. www.gcgcd.org

*If you have an existing irrigation well within the GCGCD boundary and DO NOT have a <u>valid permit</u> with GCGCD, you are in violation of District Rules. Please contact the District for compliance. 830-379-5969

All permits are granted subject to the District Act, Rules, Management Plan, Drought Management Plan, orders of the Board, Texas Water Code, and the laws of the State of Texas.

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Plugging Abandoned Water Wells



Do you have a water well on your property that is not in use? How long has it been since it was last producing water? Do you plan on using it in the future? What condition is it in? Is there equipment on the well? A pump? Power? Is the surface casing cracked? Can you move the casing around just by pushing against it?

These are important questions to ask yourself to determine whether your unused well needs to be plugged or capped for future use.

Abandoned wells are a threat to our groundwater supply. An open hole at the surface is a direct conduit to the aquifers below. Any surface contaminates can flow directly to the aquifer without any natural filtration from the soils or geologic materials. Abandoned wells can also be hazardous to humans and animals who could fall into the unplugged well causing injury or even death. Under Texas law, the landowner is responsible for plugging abandoned water wells and is liable for any groundwater contamination or injury that results from an unplugged well.

So, when is a water well considered *abandoned*? According to state law, if a well has not been used for six consecutive months, the well is considered Abandoned. Now – if your well has <u>equipment in good condition in place</u> or has been capped, then the well can be considered *in use*. But if the well has been determined to be legally abandoned, the well must be plugged in accordance with 16 TAC §76.1004. Abandoned wells are regulated by the TDLR and local GCDs through the Texas Occupations Code, sections 1901.255 and 1901.256.

Can I plug my own well? The answer is yes. The landowner, a licensed well driller or a pump installer are the only three people legally permitted to plug a well. If you plan to do it yourself, you should contact TDLR for instructions on the proper methods and compliance issues and contact us, your local Groundwater Conservation District of your intentions to plug your own well. We will be able to provide you with the information you will need to get this task done properly. Below are some additional resources for more information.



Abandoned wells are potential sources of groundwater contamination.

TDLR – Texas Department of Licensing and Regulation

TCEQ - Landowners Guide to Plugging Abandoned Water Wells

TGPC - <u>Texas Groundwater Protection Committee</u>

Texas A&M AgriLife Extension – <u>TexasWater / Abandoned Wells</u>

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Capping a Water Well for Future Use

Is your well in GOOD CONDITION AND BENEFICIAL?

<u>Texas Department of Licensing & Regulation</u> (TDLR) allows for wells in good condition, termed "NON-DETERIORATED" to be capped for future use. Non-Deteriorated wells have a casing and a pump in GOOD Condition.

- ✓ Cap must fit tightly & sealed properly to prevent surface pollutants from entering the well
- ✓ Cap should be capable of supporting at least 400 pounds of weight
- ✓ Cap should not be easily removed by hand & heavy enough so that it is not easy to lift

The open area between the casing and the soil (termed "annular space") must also be properly sealed to prevent any possible groundwater contamination.



Texas A&M Extension – L-5490





This well has a PVC cap and a metal sleeve pipe.

Questions???
Contact us!! 830-379-5969

gcgcd@gcgcd.org

According to TDLR -

A well is considered to be **IN-USE** if:

- (A) the well is not a deteriorated well and contains the casing, pump, and pump column in good condition;
- (B) the well is not a deteriorated well and has been capped;
- (C) the water from the well has been put to an authorized beneficial use, as defined by the Water Code;
- (D) the well is used in the normal course and scope and with the intensity and frequency of other similar users in the general community; or
- (E) the owner is participating in the Conservation Reserve Program authorized by Sections 1231-1236, Food Security Act of 1985 (16 U.S.C. Sections 3831-3836), or a similar governmental program.

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Phreatophytes are plants that have deep root systems able to reach the phreatic zone (zone of saturation) or the capillary fringes just above the water table - essentially taking their water supply directly from groundwater.

The term Phreatophyte comes from two Greek roots, meaning "well plant." To quote from Oscar E. Meinzer from his 1927 USGS Water Supply Paper -Plants as Indicators of Groundwater, "Such a plant is literally a natural well with pumping equipment, lifting water from the zone of saturation".

Brush Control Programs in Texas have been created to remove brush/vegetation detrimental to water conservation. According to Texas State Soil and Water Conservation Board "Brush control has the potential to enhance water yield, conserve water lost to evapotranspiration, recharge groundwater and aquifers, enhance spring and stream flows, improve soil health, restore native wildlife habitat by improving rangeland, improve livestock grazing distribution, protect water quality and reduce soil erosion, aid in wildfire suppression by reducing hazardous fuels, and manage invasive

species".



Salt Cedar



Honey Mesquite pods

Díd you know a Mesquíte tap root can extend more

For more information on Brush Control visit the Texas State Soil & Water Conservation Board

Planting 'less thirsty' plants can help conserve water!

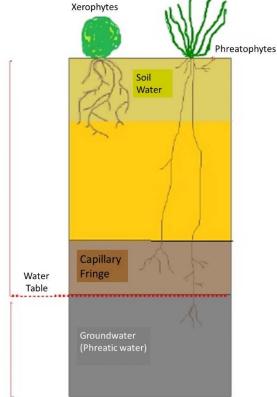


Zone of

Saturation



Xerophytes – adapted to require less water



Phreatophytes



Hackberry

GUADALUPE COUNTY GROUNDWATER CONSERVATION DISTRICT - FALL 2017

This year's Election was uncontested. We'd like to thank the current directors for remaining on the GCGCD Board of Directors.

Ronald Naumann - District 1

Hilmar Blumberg – District 2

Charlie Willmann - District 4

Jeff Schuehle - District 7



GCGCD Board meeting



www.twdb.texas.gov

Texas Water Development Board

HAPPY ANNIVERSARY

GCGCD is not the only one celebrating!

Texas Ground Water
Association (TGWA) is
celebrating its 70th
Anniversary – look for the
new Q4 Fountainhead –
now available on-line!



SAWS is celebrating its 25th Anniversary



Dr. Robert Mace is Retiring from the TWDB

Dr. Robert Mace, Deputy Executive Administrator of Water Science and Conservation, is retiring from the Texas Water Development Board (TWDB) on October 31, 2017.

Dr. Mace joined the TWDB in 1999 as the Unit Leader in the Groundwater Availability Modeling Department. Since then, he has served in a variety of positions including the Assistant Division Director of the Water Resources Planning Division and the Division Director of Groundwater Resources. In 2009, Dr. Mace took on the role of Deputy Executive Administrator of Water Science and Conservation.

In his role as Deputy Executive Administrator, he has lead a department of approximately 80 scientists, engineers, and specialists dedicated to better understanding groundwater and surface water resources, advancing water conservation and innovative water technologies, and better preparing Texas for floods.

He has testified on behalf of the TWDB at Texas Senate and Texas House of Representative committees on numerous water-related topics and represented the TWDB at conferences around the state and country.

Dr. Mace is well known for speaking on varied topics such as ocean oscillations, drought, hydrogeology, and his collection of artesian aquifer postcards. Thankfully, the waterworld is not losing Dr. Mace. He will continue his service to water at the Meadows Center for Water and the Environment at Texas State University as the Chief Water Policy Officer.

Dr. Mace was the most recent in a long line of innovative and creative leaders in water science, and the TWDB is actively seeking the next in that line. Please visit the TWDB's website to apply or view other job postings.

The TWDB thanks Dr. Mace for his service and wishes him the best of luck in his future endeavors!

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GUADALUPE COUNTY GROUNDWATER CONSERVATION DISTRICT - FALL 2017

Nov. 9th GCGCD Board Meeting @ GVEC 927 Hwy 46 N, Seguin, TX – 4:30 pm

Nov. 16th American Ground Water Trust – TX Groundwater & Water Well Workshops@

Holiday Inn San Antonio Downtown Market Square 318 W Cesar E Chavez Blvd.

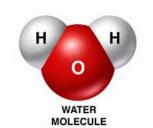
Jan. 11th GCGCD Board Meeting (No Board Meeting in December)

Jan. 16–18th SOAH hearing – William B. Clements State Office Bld.300 W. 15th St. 4th Floor, Austin, TX

Jan. 23 - 25th TGWA Convention – Embassy Suites, San Marcos, TX



Stay Hydrated!



You should drink enough to equal ½ your body weight in ounces each day.

If you weigh 140 lbs., drink 70 oz. and if you weigh 200 lbs. drink 100 oz.

By the time a person feels thirsty, his or her body has lost over 1 percent of its total water amount.



GCGCD Board of Directors & Staff

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