

Pictured above: Caroline using iPad to record September water level data into mobile survey app

Enhanced Capabilities

The District has been working to improve our app by adding exciting new capabilities! We can now input data to a survey to record water levels, collection method, pump activity, time, and special notes for each monitoring well in real time. Additionally, we can upload photographs of well sites and link water quality laboratory results for easy access in the field.

Using historical entries, our app automatically plots the water level measurement data and generates line graphs to view trends.

These graphs are useful to measure water level declines and monitor the achievability of our Desired Future Conditions.

More on Page 6...



GCGCD NEWS



Fall 2023 Newsletter



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News @ GCGCD



Notes from the G.M.

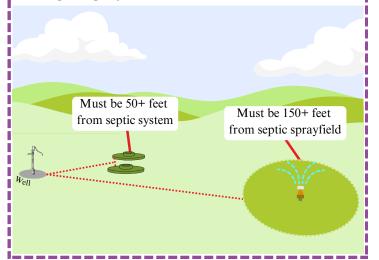
Happy Fall Y'all – The end of October brings us some most welcomed rain and cooler temperatures – but we're not out of the drought just yet! Please be mindful of your water usage and follow all drought stage restrictions in your area. For those with rain water collection systems – make sure your barrels are clean and properly maintained – more rain is forecast! Let's be THANKFUL for every drop and count our blessings as we make every drop count! Happy Holidays everyone, your friends at GCGCD.

Staff Update:

GCGCD administrative assistant Omar Maldonado opted to change careers and left the District to pursue other interests. We wish you well in your new adventures!

Well Spacing:

Below is a representation of the minimum spacing from a water well to a septic system and the septic sprayfield.



Geronimo Alligator Creek Cleanup

For this year's AgriLife Extension Fall Cleanup, the District connected with Texas Lutheran University's student organizations. The District sponsored volunteers of TLU clubs to increase participation. We hope this partnership will encourage more students to volunteer at the Geronimo & Alligator Creeks Cleanup!





Master Naturalists:

On Monday, September 25, GCGCD Staff visited the Texas A&M AgriLife Extension office to present to the Guadalupe Chapter of the *Texas Master Naturalists*! GCGCD opened with an introduction about the District, and discussed the importance of TexMesonet Stations in Guadalupe County. Caroline presented detailed instructions for building and maintaining Rainwater Barrels. If you'd like to learn how to build your own rainwater barrel, click here to download instructions.



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Association Updates

TWDB

This October, the TWDB Groundwater Division Director Natalie Ballew premiered the Groundwater Gazette! To subscribe to this quarterly newsletter,

click this link: <u>Groundwater Gazette</u>

GROUNDWATER GAZETTE

GMA 13 GAM Update

GMA 13 met on September 15th, 2023

- New board member Darrell Brownlow (EUWCD) joins GMA 13 as voting member and Region L representative
- Dr. Bill Hutchison presented updates to the GAM- more info at <u>next meeting</u> scheduled for **February 9th**, **2024**

TAGD Summit



The TAGD Summit was held on August 29-31, 2023 with an impressive attendance rate!

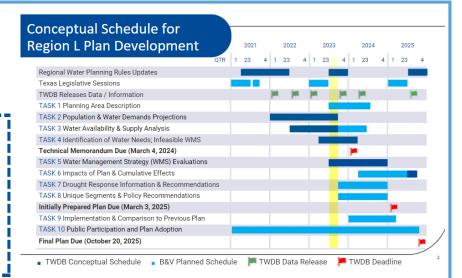
Kelley Cochran participated on a panel discussing correlative rights with James Beach, Britney Britten, & Kristen Fancher with Leah Martinsson as moderator.

To access a recording of the panel, visit this link: <u>Correlative Rights</u>

Kelley has been elected as a TAGD Officer for the position of Parliamentarian, serving for the FY24-25 term that began October 1.



Victoria and Emma Canales(Texas 4H Water Ambassadors), present GM Kelley Cochran with a plaque in recognition of GCGCD sponsorship



Region L Calendar



The upcoming Region L Planning Group Meeting will be held on November 2, 2023 @ 9:30 AM

Discussions will be focused on Task 4 related to water availability & feasibility studies and water management strategies. See above calendar for additional Task timeline.

The regional plans provide for water conservation and drought management policies while ensuring the health of the public, economy, and the natural environment.

TDLR

The <u>Texas Department of Licensing and</u>
<u>Regulation</u> proposes changes to the rules at 16
TAC, Chapter 76, Water Well Drillers and
Water Well Pump Installers. The Department
will accept comments on the proposed rule
changes until November 6, 2023.

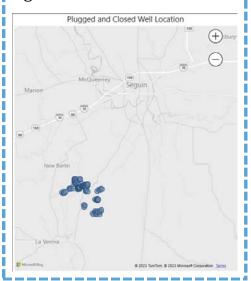
More Association Updates on the next page!

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Association Updates *Cont*.

Railroad Commission

The Texas Railroad
Commission has been
working with State funding to
plug abandoned oil and gas
wells. So far in Guadalupe
County; **257** wells have been
plugged since the program
began in 2018. The map
below shows where most of
the plugged wells are located.
To learn more about this
program, click on the RRC
logo for an informative video.



TRRC Interactive Map Site



Guadalupe-Blanco River Authority



GCGCD General Manager Kelley Cochran met with GBRA Executive Manager of Engineering, Charlie Hickman on September 21st to discuss conjunctive use potential of groundwater and surface water sources as related to Guadalupe and surrounding counties per GCGCD Management Plan Goal 4.

Mr. Hickman shared GBRA's existing water supply commitments as well as several projects currently being evaluated to meet the projected growth of the area's water needs. Once completed, the Mid-Basin Phase II water supply project is estimated to supply a total of 25,000 to 40,000 Acre Feet per year.

GCGCD Management Plan Goal 4: Addressing Conjunctive Surface Water Management 31 TAC 356.52(a)(1)(D); TWC §36.1071(a)(4)

TGWA

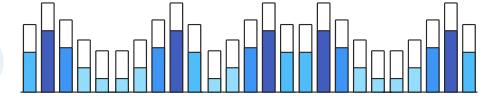


The TGWA Conference will be held January 23-26, 2024 in San Marcos, TX. *Not a member*? Click the logo to learn more about the TGWA mission and membership benefits.



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Water Levels



On September 18-19, the GCGCD Staff obtained water level measurements for all 21 of our Monitoring Wells. Our Hydrogeologist, William B. Klemt completed our Water Level Report that you can access by clicking the Cover Page below.

Pictured to the right is Caroline at MWCZ-7



September 2023 Water Level Report







- Average Carrizo water level decline from 11 wells was -1.9 feet per well from September 2022-September 2023.
- Small to moderate declines continue with current pumpage rates in Guadalupe county.
- Anticipated pumpage is expected to increase the rate of declines to a moderate level.
- Two of CRWA's wells reported rises in water levels.
- Wilcox water levels remain relatively stable.
- Mr. Klemt recommends that the District continue monitoring chemical quality and field parameters in the District's observation wells in order to detect natural changes or potential contamination of the groundwater.

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Enhanced Capabilities

Cont. from Cover...

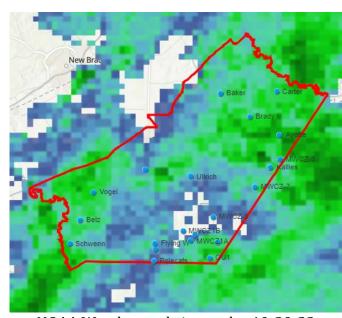
GCGCD App *Enhanced Capabilities* include additional layers:

- NOAA Weather real-time radar
- NOAA HMS (Hazard Mapping System) fire detection
- USA Flood hazard areas
- NAIP Imagery (National Agriculture Imagery Program)
- NLCD (USGS National Land Cover Database)
- USA Drought intensity- current conditions
- USDA SSURGO (Soil Survey Geographic Database)

These features will maximize efficiency and promote safety while we work in the field.







NOAA Weather real-time radar 10-30-23



USA Drought intensity- current conditions 10-30-23

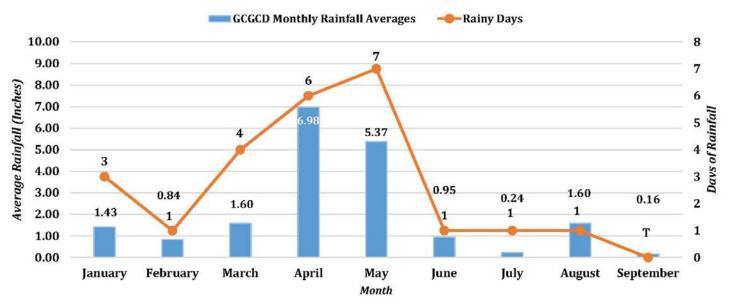
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Rainfall & Production

GCGCD Average Monthly Rainfall (in.) for 2023											(E)		
TWDB TexMesonet Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Total By Site
Baker Ranch 🖈	0.32	0.19	1.95	6.09	5.33	0.11	0.07	0.14	0.56				14.76
Diamond Half Ranch	1.91	1.27	2.88	13.95	8.62	1.26	1.04	2.10	0.41				33.44
Grones Ranch	1.94	0.96	1.61	6.27	5.27	1.00	0.06	0.51	0.05				17.67
Jones Ranch	1.73	1.51	1.90	12.08	7.63	2.03	0.20	0.34	0.00				27.42
Randolph Auxiliary*	1.71	0.65	0.91	4.01	1.61	0.57	0.03	2.10	0.01				11.60
SHWSC Office	1.50	0.79	1.34	4.29	3.83	0.95	0.18	1.52	0.03				14.43
SHWSC Plant	2.05	1.00	1.60	4.99	5.37	0.82	0.27	5.55	0.05				21.70
Strey Ranch	0.27	0.34	0.60	4.13	5.26	0.86	0.06	0.50	0.14				12.16
											Total Avg		
Monthly Avg	1.43	0.84	1.60	6.98	5.37	0.95	0.24	1.60	0.16				19.15

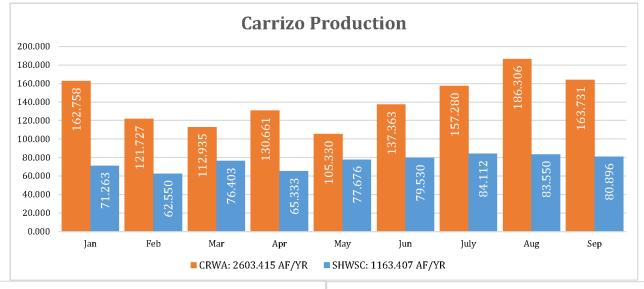
* Maintained by the NWS/FAA

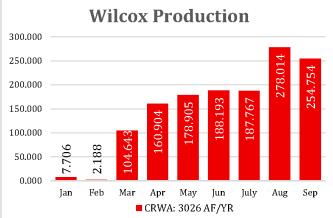
2023 GCGCD AVG Rainfall and Days of Rainfall

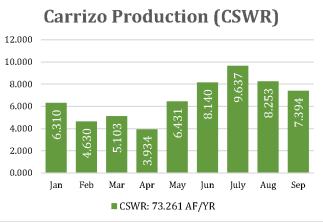


GCGCD Production Graph can be found on the next page.

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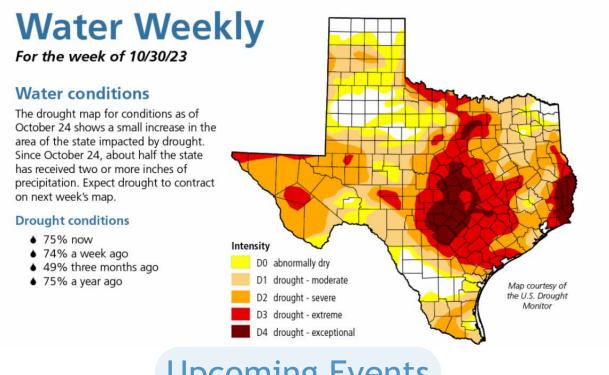


Conservation Tip!

Slow the Flow! By digging Swales, "long shallow depressions in the ground designed to collect or redirect rainwater" in your yard, you can optimize the flow of rainwater runoff efficiently.

To start, begin digging a shallow trench at a high point where rainwater tends to fall, I.E., next to a rainwater barrel or underneath a gutter. You can then direct this trench to a garden bed, a flower bed, to a pond, or to a spot in your yard where water can most conveniently collect. Next, get newspaper, and cover the bottom of the trench, then cover the newspaper with a thin layer of mulch. Last, get medium to large sized rocks and cover the layer of mulch completely. This offers a path for the water to flow and collect. Swales are an excellent way to prevent the waste of rainwater and promote groundwater recharge! Source

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- We will be having a Rulemaking Hearing to discuss amendments to our District Rules at our next Board Meeting on Nov. 9th, 2023. Visit our <u>website</u> to view the <u>proposed edits</u>.
- A meeting of the Region L South Central Texas Regional Water Planning Group will be held on Thursday, November 2, 2023 at 9:30 AM both in person and virtually. Here is the link to attend virtually: Region L
- The Railroad Commission of Texas will host two informal hearings to accept public comments on draft amendments to 16 Texas Administrative Code §3.8, relating to Water Protection, (AKA Statewide Rule 8) and 16 TAC Chapter 4, Subchapter A, relating to Oil and Gas Waste Management, and Subchapter B, relating to Commercial Recycling. To view the draft amendments or submit written comments, visit this link: TRRC Rules
- Elections information for Guadalupe County:
 Last Day to Early Vote: **Friday, November 3, 2023**Election Day: Tuesday, **November 7, 2023**



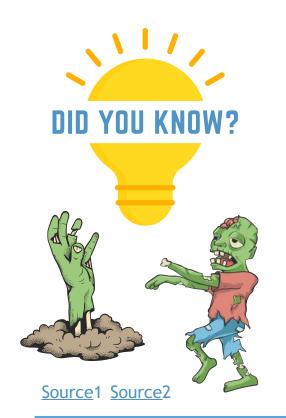
Nov 5, 2023 - Daylight Saving Time Ends!

Sunrise and sunset will be about 1 hour earlier on Nov 5, 2023 than the day before. There will be more light in the morning. Don't forget to reset your clocks!

GCGCD is not scheduled to hold a regular board meeting in December

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Zombie Wells



Abandoned oil and gas wells have been causing a **SPOOKY** phenomenon lately. Zombie Wells, AKA, orphan wells (unplugged oil and gas wells or wells with failed plugging) have been coming back to life and causing harmful substances like "toxic mixtures of crude oil, salty water, and methane" to seep out. These leaks are detrimental for soil composition, air quality, plant life, and aquifers. When these older wells were drilled, radioactive material was released from rock and soil, and when water travels underground, it has the potential to carry that material with it. The reason it's hard to shift attention to these threats is because these wells are so old that the State no longer has records for them, so it's hard to determine accountability. Fortunately, the State of Texas has received funding to 'put a plug' on this reanimation issue, and prevent more wells from **COMING BACK TO LIFE**.



Guadalupe County Groundwater Conservation District

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