Recharge

Your Groundwater Resource

Fall 2017
Volume 9 Issue 2

Sign up for the October 10th Rainwater Harvesting Workshop

Rainwater Harvesting Grant Program

We are excited to announce our new Rainwater Harvesting Grant Program! Available to all residents of Burleson and Milam Counties, this program is designed to encourage groundwater conservation through the capture and use of rainwater.

For every square foot of a collection surface, you can get about 0.6 gallons of water for every 1 inch of rainfall. In other words, every 2,000 square feet of collection surface generates 1,200 gallons of water.

Harvesting rainwater reduces dependency on groundwater in landscapes, improves soil and plants with higher water quality, and reduces on-site flooding and pollution from storm water.

The District will award $1.00 per gallon of rainwater storage of the completed system (500 gallon tank = $500 rebate) and up to a maximum of $3,000 can be awarded per household per lifetime.

To qualify for the rebate, applicants must first complete an approved rainwater harvesting course.

Rainwater harvesting site plans must also be submitted and approved before expenses can be considered for the rebate.

After the course is completed and the site plan is approved and equipment is installed, qualified staff will perform a completion inspection and file the report along with qualifying receipts for reimbursement.

The first workshop is scheduled for October 10, 2017 at the POSGCD office from 6 - 8 p.m.

For more information, upcoming workshops and online sign-up, go to http://posgcd.org/outreach/rainwater/

New Staff Highlight

Ralph Sifuentes joins the POSGCD staff as a field technician

On August 1, 2017, Post Oak Savannah GCD welcomed Ralph Sifuentes as its new Field Technician. Sifuentes was born and raised in Hearne, Texas before moving to Rockdale in 1979.

Mr. Sifuentes has over 27 years of experience in drilling and groundwater monitoring. He began working for Alcoa as a driller and drilling supervisor in 1990. After working with Alcoa, Sifuentes worked for Luminant by supervising installation of wells, as well as groundwater mitigation and monitoring.

As a field technician for POSGCD, Sifuentes will assist in monitoring wells, checking water levels and water quality, troubleshooting, and performing well inspections.

Sifuentes said that his experience and background in groundwater, as well as being involved with the installation of monitor wells, will help him perform the duties of the POSGCD Field Technician. In addition, he will be talking to landowners about adding their wells to the POSGCD Monitoring Network.

With his extensive drilling background and knowledge about groundwater and wells, Sifuentes is a valuable addition to the POSGCD staff and we are excited to have him aboard.

POSGCD Groundwater Well Assistance Program

The Groundwater Well Assistance Program (GWAP) is in the final stages of development. It is currently being developed by the Desired Future Conditions Committee. Steven Wise, the Vice-President of the POSGCD Board of Directors, is the chair of the committee.

Along with Wise, the POSGCD General Manager, Gary Westbrook, presented the GWAP to attendees at the 2017 Milam and Burleson Counties Groundwater Summit.

The purpose of the GWAP is to identify wells which might be at risk of water level decline due to aquifer-wide pumping and administer corrective actions before loss of water production occurs.

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Secondary purposes are to improve the monitoring program and address well conditions to prevent impacts in the future through increasing knowledge of the aquifer.

Through the GWAP, the District will be able to increase the number of wells in the monitoring network, which means more data from wells in the District. By collecting more data, we will have more information about the aquifer to better monitor and predict water levels.

Additionally, we will be able to identify wells that may experience impacts in the future. This will allow the District to prevent those negative impacts before they happen.

To fund the GWAP, Westbrook and Wise said that the District will collect fees on permitted amounts for the production and/or transport of groundwater. The GWAP shall be included as a separate line item in the District budget.

If the money is not spent in the current year, it stays in the program to be used for future years. It does not go away.

The District will cover all costs for qualifying wells.

To qualify, wells must:

- be located in Milam or Burleson Counties;
- be functional and registered with the District;
- be part of the monitoring well network;
- be either a low-capacity non-exempt permitted well that produces less than 50 gallons per minute OR an exempt well used for domestic and/

or livestock use as defined in the District's Rules; and

- not be covered by a mitigation agreement included in a permit issued by the District or required by the State of Texas.

Some examples of corrective actions for qualifying wells include lowering the pump, modifying construction of the well, drilling a new well, connecting the landowner to a water supply, or constructing a stock pond. Each claim will be evaluated separately and the best course of action will be taken. The District is committed to improvement of the monitoring network in order to better understand and manage the groundwater resources in Milam and Burleson Counties.

The GWAP is set to be posted for a 90-day comment period by October 3, 2017 with hopes of adoption by January 5, 2018. There will be ongoing evaluations to continue to improve the GWAP after it is implemented.

Steven Wise talks about the GWAP at the Groundwater Summit

Texas 4-H2O Water Ambassador Program

Ambassador Dague talks about his summer experience

At the June Board Meeting, Directors agreed to sponsor the 4-H2O Water Ambassador Program for high school-aged youth. The program gives youth an opportunity to gain knowledge about policy, management and conservation of water in Texas.

This summer, 16 students participated in an eight-day Youth Leadership Academy and travelled around the state learning about water. They travelled 2,200 miles with over 30 stops and presentations in eight days.

At the TAGD Summit, Director Durwood Tucker and GM Gary Westbrook spoke with some of the ambassadors and learned about their amazing experience.

At the September Board Meeting, Kolby Dague presented a review of the trip. Dague lives in Milam County and attends Holland High School.

During his presentation, Dague shared highlights from the Youth Leadership Academy, where ambassadors learned about water policy, management and issues across Texas. His favorite part about the academy was a well camera demonstration that allowed him to see inside a well.

Dague said that water is always going to be needed and in-demand. This summer experience exposed him to a lot and opened his eyes to many possibilities in the water industry.

Kolby Dague and David Smith present the Directors with a plaque to thank them for their sponsorship

Director Tucker and GM Westbrook are awarded with a plaque at the TAGD Summit

Milam & Burleson Counties Groundwater Summit Overview

Groundwater experts from across the state came to the Caldwell Civic Center on August 16, 2017 to speak at the fourth annual Milam & Burleson Counties Groundwater Summit. The seven-hour summit was packed with amazing groundwater information. Speakers discussed groundwater policies, groundwater management strategies and how aquifers worked. Post Oak Savannah GCD also gave District updates and talked about upcoming events.

Sarah Schlessinger, the Executive Director of Texas Alliance of Groundwater Districts, was the Master of Ceremonies.

Groundwater Availability Models

Robert Mace, a Deputy Executive Administrator of the Texas Water Development Board, was the first speaker. He gave an overview of the characteristics of aquifers and groundwater before delving into Groundwater Availability Models (GAMs). Mace told attendees that aquifers aren't large ponds of water beneath the surface. Aquifers are dirt and rocks that water moves through.

Mace walked through figures and meanings of aquifers and groundwater. He then talked about groundwater flow and the differences between confined and unconfined aquifers.

After his "Aquifer 101" set up, Mace talked about GAMs. He said models are essentially taking what is known about aquifers and putting that knowledge into a computer to simulate them. The models are then used by GCDs to help create Desired Future Conditions and District Management Plans.

Desired Future Conditions

Larry French, P.G., Director of the Groundwater Division of the Texas Water Development Board, talked about Desired Future Conditions (DFCs) after Mace's presentation. A DFC is a measurable condition of an aquifer at a specified future time.

French started his presentation by going over two approaches to managing groundwater in the United States. In Texas, landowners own groundwater as a private property right. In other states, such as New Mexico and Colorado, groundwater is owned by the state.

DFCs are part of the joint planning process in Texas to help manage, regulate and protect aquifers and groundwater at the local level. French said groundwater could care less about county, state or any other political lines. That is why it is essential to implement management practices across areas that share resources.

Master of Ceremonies, Sarah Schlessinger, opens the Summit

Roughly 140 people attended the 4th annual Groundwater Summit

The process to adopt DFCs include three groups: district representatives in groundwater management areas, individual districts and the Texas Water Development Board.

At the District level, residents have the opportunity to look at and comment on the proposed DFCs, after which the DFC moves to adoption. DFCs are not set in stone and can be modified and adjusted as improvements in data happen; and Districts are responsible for managing aquifers and allowing DFCs to be reached.

The next presentation was a panel that discussed the Carrizo-Wilcox Aquifer.

Impacts of Production in the Carrizo-Wilcox Aquifer

Kevin J. Spencer, P.G., President of R.W. Harden and Associates, Inc. has more than 25 years of experience developing fresh and brackish groundwater resources and was the first panelist to present.

Spencer began the panel by talking about how pressure in aquifers work and how that affects water level measurements. He said that the outcrop area and water table are better measuring tools to measure how pumping affects an aquifer.

Spencer went on to say that there is more groundwater in the Carrizo and Simsboro Aquifers than all of the lakes in Texas. He said that if the DFC were to be reached by 2060, that only 1.13% of the total water in the aquifers will be produced.

In summary, Spencer said that the Carrizo-Wilcox Aquifer system is a productive major aquifer, drought resistant, has large volumes of water in storage and is a long-term, reliable supply of water.

Second to speak was Chad Norris, an aquatic biologist representing the Water Resources Branch from Texas Parks and Wildlife Department. Norris said that TPWD has a responsibility to protect fish and wildlife resources in Texas and that they provide input to GCDs and GMAs as requested.

Norris said that surface water and groundwater interaction is extremely important to aquatic environments. Habitats such as streams, hillside bogs, ponds and rivers are dependent on groundwater.

When water is withdrawn from groundwater wells, it has to come from somewhere, Norris said. He knows there will be some change with groundwater withdrawal, but cannot predict where that change will happen.

Chad Norris, Kevin Spencer and Toya Jones discuss production in the Carrizo-Wilcox Aquifer while Robert Mace moderates

Moving forward, Norris said that it is important to monitor and learn more about groundwater and surface water interaction.

Toya Jones, a hydrogeologist from Intera, followed Norris. She started her presentation by stating GCDs are charged with regulating and protecting groundwater in the aquifers. She said that POSGCD's management strategies consist of spacing requirements, maximum pumping limit, DFCs and Protective Drawdown Limits (PDLs) of shallow zones in the District.

Jones reminded attendees that POSGCD is the regulatory agency with authority and responsibility to regulate production and manage the aquifers in Milam and Burleson Counties.

Because the majority of registered wells in the District are 400 feet deep or less, the District is taking precautions to make sure that shallow wells are protected. She noted that since 2000, drawdown in the shallow zone of the Simsboro has seen no net change.

Jones said that POSGCD, along with other GCDs and groundwater organizations, has been a leader in efforts to improve the Groundwater Availability Model (GAM). This will help them to better understand aquifer characteristics, fault representations, surface water and groundwater interaction, and shallow zone predictions.

In conclusion, Jones said that POSGCD is in the process of expanding their monitoring network through increasing the number of wells and frequency of measurement, coverage of aquifers, and continuing to support GAM updates.

General Managers of Groundwater Management Area 12

The General Managers of Groundwater Management Area (GMA) 12 Panel consisted of the five general managers of the GCDs within GMA 12. Gary Westbrook from Post Oak Savannah GCD, Alan Day from Brazos Valley GCD, Jim Totten from Lost Pines GCD, David Bailey from Mid-East Texas GCD, and David Van Dresar from Fayette County GCD. Schlessinger moderated.

The panel reviewed similarities and differences among the neighboring Districts that make up GMA 12. Each general manager had an opportunity to explain why their management practices and rules varied from other GCDs in the GMA and how those differences impacted the GMA as a whole. Differences such as type of permits, exemptions, enforcement and spacing requirements were discussed at length.

GCDs also share data among GMA 12 to improve the understanding of the aquifer as a whole.

As an aquifer's characteristics change over different areas, management and policies change as well. Additionally, each District has different populations and uses of water that need to be considered.

POSGCD Monitoring Network Update

The final presentation was a POSGCD Monitoring Network update by Bobby Bazan, Water Resource Specialist at Post Oak Savannah GCD, and Ralph Sifuentes, POSGCD Field Technician.

Bazan talked about what the monitoring network is and how it helps the District make management and rule decisions. There are currently 112 wells in the network, with 16 of them being measured continuously. The rest are measured annually.

Bazan and Sifuentes said the District is focusing on the shallow Carrizo-Wilcox zone and will have 50 additional wells by the end of this summer. They are also increasing the frequency of measurements and improving transparency through a new web-based interface that shares data directly to residents. This new feature will be coming to the POSGCD website soon.

Ralph Sifuentes and Bobby Bazan give an update on the Monitoring Network

A citizen asks a question and voices her concerns

The 5 general managers of GMA 12 talk about their similarities and differences

During the Summit, Sidney Youngblood, the President of the Board of Directors, called Directors Nathan Ausley, Kerry Starnes and Bob Ware to the stage.

After thanking them for their service on the Board, Youngblood awarded the Directors for their continued service to the citizens of Milam and Burleson Counties.

Ausley, Starnes and Ware have served as Directors since the District's creation in 2001.

You can find all of the presentation slides and videos from the Summit at http://posgcd.org/2017-milam-burleson-counties-groundwater-summit/

Directors Ausley, Starnes and Ware receive awards at the Milam & Burleson Counties Groundwater Summit

TAGD Texas Groundwater Summit


Bobby Bazan moderates a panel about future groundwater projects

District staff were pleased to be asked to serve and participate in the Texas Alliance of Groundwater Districts (TAGD) Summit from August 29 - 31 in San Marcos. The Summit is an annual event with keynotes from State Legislators, Supreme Court Justices and innovative groundwater experts.

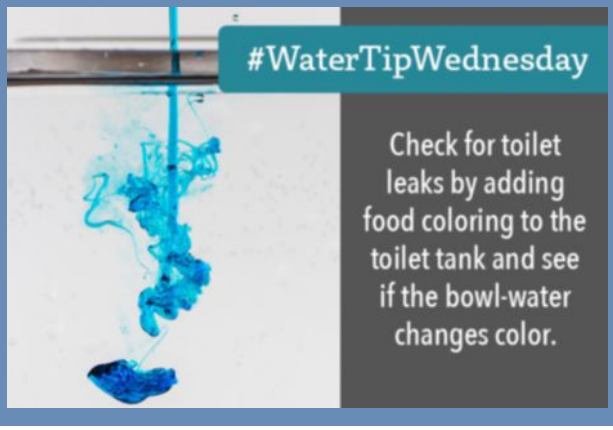
More than 350 people attended the Summit, and Post Oak Savannah GCD received many complimentary reviews on our booth, displays and educational material. These were designed to highlight the services POSGCD offers to its citizens.


Gary Westbrook joins a panel of general managers

MAKE SURE YOU AREN'T MISSING INFORMATION

In addition to this quarterly newsletter, we have active Facebook and Twitter accounts. Our social media is a great resource for learning more about groundwater, water conservation and what services POSGCD has to offer.

The District also sends out emails bi-weekly to keep you informed of upcoming events and meetings and to informn you of local and state water issues. Visit http://posgcd.org/outreach/e-newsletter/ to sign up!



FACEBOOK: @PostOakSavannahGCD

TWITTER: @POSGCD

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.

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INSIDE THIS ISSUE:

- Rainwater Harvesting Grant Program
- New Employee, Ralph Sifuentes
- Groundwater Well Assistance Program
- Texas 4-H2O Water Ambassador Program
- Milam & Burleson Counties Groundwater Summit Overview
- TAGD Groundwater Summit

Let's chat!
Phone: 512.455.9900
Email: admin@posgcd.org

Visit our website for more information:
www. posgcd.org

Look for our next newsletter in Winter 2017

upcoming events

October 3rd
POSGCD October Board Meeting

October 10th
Rainwater Harvesting Workshop

November 6th
Earth-Kind Water Conservation Workshop

November 7th
POSGCD November Board Meeting

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

Board of Directors

Sidney Youngblood, President
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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

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 979.455.9900 or 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).