

# Recharge

Your Groundwater Resource



Winter 2017  
Volume 9 Issue 3



## Merry Christmas

AND A HAPPY NEW YEAR!



## Conserving Water Through Rainwater Harvesting & Landscaping

The POSGCD Rainwater Harvesting Rebate Program has taken off! There were two Rainwater Harvesting 101 workshops and an Earth-Kind workshop since October 2017 with more to come next year.

Participants learned about the components of rainwater harvesting, landscaping, and irrigation at the three



*Dr. Drew Gholson shows participants the basics of rainwater harvesting*

workshops this fall.

The conservation program is a joint effort by POSGCD and Texas A&M AgriLife Extension. Drew Gholson, Ph.D., Extension Specialist, helped put the workshops together and brought in experts to present.

Post Oak Savannah General Manager Gary Westbrook said this program is beneficial to landowners because people can come get useful ideas to use at home.

Rainwater harvesting helps promote water conservation within the District. By participating in the program, residents can lower their water costs while reducing the amount of groundwater used outdoors. Lawn care requires a lot of water

and in some places can reach up to 80% of all home water use.

In addition to the program, the District maintains its own rainwater harvesting system at its offices in Milano as a demonstration for other landowners.

There will be a Landscaping & Irrigation: Planning and Installation workshop on March 3, 2018. During this workshop participants will learn how to choose and install drought-tolerant plants. They will also learn about drip irrigation design and get hands-on experience.

After this workshop, the demonstration site will be complete with examples of landscape zones, drip irrigation and different types of turf.

For more information and to sign up, visit <http://posgcd.org/rainwater> and look for upcoming workshops.

# Telemetry System Offers Monitoring Advantage

Our new telemetry system is in the first stages of being installed and tested. We installed the first transducer, which will be collecting and transmitting data. Adding telemetry technology into our monitoring system is one of the steps Post Oak Savannah GCD is taking to improve our Monitoring Network.

Telemetry is an automated process that measures and collects data at remote points and sends data to receiving equipment for monitoring. The basic components of a telemetry system include sensors that measure and collect data, transmitters that are connected to the sensors and send the collected data to a database, and programs that turn data into useful information for system users.

Transducers, which include the sensors and transmitters, are installed within wells that continually record and send water level updates at specified times. They allow the District to receive real-time data from all wells that are part of the telemetry system.

Data will be collected every hour and sent via cellular data to an online data management application once daily. Once the telemetry system is complete and online, users can visit our website



*Bobby Bazan, Water Resource Specialist, installs the first transducer of the new telemetry system for the POSGCD Monitoring Program*

to see daily updated water level readings throughout the District. Users will be able to select wells in separate formations (i.e., Simsboro Aquifer, Carrizo Aquifer, etc.) as well as by geographical location.

Bobby Bazan, POSGCD Water Resource Specialist, said the biggest advantage of the telemetry system is a cost-benefit to the District through reducing maintenance and travel requirements. Because data is collected remotely, staff will not have to drive out each time and manually check water levels at selected wells.

“Additionally, the system will increase the frequency of data readings,” Bazan said. “Users will be able to see daily, monthly and seasonal water readings throughout the District. Instead of a snap-shot in time, there will be a continuous inflow of water level data.”

Although the system will reduce the number of visits to each well, staff will still go out regularly to check the accuracy of the measurements.

The system is scheduled to go online by January 2018.



## ADD YOUR WELL TO THE POSGCD MONITORING NETWORK

The District is always growing and improving the Monitoring Network. By adding your well, you can help improve the data that helps the District make management decisions and receive and track information on your water levels.

## 2017 Highlights



Added 50+ wells to monitoring system



22 Presentations & Educational Outreach Events



POSGCD Water Conservation Grants awarded local water utilities \$947,521.00

# Ownership of Groundwater & Challenges of GCDs

According to the Texas Constitution and Statutes, as well as recent Supreme Court rulings, there is no doubt that the water beneath the land surface belongs to the landowner. The landowner, or leaseholder, has every legal right to produce their groundwater as property for their benefit.

Some produce groundwater to water livestock and/or produce crops. Some contract with a company to produce their property for use in fracking oil wells. Still others enter into a contract with an entity to produce their groundwater for use in locations outside the District.

These are all examples of how landowners or leaseholders legally and rightfully benefit from the ownership of their property right in their groundwater. In Texas, the Rule of Capture is still the applicable law [2] this rule grants landowners a legal right to capture water beneath their property without regard to effects on other wells except in cases of willful waste or malicious harm to a neighbor.

With this rule comes concerns about proper management of groundwater. To address these concerns, the state created groundwater conservation districts (GCDs), which are governed by a board of directors. GCDs protect property rights by modifying the Rule of Capture and provide for the protection, conservation and preservation of aquifers.

Because of the Rule of Capture, a GCD cannot refuse one landowner the right to produce their property while allowing another to do the same. But, a GCD can adopt rules to reduce impacts of one landowner upon another. Some examples of rules adopted by the POSGCD Board include spacing requirements and maximum production limits stated in permits, which limit production.

Permitting for different water uses and amounts is a controversial subject. Opinions vary on how different permits should be handled, but state law is clear that a GCD cannot treat a producer differently based on how and where the water is used. However, GCDs can assess and collect additional fees for water exported outside the boundaries of a District.

Under state law, a GCD must continue to issue permits to reach the Desired Future Condition (DFC) of an aquifer. DFCs are also required by state law and are quantifiable measurements of what aquifers will look like in the future. In our District, DFCs are based on aquifer water levels, which are continuously monitored. In setting DFCs, GCDs must balance groundwater production with conservation and protection.

Along with these challenges, there are concerns about pumping effects and drawdown of water levels in the aquifers of the district. The POSGCD Board has been aware of these concerns and began adopting protective management

strategies and rules as far back as June 2005. Those adopted strategies and rules protect existing wells as well as landowner's rights to produce, all while preventing harm to the aquifers of the District.

The first strategy of the Board was to evaluate aquifers and adopt specific spacing requirements. These evaluations are ongoing to reduce impacts of production of one landowner to another. Next, the Board added additional restrictions to limit production based on tract size of contiguous acreage. This made it difficult to produce large amounts of water without first acquiring water rights from many landowners in large contiguous acreage tracts.

Additionally, the Board added drawdown limits to shallow parts of the aquifers, which are continuously and carefully monitored. The Board also developed rules which treat all landowners the same [2] as stated earlier, a GCD cannot treat a producer differently based on how and where the water is used. In the event the District must curtail production to prevent DFCs from being exceeded, these rules would apply to everyone equally.

It is the job of POSGCD to balance production with conservation, but the POSGCD Board and staff continues to evaluate policies, management and rules. We are always searching for new and better ideas. We welcome anyone to call with questions and ideas or come by the office.



57 wells tested for water quality in well water screening campaign



Added 2 new staff to meet the needs of citizens and the District



Built new building to serve the public by hosting meetings and workshops

Post Oak Savannah Groundwater Conservation District  
310 East Avenue C  
P.O. Box 92  
Milano, Texas 76556

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 Let's chat!  
Phone: 512.455.9900  
Email: [admin@posgcd.org](mailto:admin@posgcd.org)

Visit our website for more information:  
[www.posgcd.org](http://www.posgcd.org)

Look for our next newsletter in Spring 2018

### upcoming events

**January 1st**  
Office closed for New Year's Day

**January 9th**  
Public Hearing & Board Meeting:  
Adoption of GWAP and DFCs

**March 3rd**  
Landscape & Irrigation: Selection and Installation Workshop

**Spring**  
Rainwater Harvesting 101 Workshop

### Board of Directors

Sidney Youngblood, President  
Steven Wise, Vice President  
Tommy Tietjen, Sec/Treas  
Lee Alford, III  
Nathan Ausley

Kerry Starnes  
Durwood Tucker  
Robert Ware  
Jay Wilder  
Bob Wilson

### Staff

Gary Westbrook, General Manager  
Elaine Gerren, Administrative Assistant  
Bobby Bazan, Water Resource Specialist  
Megan Homeyer, Education Coordinator  
Ralph Sifuentes, Field Technician

Groundwater conservation districts are the state's preferred method of groundwater management through rules developed, adopted and promulgated by a district.  
**Texas Water Code, Sec. 36.0015**

### Are we providing information you need?

The district staff want to know what information you would like to see in this newsletter. Please contact us at 512.455.9900 or [admin@posgcd.org](mailto:admin@posgcd.org) to let us know how we can better serve you.



POSGCD was created to conserve and regulate the use of groundwater through monitoring of aquifer levels and production and encourage conservation rules which limit pumping, thereby extending the quantity and quality of the water available in all of the aquifers in Milam and Burleson counties. POSGCD is a member of the Texas Alliance of Groundwater Districts (TAGD).