Photo courtesy of Dr. Evgenia Spears

GCGCD NEWS

SPRING 2021 Newsletter

IN THIS ISSUE

Volunteers remove debris from local watershed

Within the Guadalupe River Basin lies the Geronimo Creek and its tributary Alligator Creek. As part of the Clean Rivers Program, a partnership between TCEQ and GBRA, water quality is monitored and assessed.

In 2009, in response to a concern of nitrate-nitrogen levels and elevated E. Coli bacteria concentrations, local stakeholders worked together to help protect and restore the quality of water in Geronimo Creek. Those efforts helped to establish The Geronimo and Alligator Creeks Watershed Protection Plan (WPP) which received EPA approval in 2012.

Groups of environmental stewards now walk the watershed banks each Spring to pick up litter such as plastic water bottles, fast food wrappers, soda cans and plastic grocery bags.

Thanks to the efforts of Texas A&M AgriLife Extension Service, its sponsors and volunteers from the community, hundreds of pounds of trash and debris were removed from those creeks this year.

Continued on page 4.

WWW.GCGCD.ORG

Visit our website for more information!

Happy Spring Everyone!

I imagine we are all pleased to have these recent rain showers. Keep an eye on the local weather forecasting and do your best to capture rainfall to water your gardens and plants. In this newsletter, we featured some helpful tips on sprinkler efficiency to help reduce water loss.

As the months heat up and the drought conditions worsen - please do your part to conserve water at every opportunity. Be mindful every time you turn on the tap. Remember Every Drop Counts!

Kelley

Think Water Conservation!

Kelley Vickers
General Manager

View Water Weekly Drought Map

January 2021

Water Level Report

READ ME!

By William B. Klemt, P.G.

SUMMARY

- Short term (1/2020 – 1/2021) Carrizo water levels declined a little over a foot
- Long term (2013-2021) Carrizo water levels in the outcrop indicate an average decline of less than one-half foot/year
- For the most part, Wilcox water levels remain relatively stable
- At the present-day level of pumpage, small to moderate water level declines are continuing
- However, additional proposed pumpage is expected to increase the rate Carrizo water level decline within the District to a moderate level which will slowly decrease with time.

RECOMMENDATION

Add a few Wilcox water level observation wells in the vicinity of the Sandy Oaks Well (67-33-803(8)). In this general area the wells are completed in the Carrizo and water level coverage is good. However, the District is lacking with regard to base-line Wilcox water levels. Also, because of the distance between MW-CZ-7 and MW-CZ-8, it is recommended consideration should be given to drilling another monitor well in the vicinity of Grid 67-34-2.

2021 Carrizo Saturated Thickness Model

Water Rights Available

Each year, changes to property ownership, property divisions/additions, parcel identification codes and/or any property boundary changes are updated by the Guadalupe County Appraisal District (GCAD). In January 2021, the Guadalupe County Groundwater Conservation District obtained the 2020 Certified Tax Roll from GCAD. That file was then imported into the District's Saturated Thickness Model to assign Carrizo water rights - reflecting the GCAD updated property parcel ownership.

As per GCGCD Rule 5.4 (d) – "The District is responsible for calculating and regularly updating, by a computer program using the most reliable hydrological data available, the approximate total volume of saturated Carrizo sand within the District".

The 2021 Carrizo Water Rights file is posted on the District's website:
http://gcgcd.org/water-rights.html

Desired Future Conditions are defined as "the desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a management area at one or more specified future times as defined by participating groundwater conservation districts within a groundwater management area as part of the joint planning process."

Title 31, Part 10, §365.10 (6) of the Texas Administrative Code

87th Texas Legislature Online

Interested in looking up a Bill but don't know how?

You can search Legislation by word/phrase or by Bill Number – you can also:

- Find a list of filed bills
- Follow the status of a bill
- Contact your legislator
- Find out how a legislator voted
- Find when hearings are scheduled
- View the text of a bill
- Learn how to testify at a House Committee hearing and more.

Visit the Texas Legislature Online website:
TLO (texas.gov)

Desired Future Conditions

Where are we in this DFC cycle?

At a noticed public meeting, GMA 13 met on April 23, 2021 and voted to propose DFCs to the TWDB (Full description on page 7).

The 90-day public comment period is open from April 30, 2021 – July 30, 2021.

Look to our website for more information on how to make a public comment.

Click here to see flow chart of the DFC to MAG process by TWDB.

GCGCD will hold a public hearing on July 8, 2021

Each GCD will compile a summary report of all relevant comments received and any suggested changes to the desired future conditions.

These summary reports will be discussed at the next GMA 13 meeting scheduled for **September 17, 2021**.

The 8th Annual Geronimo and Alligator Creeks Clean Up

http://gcgcd.org/outreach.html

Texas A&M AgriLife Extension organizes this event and once again, GCGCD is proud to sponsor this great cause!

For more information visit: Home - Geronimo and Alligator Creeks Watershed Partnership (geronimocreek.org)

Donations provide clean up materials issued to the volunteers. GCGCD has been a proud financial sponsor of this program for the past 5 years.

TEXAS A&M AGRILIFE EXTENSION

Welcome Dr. Evgenia Spears, the new watershed coordinator for the Geronimo and Alligator Creeks Watershed Partnership project.

GCGCD's very own Omar Maldonado rolled up his sleeves and joined the other volunteers at the Irma Lewis Outdoor Seguin Learning Center on April 17th. The second day (April 24th) focused on the area near Navarro High School and the New Braunfels Regional Airport. "It was a smaller group than usual due to student groups not being able to participate due to the pandemic" recounted Omar, "but around ten people showed up on that windy cold Saturday morning to pick up trash."

Photo courtesy of Dr. Evgenia Spears

Pictured left to right - GCGCD Field Technician Omar Maldonado and Rick Ehlers of Ehlers Tree Farm in Seguin – both have been supporting the cleanup efforts in the watershed for years. Thank You!

Sprinkler Efficiency

It is important to consider water conservation when choosing a sprinkler system.

An inefficient sprinkler system can have major negative impacts on water conservation and your wallet! Evaporation loss can be as high as 30% to 50% from sprinklers that spray water into the air over a wide area. Wind drift loss carries water droplets away from the irrigated area. Droplets either evaporate or are blown away from the target area thereby losing water meant for the plants being irrigated.

INEFFICIENT

High Evaporation & Wind Drift Loss

So, what kind of sprinkler is the most efficient use of groundwater? A low-angle sprinkler is the most efficient because it produces large water droplets close to the ground. It is a better option compared to an oscillating sprinkler or one that produces a fine mist since most of the water is lost through evaporation. If the target for irrigation is an irregular shape, a sprinkler with an adjustable spray pattern can be useful. Automatic sprinkler efficiency comes in the form of controllers that can turn the system off after a predetermined amount of time. Run time and frequency of the system should be adjusted to changing rainfall which can be accomplished by installing rain shut off devices or moisture sensors.

Better option

When looking to irrigate non-turf areas such as bedded plants, trees, or shrubs, drip irrigation is the most efficient method of watering. Drip irrigation systems minimize evaporation loss, impede weed growth, and help prevent diseases caused by under or overwatering. Tubing in drip irrigation systems require regular inspections to check for damage and leaks.

Best option

Source: https://homeguides.sfgate.com/type-irrigation-loses-water-evaporation-100415.html Source: Texas Water Development Board

"Updated and adopted every five years, the state water plan serves as a roadmap for addressing the water needs of our state and ensures that Texas will have adequate water supplies during times of drought in the next 50 years.

The Draft 2022 State Water Plan is the eleventh state water plan and is based on 16 regional water plans that set forth thousands of specific, actionable strategies that address water supply needs across the state.

Among the water management strategies is conservation. The new state water plan has a greater emphasis on conservation, and for the first time, the plan contains a chapter exclusively dedicated to it. The chapter includes agency initiatives and new legislative requirements in the planning process regarding setting conservation goals".

Excerpts quoted from Texas Water Newsroom

TEXAS WATER NEWSROOM
WATER NEWS ON DEMAND

The Texas Water Development Board (TWDB) is now receiving public comments on the Draft 2022 State Water Plan.

The public comment period is open until 5:00 p.m. on May 26. Written comments can be submitted to Melinda Smith, Water Supply Planning Division, TWDB, P.O. Box 13231, Austin, Texas 78711-3231 or via email to public-comment@twdb.texas.gov.

The Board will receive public comment on the Draft 2022 State Water Plan at a hearing on May 24 at 1:00 p.m. The hearing will be held in Austin at the Stephen F. Austin Building, 1700 North Congress Avenue, Room 170, and via GoToWebinar. The draft plan and additional information about the hearing are posted on the TWDB website.

After consideration of public comments, the Board will consider adopting the 2022 State Water Plan at a regularly noticed and scheduled TWDB meeting tentatively scheduled to be held in July of 2021.

Excerpts quoted from Texas Water Newsroom

Texas Ground Water Association

ANNUAL CONVENTION

AUGUST 1 – 4, 2021

IN PERSON

San Marcos Embassy Suites Convention Center

C.E. Credits

TGWA Membership Meeting
(vote on proposed by-laws)
TGWA Board of Directors Meeting
(Election of Officers)

Register NOW!

TEXAS ALLIANCE OF GROUNDWATER DISTRICTS

2021
TEXAS GROUNDWATER SUMMIT
Hyatt Regency Hill Country • San Antonio, TX • August 31-September 2

Do you miss In-Person Events? Well…

In Person registration is now open for the

10th Annual Texas Groundwater Summit

If you are interested in the future of groundwater – this is the conference to attend!

- Expert presentations from groundwater professionals
- Networking opportunities with industry leaders, community stakeholders, agency representatives
- Opportunity to meet elected officials and
- SO MUCH MORE!

Register

(hotel/convention safety guidelines and practices)

On April 23, 2021 – Groundwater Management Area 13 (GMA 13) approved the following proposed DFCs and designated non-relevant aquifers:

Due to limitations of the Groundwater Availability Model for the Southern Portion of the Carrizo-Wilcox, Queen City, and Sparta aquifers identified and discussed during 2016 and 2021 Joint Planning, Groundwater Management Area 13 proposes two desired future conditions for the Carrizo-Wilcox, Queen City, and Sparta aquifers:

- The first proposed desired future condition for the Carrizo-Wilcox, Queen City and Sparta aquifers in Groundwater Management Area 13 is that 75 percent of the saturated thickness in the outcrop at the end of 2012 remains at the end of 2080. Due to limitations of the current Groundwater Availability Model, this desired future condition cannot be simulated as documented during 2016 Joint Planning in GMA 13 Technical Memorandum 16-08.

- A secondary proposed desired future condition for the Carrizo-Wilcox, Queen City, and Sparta aquifers in Groundwater Management Area 13 is an average drawdown of 49 feet (+/- 5 feet) for all of Groundwater Management Area 13. The drawdown is calculated from the end of 2012 conditions through the year 2080. This desired future condition is consistent with simulation "GMA13_2019_001" summarized during a meeting of Groundwater Management Area 13 members on March 19, 2021.

The desired future conditions for the Yegua-Jackson Aquifer in Groundwater Management Area 13:

- For Gonzales County, the average drawdown from end of 2010 through 2080 is 3 feet (+/- 1 foot).
- For Karnes County, the average drawdown from end of 2010 through 2080 is 1 foot (+/- 1 foot).
- For all other counties in Groundwater Management Area 13, the Yegua-Jackson is classified as not relevant for purposes of joint planning.

Declaration of non-relevant aquifers in Groundwater Management Area 13:

- Groundwater Management Area 13 does hereby document, record, and confirm that the Edwards (Balcones Fault Zone), Gulf Coast, and Trinity aquifers are not relevant for purposes of joint planning within Groundwater Management Area 13 and therefore do not require the establishment of desired future conditions by Groundwater Management Area 13, nor the determination by the Texas Water Development Board of Modeled Available Groundwater for those aquifers in Groundwater Management Area 13.

Groundwater conservation districts located wholly or partially within Groundwater Management Area 13 include: Evergreen Underground Water Conservation District, Gonzales County Underground Water Conservation District, Guadalupe County Groundwater Conservation District, McMullen Groundwater Conservation District, Medina County Groundwater Conservation District, Plum Creek Conservation District, Uvalde County Underground Water Conservation District, and Wintergarden Groundwater Conservation District.

WORLD METEOROLOGICAL ORGANIZATION
Weather · Climate · Water

NATIONAL WEATHER SERVICE
National Hurricane Center

Update for the 2021 Hurricane Season and Beyond

The World Meteorological Organization (WMO) convened earlier in March to discuss future changes in preparation for the 2021 hurricane season and future years moving forward. One topic of discussion related to the use of the Greek Alphabet as an auxiliary list for a situation where all established names for the Atlantic hurricane season were used. We saw this occur in 2005 and recently last year where the list of names established by the National Hurricane Center (NHC) were exhausted which resorted in using the Greek Alphabet. That will all change as the WMO and NHC has agreed to eliminate the use of the Greek Alphabet and create a new list of names to be used as an auxiliary list if the need arises.

The reasoning behind the change? The organizations deemed the use of the Greek Alphabet created potential confusion.

Another topic of discussion - the potential of extending the Atlantic hurricane season timeframe by having it start on May 15th instead of the usual start date of June 1st. The reason given by the NHC - an uptick in May storms forming during the last few seasons and the need to address this new pattern. However, after talks with NHC and the National Weather Service (NWS), it was decided to keep the Atlantic hurricane season timeframe as is starting on June 1st and ending on November 30th.

Source: CBS News

2021 Atlantic Hurricane Names

Ana
Bill
Claudette
Danny
Elsa
Fred
Grace
Henri
Ida
Julian
Kate
Larry
Mindy
Nicholas
Odette
Peter
Rose
Sam
Teresa
Victor
Wanda

2021 *New* Auxiliary List

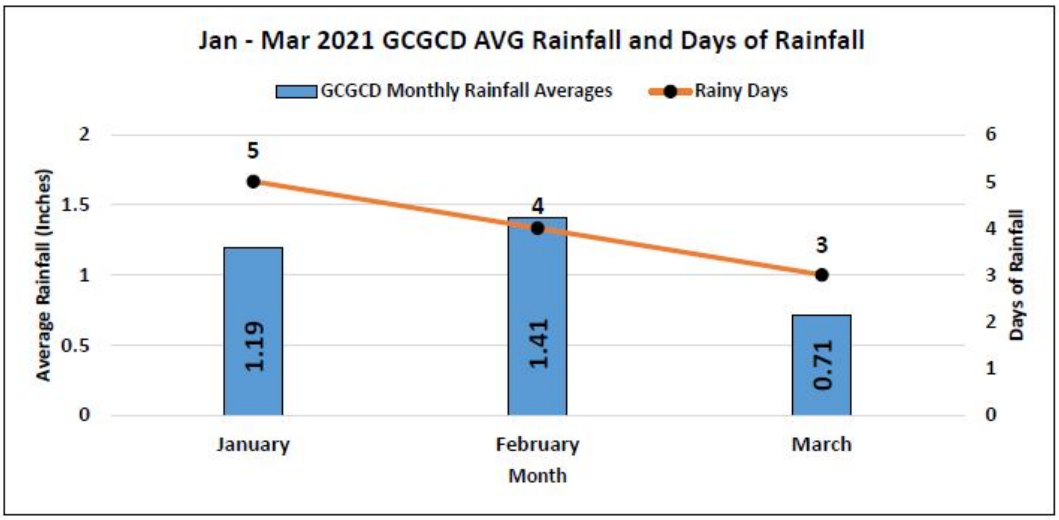
Adria
Braylen
Caridad
Deshawn
Emery
Foster
Gemma
Heath
Isla
Jacobus
Kenzie
Lucio
Makayla
Nolan
Orlanda
Pax
Ronin
Sophie
Tayshaun
Viviana
Will

Weather Warnings

District Rainfall Total for 2021

so far….

3.31”



Finding Information on Water Wells in Texas

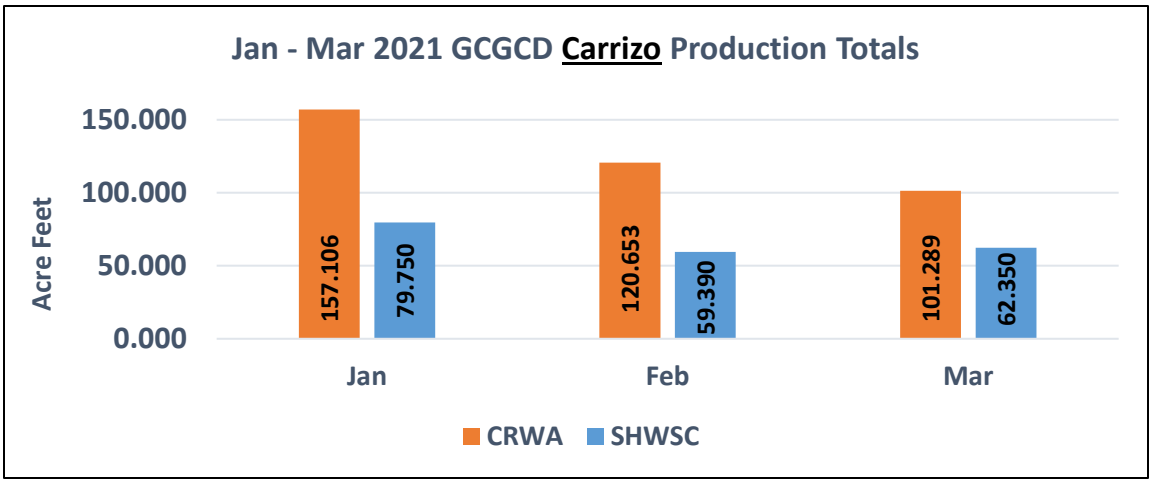
Just purchased property that has an existing water well and want to learn more about that well?

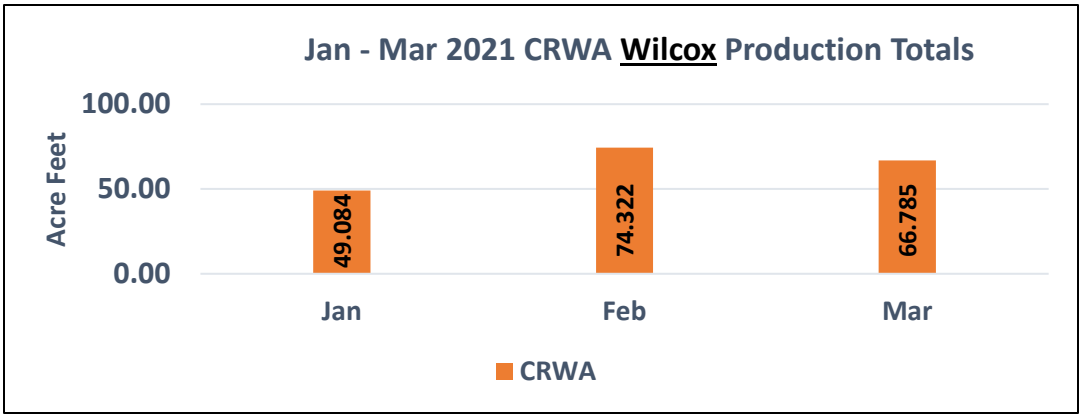
There are several resources available to the public:

Guadalupe County Groundwater Conservation District (GCGCD) – Your local groundwater conservation district has a database of wells located within our District. It is always being updated - if you have questions locating a well log, please contact us by phone at 830-379-5969 or e-mail us at gcgcd@gcgcd.org so we can assist you and make sure your well is Registered! WELL REGISTRATION FORM

Texas Water Development Board (TWDB) - Offers an online database using an interactive map of the state of Texas with highlighted locations of submitted water well records. These records can be filtered by well use, aquifer, driller, drilling date, county, and well owner. Plugging reports are also available on their website. The database can be found here: https://www.twdb.texas.gov/groundwater/data/drillersdb.asp

Texas Commission on Environmental Quality (TCEQ) – TCEQ's online database offers scanned water well logs that were submitted by mail. The database is categorized by county through an interactive map featuring well logs, electric logs, plugging reports, and unplotted well logs. The plotted water well reports are categorized by grid number. To locate the grid map, click on maps and photos for the county of interest. The online TCEQ water well report database can be found here: Water Well Report Viewer





UPCOMING EVENTS – Update in response to COVID-19

May 6th	Region L – Region L Texas | South Central Texas Regional Water Planning Group
May 13th	GCGCD Board Meeting – Agenda posting www.gcgcd.org
June 8th – 9th	TAGD Regular Business Meeting
June 10th	GCGCD Board Meeting - Agenda posting www.gcgcd.org
July 8th	GCGCD Board Meeting - Agenda posting www.gcgcd.org

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Every Texan knows the state flower is the
Bluebonnet.

Perhaps named because some thought the blue petals resembled bonnets worn by early pioneer women.

But *did you know* there are other names for it?

Some know it as 'wolf flower' referring to the scientific name *Lupinus texensis* and others know it as 'Buffalo clover'.

In Spanish, it is referred to as 'El Conejo' meaning rabbit because the white tip of a bluebonnet is thought to resemble a rabbit's tail.

(Personally, I think they look more purple).

No matter – they are **GORGEOUS!**

Happy Spring!!

Source: Austin.com