

# Prairielands eLine

The Newsletter of the Prairielands Groundwater Conservation District

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## Texas 4-H Youth Water Ambassador Program Applications for 2023-2024 Opened March 15



Applications for the 2023-2024 cohort of Texas 4-H Youth Water Ambassadors opened March 15, 2023. Continuing for the fifth year, the 4-H Water Ambassadors Program continues to grow in number and continues to gain recognition and support from the Texas water industry. To date, 158 youth have participated in the program. The District is proud to support this youth leadership organization and provide an opportunity for young people to nurture their passion and knowledge for management of natural resources in Texas.

Founded in 2017, the Texas 4-H Water Ambassadors Program provides high school youth an opportunity to gain advanced knowledge and develop leadership skills related to the science, technology, engineering, and management of water across the state. The District is currently sponsoring three Ambassadors representing Hill and Johnson counties.

Through the program, Ambassadors gain insight into water law, policy, planning, and management as they interact with representatives from state water agencies, educators, policy-makers, and water resource managers. Ambassadors also gain an appreciation for the complexity of managing Texas surface and groundwater resources, its importance to local, regional, and state economies, and the importance of protecting this valuable resource for future generations.

Water Ambassadors commit a minimum of 40 hours of service over a 12-month period following a Leadership Academy. Service hours include delivering water education at local 4-H clubs, schools, and community events.

### How to Apply:

Visit <https://www.texas4hwaterambassadors.com/> for instructions.

**Deadline to apply is May 1, 2023**

### Eligibility:

- Be in high school or entering high school in the 2023/2024 academic year;
- Be 14 years of age or older by September 1, 2023; and
- Be a current 4-H member, or willing to join a local 4-H club if selected.

### Expectations:

- 4-H Water Ambassadors accept the responsibility of educating youth and adults in their communities and beyond.
- They commit to advancing their water knowledge throughout a 12-month term of service.
- Those selected will participate in the summer 4-H2O Leadership Academy (June 11-17) and commit to a minimum of 40 hours of education/service.

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# Kirk Retires from Prairielands Groundwater Conservation District Board of Directors

In January 2023, Prairielands GCD Director Randel Kirk announced his retirement after eagerly and faithfully serving the District since his appointment by the Ellis County Commissioners Court in November 2009.

Director Kirk proudly represented the communities and water resources in Ellis County for over thirteen years, serving as 1st Vice President of the Board of Directors from November 2009 to January 2021 and Vice President from September 2021 to January 2023.



Throughout his years of service, Kirk provided the District with leadership and expertise in his role as Chair of the Board of Director's Committee on Rules and Bylaws which helped establish regulatory goals for our aquifers to ensure that future generations of Texans will continue to have adequate groundwater supplies.



“Randel’s contributions were instrumental in moving the District from its infancy to a first-class operation that is widely regarded as one of the leading groundwater conservation districts in Texas,” stated PGCD General Manager, Kathy Turner Jones.

Prairielands GCD Board of Directors, staff, and consultants are grateful for the service and dedication Randel Kirk provided over the years and wish him the best for continued success in all his future endeavors.

## Staff Spotlight: Shannon Roberson

*Office Assistant - Joined PGCD in January 2023*

### **Tell us a little about yourself.**

“I was raised in Ellis County where my family has resided for several generations. I enjoyed raising my children in the same area I grew up and have just recently moved to Hill County where we are building a house. I have worked in administrative positions in the legal and construction industries for more than 20 years and look forward to growing with PGCD.”



### **Do you have any hobbies outside of work?**

“I love spending time with my family and working around the ranch. The small herd of Simmental cattle we have ensure our weekends are busy. My husband and I have recently discovered a love for traveling and are eager to explore different areas and cultures.”

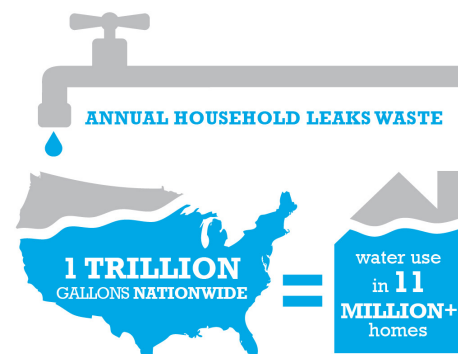
### **What do you enjoy about working at PGCD?**

“I have really enjoyed working with the staff at PGCD on learning the intricacies of the rules and regulations surrounding the groundwater in this area. It was not only about learning the information but also on how it affects the residents and this area of Texas that I love.”

# Prevent and Manage Water Leaks at Home During EPA's Annual Fix-A-Leak Week 2023

Leaks can run, but they can't hide! Household leaks can waste nearly 1 trillion gallons of water annually nationwide, so each year we hunt down the drips during EPA's annual Fix a Leak Week, March 20 through 26, 2023, remember that you can find and fix leaks inside and outside your home to save valuable water and money all year long.

Talking leaks, did you know the average household's leaks can account for nearly 10,000 gallons of water wasted every year and ten percent of homes have leaks that waste 90 gallons or more per day? Common types of leaks found in the home are worn toilet flappers, dripping faucets, and other leaking valves. These types of leaks are often easy to fix, requiring only a few tools and hardware that can pay for themselves in water savings.



To check for leaks in your home, you first need to determine whether you're wasting water, then identify the source of the leak. Here are some tips for finding leaks:

- Take a look at your water usage during a colder month, such as January or February. If a family of four exceeds 12,000 gallons per month, there are serious leaks.
- Check your water meter before and after a two-hour period when no water is being used. If the meter changes at all, you probably have a leak.
- Identify toilet leaks by placing a drop of food coloring in the toilet tank. If any color shows up in the bowl after 10 minutes, you have a leak. (Be sure to flush immediately after the experiment to avoid staining the tank.)
- Examine faucet gaskets and pipe fittings for any water on the outside of the pipe to check for surface leaks.

## Toilet leaks

Old or worn-out toilet flappers (e.g., valve seal) can cause leaks. This simple rubber device holds water in the tank, then releases water into the bowl when the toilet is flushed. Because the rubber can wear out, the flapper should be checked periodically and replaced at least every five years to ensure a good seal and avoid leaks. An old or worn flapper can cause your toilet to flush on its own or silently leak thousands of gallons a year. Replacing a flapper is a quick and easy fix that will save water and money.

## Faucet Leaks

Old and worn faucet washers and gaskets frequently cause leaks in faucets. A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year. That's the amount of water needed to take more than 180 showers! There are many tutorials available online on how to fix a wide variety of faucets.

## Showerhead Leaks

A showerhead leaking at 10 drips per minute wastes more than 500 gallons per year. That's the amount of water it takes to wash 60 loads of dishes in your dishwasher. Some leaky showerheads can be fixed by making sure there is a tight connection between the showerhead and the pipe stem and by using pipe tape to secure it.



# Validating Water Loss Audits Leads to Better Data and Water Savings



Water conservation is more than just turning off your tap or limiting lawn irrigation to save water. As a popular strategy recommended in the state water plan to help meet future water supply needs in Texas, water conservation includes identifying and addressing leaks, breaks, inaccurate customer meters, and more that can result in recoverable

water loss. Utilities conduct and submit water loss audits to the Texas Water Development Board (TWDB) to determine how much water is being lost in their systems and how to improve water loss control.

## Why complete a water loss audit?

When utilities understand where and how much water is being lost from their distribution systems, they can better track and improve water loss. Utilities can target where infrastructure upgrades may be needed to improve efficiency and mitigate future water loss, ultimately increasing their water supply and saving money.

All retail public water systems in Texas with more than 3,300 connections or those with a financial obligation to the TWDB are required to complete and submit a water loss audit annually by May 1. Legislation was passed in 2013 to require utilities that receive financial assistance from the TWDB to use a portion of the funding to mitigate the utility's water loss if it meets or exceeds a specific threshold.

## Validating the data

Accurate and reliable data is critical to targeting mitigation efforts that effectively reduce water loss. Starting January 1, 2025, all utilities receiving financial assistance from the TWDB will be required to have their annual water loss audits validated to improve the quality of the data. The validation process includes examining water loss audit inputs to identify and correct data inaccuracies.

To learn more about water loss audits, visit the TWDB's [website](#).

**Reminder – PGCD's rules require a retail public utility applying for either an increase in authorized annual groundwater production for an existing system through an Operating Permit or an amendment to an Operating Permit, or for renewal of an Operating Permit or Historic Use Permit, provide water audit and system loss information as required under Rule 5.8 – System Water Loss for Retail Public Utilities. To learn more, please click [here](#).**

## Kathy Tucker Appointed to Prairielands Groundwater Conservation District Board of Directors

In a public meeting on February 21, 2023, Kathy Tucker of Midlothian, TX, took her oath of office as a director on the Prairielands Groundwater Conservation District Board of Directors. Tucker was appointed by the Ellis County Commissioners Court on January 10, 2023, and was appointed to serve out an unexpired term representing Ellis County through August 31, 2025. Tucker has a distinguished background in education, serving youth for 28 years. Following her retirement from teaching, she has served on the Mountain Peak SUD Board of Directors.



The Prairielands Groundwater Conservation District's Board of Directors consist of eight members, two from each county, who are appointed by the county commissioner's courts to serve unpaid, four-year terms. This District is committed to manage and protect the groundwater resources within Ellis, Hill, Johnson and Somervell counties and to work with others to ensure a sustainable, adequate, high quality, and cost-effective supply of water, now and in the future.



# Be in the Know: When to Water Your Lawns and How Much Water Your Sprinklers Use

Currently it is recommended to keep your sprinklers off. Warm season turfgrass is still dormant or just starting to wake up. Recent rainfall and cooler temperatures the last couple of weeks means there is plenty of moisture in the soil. There is a high probability we have seen our last freeze this year but there is always a chance through April.

Remember to be cautious with your new plantings and leave space for natives!

To know when you should water and how much is needed, visit <https://waterisawesome.com/weekly-watering-advice>.

**Whether you already have a sprinkler system installed or are looking to have one installed, be sure to be in the know when it comes to sprinkler system water usage.**

## Standard Fixed Spray Nozzle

- Run Time: 24 Minutes
- Pressure: 30-50 PSI
- ARC/Radius: 90 - 360 degrees
- Application in inches: 0.5"
- Gallons per minute: 3
- Precipitation Rate: 1.25" per hour



## In-Line Drip Tubing

- Run Time: 24 Minutes
- Pressure: 20-45 PSI
- GPH/Spacing: 0.9 GPH at 12-inch spacing
- Application in inches: 0.5"
- Gallons per minute: 1.54
- Precipitation Rate: 1.48" per hour



## Rotating Sprinkler

- Run Time: 30 Minutes
- Pressure: 30-50 PSI
- ARC/Radius: 360 degrees
- Application in inches: 0.5"
- Gallons per minute: 9
- Precipitation Rate: 1" per hour

## Oscillating Sprinkler

- Run Time: 30 Minutes
- Pressure: 30-50 PSI
- ARC/Radius: 360 degrees
- Application in inches: 0.5"
- Gallons per minute: 17
- Precipitation Rate: 1" per hour



For more information on how much water your sprinkler uses, visit <https://www.youtube.com/watch?v=uUosWwVoM58>

## How Much Water Do Your Sprinklers Use?

To calculate how much water your sprinklers use everytime they run, use this formula:

$$\text{Total number of spray heads} \times \text{Number of gallons per minute} \times \text{Total run time in minutes} = \text{TOTAL GALLONS USED}$$

# About Prairielands GCD

The Prairielands Groundwater Conservation District was created in response to a finding by the Texas Commission on Environmental Quality that groundwater shortages were expected in Ellis, Hill, Johnson, and Somervell counties over the next 25 years. The TCEQ finding required local residents to create a groundwater conservation district, or else TCEQ would mandate one. Enabling legislation for the Prairielands GCD was passed in 2009.

The Mission of the Prairielands Groundwater Conservation District is to develop rules to provide protection to existing wells, prevent waste, promote conservation, provide a framework that will allow availability and accessibility of groundwater for future generations, protect the quality of the groundwater in the recharge zone of the aquifer, insure that the residents of Ellis, Hill, Johnson, and Somervell Counties maintain local control over their groundwater, and operate the District in a fair and equitable manner for all residents of the District.

## Upcoming Events and Meetings

### March

- 25 Educational Booth -**  
Ellis County Master  
Gardeners Expo
- 27 PGCD Public Hearing  
and Board Meeting**  
9:00 a.m.  
208 Kimberly Dr  
Cleburne, TX 76031

### April

- 6 Water Education Trailer -**  
Cleburne Library
- 7 Good Friday**  
PGCD Office Closed
- 11-13 Water Education Trailer -**  
Hill County Water Days
- 17 PGCD Board Meeting**  
9:00 a.m.  
208 Kimberly Dr  
Cleburne, TX 76031
- 21 Water Education Trailer -**  
Earth Day at Venus  
Elementary
- 22 Water Education Trailer -**  
Earth Day at Russell Farm  
Art Center - Burleson
- 29 Water Education Trailer -**  
Springfest - Cleburne
- 30 Water Education Trailer -**  
Wildflower Walk at Rural  
Heritage Farm - Waxahachie

### Board:

President  
Charles Beseda  
Hill County

Vice President  
Paul Tischler  
Johnson County

Secretary/Treasurer  
Maurice Osborn  
Ellis County

Director  
Marty McPherson  
Somervell County

Director  
Kathy Tucker  
Ellis County

Director  
John Curtis  
Somervell County

Director  
Brad Daniels  
Hill County

Director  
Barney McClure  
Johnson County



www.prairielandsgcd.org  
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