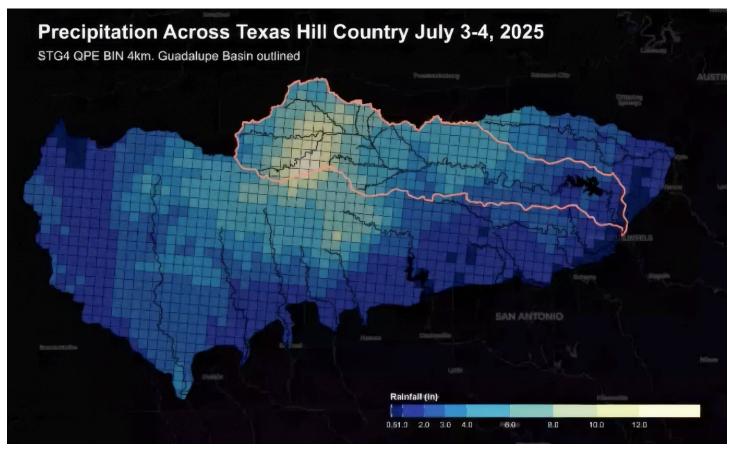
# TGP SERTEMBER 2025

## FROM SEVERE DROUGHT TO HEAVY FLOODING



This past summer in South Texas has been one for the record books. Toward the end of May, this part of the state was still baking in multi-year drought conditions with local aquifers nearing all-time lows. A month later, a one in 1,000 year rainfall event occurred over the 4th of July holiday in the Guadalupe River Basin near Hunt, Texas sending catastrophic flood waters barreling through the area. After the emergency flood relief efforts to help those most impacted subsided some, it was time to analyze how all that rain might have benefitted the Trinity and Edwards aquifers.

The map illustrates rainfall distribution across the Edwards Aquifer region over July 3-4. The Guadalupe River Basin is outlined and the lighter areas of the map are where the most rain fell. The headwaters area of the Guadalupe River received 12-15 inches causing the river to rise 26 feet within less than an hour at some points along the Guadalupe River. The Bexar County area where the Trinity Glen Rose District manages the

Trinity Aquifer experienced some fairly steady precipitation over those few days but rainfall totals were less than half of what was experienced in the Guadalupe Basin.

"Water planning professionals have been saying that the region really needed some major rain events to get us out of the prolonged drought we've been enduring over the last few years," said TGR General Manager Amanda Maloukis.

"Hydrologically, the Guadalupe Basin isn't the main contributor to recharging the Trinity and



Edwards aquifers within our District like areas west of Bexar County are. So while we did see an initial rise in our local Trinity Aquifer monitoring wells after the 4th of July, they began to settle out a few weeks after. Some good news though is that Bexar County has spent months in an "exceptional drought" rating and now has been downgraded to "extreme drought" conditions."

Rain gauge readings have inched above the historic averages for the first time in several years with around 14 inches of rain received in May, June and July.

Despite the plentiful precipitation early this summer, the **Trinity Glen Rose District still remains in Stage 3** of its drought management plan. Stage 3 irrigation measures limit watering to once every other week. It is requested that automatic sprinkler systems be placed in manual mode and only turned on for your specific water day. In between times, watering with a hose by hand is acceptable.

There are many ways families and businesses can help preserve the Trinity Aquifer by using water only as needed each day. You can learn more at the Trinity District's water conservation page. Just click this link. https://www.trinityglenrose.com/conservation.

## TGR TO AMEND DISTRICT RULES

The TGR Board of Directors has reviewed and proposed updates to the District Rules for improved management of our groundwater resources. The Board will meet for a public hearing on the proposed amendments to the District Rules on October 16th to consider adoption of the amendments, which will be available for public viewing on the District website prior to the hearing.

District Rule updates are a common practice and create improvements for the health, protection, preservation, and conservation of our vital natural resource for the Trinity Aquifer. The Rule adjustments will help us better align our work with the region's water planning outlook set up by the State. The proposed changes improve practices to help us be better stewards of the Trinity Aquifer and develop long term goals for groundwater management and the protection of our groundwater resources for future generations.

Highlights of the changes include, statutorily required changes made by the most recent 89th Texas Legislature, as wells as criteria for water wells on small tracts that maintain groundwater production in relation to their limited property right acreage, in order to protect neighboring wells, property rights, and aquifers, without requiring well permits, meters, nor production fees.



Texas is seeing massive growth with AI data centers. There has been attention on their incredible energy demands; however, little attention has been paid to their equally incredible water consumption. But it's becoming clear that if left unchecked, AI water use could impact the availability of water in drought-stricken Texas.

Outside of Abilene, construction is underway on the world's largest AI data center— which is part of the five hundred billion dollar endeavor called Stargate. When complete, Project Stargate One will sit on 940 acres, an area larger than Central Park in New York City. The planned power demand is up to 1.2 Gigawatts for the full campus. And, there's a concern about water use. Data centers for AI and cryptocurrency mining use a lot of water. Currently, San Antonio ranks third in Texas with 49 data centers operating there.

"If you ask ChatGPT 10 to 50 questions, then it consumes about 50 milliliters of water," said Yi Ding, professor at Purdue University's School of Electrical and Computer Engineering specializing in developing sustainable AI. 50 milliliters of water is about a quarter of a cup. Ding said all those cups of water quickly add up as more and more people are using AI.

Ding recently published the paper "Not All Water Consumption Is Equal: A Water Stress Weighted Metric for Sustainable Computing" which was published in HotCarbon 2025. She found that since 2022, two-thirds of new U.S. data centers are located in water scarce regions, including Texas and Arizona.

"Open AI and some bitcoin mining companies, they are all investing heavily in Texas to build data centers. Texas is actually a relatively high water stress region. It's very intensive because people also need water to live," she said.

The average, midsized data center uses 300,000 gallons of water a day, roughly the use of a thousand homes. According to a policy brief from the Houston Advanced Research Center and University Houston Energy, data centers in Texas will consume 46 billion gallons of water in 2025. They project that by 2030, that number could rise up to 399 billion gallons or about 7% of the total water use in Texas.

You can read the full Texas Public Radio article here.

# TGR DISTRICT RECOGNIZED FOR ITS TEXAS 4-H WATER AMBASSADORS SUPPORT



The Trinity Glen Rose Groundwater Conservation District was recently recognized for its continued support of the Texas 4-H Water Ambassadors Program. The program debuted in 2017, and for the 2025-26 Leadership Academy tours, more than 100 students will be participating. Students travel throughout Texas to learn how water is collected, conveyed, treated, conserved and managed to meet Texan's needs.

Today, more than 40 groundwater districts sponsor Texas 4-H activities and training programs and have been a primary source of funding for the program since its inception now contributing nearly \$100,000 per year, which is approximately half of the program's total donations.

To reinforce knowledge gained during the academy, water ambassadors pass on that information to others as they engage in various education and service activities throughout the year. This program also provides a platform for youth to connect with water industry professionals and educators who represent a wide range of water disciplines.

You can read more at this link.

## TEXAS LEGISLATURE INVESTING \$20 BILLION IN WATER RESOURCES AND INFRASTRUCTURE BY 2050

Texas is tackling its booming population's water demands with a bold \$20 billion investment plan to secure sustainable supplies and infrastructure by 2050. In June, Governor Greg Abbott signed Senate Bill 7 and House Joint Resolution 7 into law to deliver a generational investment in Texas' water infrastructure.

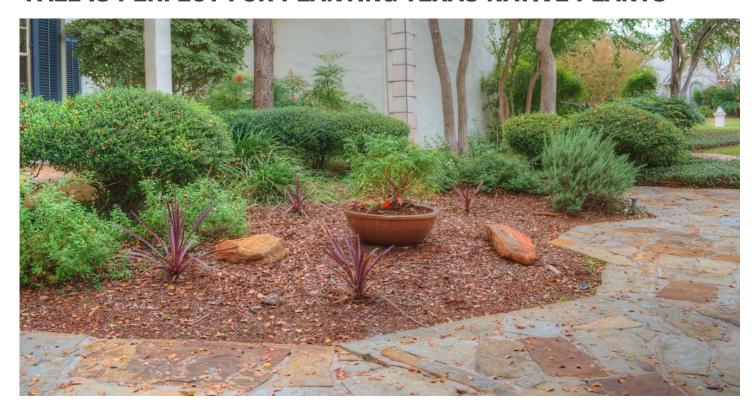
"Water is a critical need for all Texas," said Governor Abbott. "In my State of the State Address, I called on the Texas legislature to make the largest investment in water in Texas history. This law does just that delivering financial resources for both new water supply and for the repairing of existing infrastructure. With this law, we can secure Texas' water for future generations."

Now, water reuse, wastewater, flood control, and even agricultural water conservation projects are eligible to receive funding through the revenue dedication. These changes will address the state's growing need for different types of water projects to meet accelerating demands and changes.

SB 7 also introduces performance measures that begin tracking the state's progress toward addressing water infrastructure challenges. Moving forward, taxpayers and policymakers will have access to data describing how funded projects are expanding water supplies or fixing failing systems.

Speaking to a crowd of more than 150 water industry workers and supporters, Governor Abbott touted the Texas-sized water investment and how it will help address the needs of Texans and communities in every corner of the state. Additionally, Governor Abbott highlighted Texans' daily water needs and how the steps taken through this legislation will ensure Texas remains a great state to live, work, and raise a family.

### **FALL IS PERFECT FOR PLANTING TEXAS NATIVE PLANTS**



In the springtime, homeowners start to get the itch to get out and work in the landscapes and gardens. But, did you know that from late September to early November is the best time to get those new water-saving native Texas plants in the ground. Here's why.

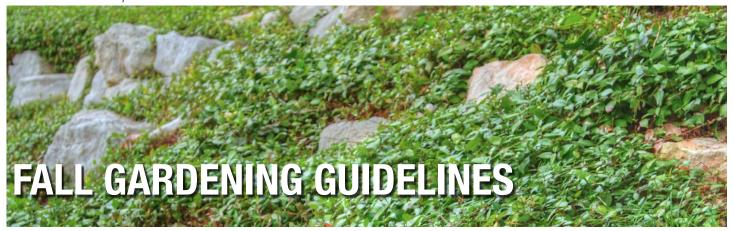
The soil retains some warmth from the summer months, creating favorable conditions for root establishment and initial plant growth. Planting in the fall allows the roots to develop and strengthen over the cooler months, providing a solid foundation for excellent growth when spring arrives. And keep in mind, removing turfgrass from your landscape and establishing some native plant beds in the fall will save water throughout the coming year and reduce the amount of time spent on landscape maintenance. Plus, native plants will help reduce weed growth and not require continued fertilizer or pesticide application.

Another advantage of fall planting is reduced heat stress on newly established plants. Additionally, fall planting facilitates efficient water uptake due to the typically higher rainfall levels during the season, supporting the initial establishment and hydration of the new plants.

While you are planning for your new native plant beds, it would also be a good time to think about adding some hardscape to your evolving landscape. Hardscapes can:

- decrease the amount of the yard that needs to be mowed, watered, fertilized, trimmed, or weeded
- improve the value and curb appeal of your home
- conserve water resources
- have recreational or practical uses

See the following story for some helpful landscape planning resources.



**Know Your Yard.** Because of that famous Texas heat, many homeowners have planted shade trees in their yards. So as you are looking to enhance your landscape through fall planting, you need to choose new plants that will thrive in either shade or full sun conditions. Shade plants can be a bit more delicate and will definitely not survive summer heat. However, there are plants that will take whatever the Texas sun will dish out, and without any extra watering. There are many great resources for learning which plants will work best in your yard. See our list below.

**Preparing for Planting.** To ensure a successful fall planting experience, begin with proper soil preparation. Testing the soil pH is crucial, as many Texas plants thrive in slightly acidic to neutral conditions. Amending the soil with organic matter, such as compost, enhances drainage and provides essential nutrients, creating an ideal environment for your new plants.

**Establishing Good Roots**. Once you've planted, it's important to water them deeply. This encourages strong root growth and helps the plants establish themselves. Cooler fall temperatures reduce the risk of overwatering, allowing the soil to retain moisture without becoming waterlogged.

**Monitor your plants**. After planting those beautiful new native plants, you should watch them for the next several weeks. Look for any signs of stress, such as yellowing leaves or wilting, and be vigilant for pests. With the right care and attention, your fall-planted garden will flourish, offering beauty and sustainability throughout the seasons.

Making fall planting a part of your gardening routine not only creates color in your landscape but also sets the stage for your garden to take off in the spring. By choosing native plants that flourish in the Texas climate and following the tips for successful planting, you can create a relaxing, low maintenance and water conserving outdoor space.

San Antonio Water System Garden Style - <a href="https://www.saws.org/conservation/garden-style/">https://www.saws.org/conservation/garden-style/</a>

**Texas A&M Agrilife** - <a href="www.agrilifeextension.tamu.edu/assets/plants-crops/lawn-garden/landscaping/">www.agrilifeextension.tamu.edu/assets/plants-crops/lawn-garden/landscaping/</a>

Haely Giambalvo, Go Gardening Contributor - <a href="https://nativebackyards.com/">https://nativebackyards.com/</a>

# GO GARDENING

Check out what's happening in this edition of your favorite landscape show - **Go Gardening!** 



In September, the Go Gardening Show crew made a trip to a large landscape mulch operation located on the far westside of San Antonio. While there, large trucks were constantly offloading tree branches and other landscape material to be ground into mulch, a delivery of fruit and vegetable waste was added to a compost pile and landscape companies were picking up loads of mulch, compost and landscape rocks for their projects around the city. The impressive operation reminded us that there are many ways to beneficially recycle these types of materials that help preserve local water resources while nurturing new and established landscapes.

Next, the Go Gardening team visited with a local landscape designer that shared his insights on converting turfgrass heavy yards into colorful, water-saving showcases featuring Texas native plants. Some of those ideas included planting the new, smaller plants with enough spacing to allow them to "grow together" over a few seasons, and choosing plants that will provide color from springtime to fall. Other great recommendations included picking plants with different textures and making sure you place taller selections toward the back of new plant beds. Click here to watch the latest Go Gardening Show.

## TGR'S DROUGHT TOLERANT PLANT PICKS

Having a water-saving garden doesn't mean you have to sacrifice color and even year round color in your landscape. Once the temperatures cool, any of the native perennials can go in the ground for next year's show. Here are two great suggestions.

The **Verbesina virginica, Frostweed** is drought tolerant, deer-resistant, butterfly magnet. If you have densely shaded areas under trees, frostweed will thrive. Once established, you can pretty much ignore it. It will readily spread but the young plants are easy to identify for removal or transplant to other areas. As a native, it is well adapted to our weather extremes.

The **Liatris mucronata, Texas Blazing Star** is fall blooming, drought-tolerant and deer-resistant perennial. Plant in full sun with excellent drainage to avoid root rot. Texas Blazing Star supports bees, butterflies, and hummingbirds.



Photos by Joseph A. Marcus and Charmaine Richardson, Lady Bird Johnson Wildflower Center

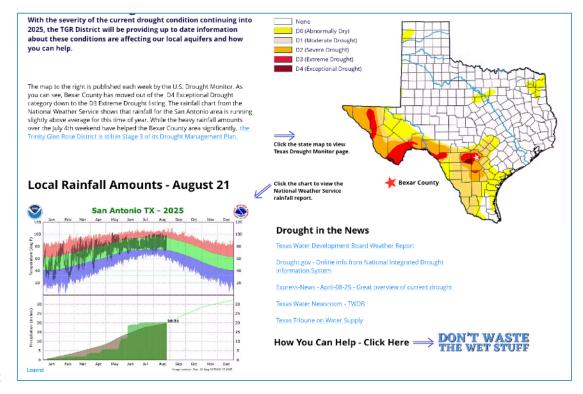


# DROUGHT DASHBOARD

Get the latest updates on the state of the ongoing drought in the State of Texas.

With the severity of the current drought conditions continuing into 2025, the TGR District is providing up to date information about these conditions affecting local aquifers and how you can help.

At the TGR Drought Dashboard on the District's website home page, you will find the current U.S. drought monitor map, the rainfall chart from the National



Weather Service, current drought news articles and a link to some great water conservation recommendations at our Don't Waste the Wet Stuff page.

Just click on this link to check it out.



#### Trinity Glen Rose Groundwater Conservation District

#### **Board of Directors**

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#### **TGR Mission**

The Trinity Glen Rose Groundwater Conservation District was created in 2001 to conserve, preserve, and protect the Trinity Aquifer within the District.