



## *Inside the Issue*

### **FLOOD EARLY WARNING SYSTEM**

A project funded by Texas Water Development Board, as well as other local contributors, designed to save lives and property. p. 03

### **EXPANDING YOUR HORIZONS**

The Education and Outreach team assists with engaging young girls in the STEM field and teaches them about watersheds. Featured picture above and continued on p. 05

## **MISSION STATEMENT**

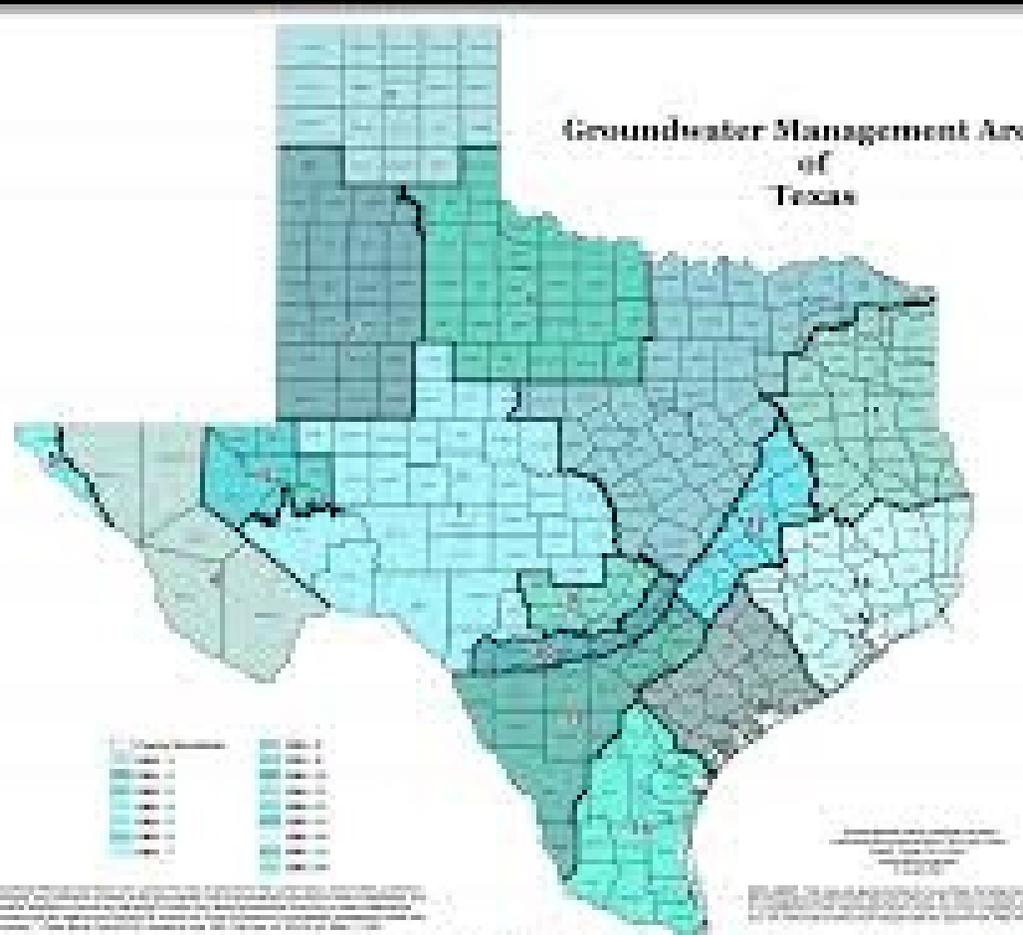
The principle mission of the Bandera County River Authority and Groundwater District is to **protect and preserve** the County's water and natural resources for the State of Texas. The District is also tasked with **maintaining local accountability** of the County's water resources to help safeguard the property rights of the citizens of Bandera County.

# TEXAS WATER CONSERVATION ASSOCIATION - FALL CONFERENCE

A few members of the BCRA GD Staff attended the Texas Water Conservation Association (TWCA) Fall Conference, October 16-18, 2019. The staff was present during several important conversations concerning the future of Texas Water. TWCA hosted a panel that discussed the applicability of state water issues and concerns at a national level. The three day conference included topics of both groundwater and surfacewater, as well as the interactions between the two.

## REGIONAL WATER PLANNING

As assigned by the Texas Water Development Board, the District sits on a regional water planning group and a groundwater management area (GMA): Region J (plateau) and GMA 9. Region J is one of 16 Regional Water Planning Groups that consist of several members with key interests in water usage. Region J serves Bandera, Edwards, Kerr, Kinney, Val Verde, and Real counties. GMA 9 is one of 16 Groundwater Management Areas consisting of the following Groundwater Conservation Districts: Bandera County River Authority and Groundwater District, Barton Springs/Edwards Aquifer Conservation District, Blanco-Pedernales Groundwater Conservation District, Comal Trinity Groundwater Conservation District, Cow Creek Groundwater Conservation District, Southwestern Travis County Groundwater Conservation District, Hays Trinity Groundwater Conservation District, Headwaters Groundwater Conservation District, Medina County Groundwater Conservation District, Trinity-Glen Rose Groundwater Conservation District, and Edwards Aquifer Authority serves as a non-voting member.



\*Map courtesy of Texas Water Development Board



## EDWARDS AQUIFER AUTHORITY SAMPLING IN BANDERA COUNTY

Michael Redman, Groundwater Operations Manager, joined the Edwards Aquifer Authority in sampling several creeks for water quality and background element tracing. (Pictured bottom right) BCRAGD's Clint Carter, Natural Resource Specialist, is also assisting the Edwards Aquifer Authority with additional sampling that looks for isotope traces in order to gather a database of information related to spring identification.

## FLOOD EARLY WARNING SYSTEM

On November 5, 2019 the Bandera County River Authority, in conjunction with the U.S. Geological Survey, held a training for County and public officials on the ins and outs of the new Flood Early Warning System. This training was meant to train the officials to be able to properly utilize the toolset in future flood events. During the training, the U.S. Geological Survey presented the interactive web model, demonstrated how the public can sign up for gage reading notifications, and explained how to properly read the gages and how to use the model base off rainfall. This toolset is meant to save lives and safeguard property.





## ARUNDO CONTROL PROGRAM

The District has partnered with Texas Parks and Wildlife to control the non-native, invasive species known as *Arundo donax*. This cane-like plant produces seeds, but the seeds are not viable. Instead, it regenerates from the breaking of individual nodes on the stalk of the plant. In addition to rapid growth and spread, the plant consumes large quantities of water and counteracts water conservation efforts. In an effort to control the spread of this invasive species, the District is diligently working with Texas Parks and Wildlife to find and treat patches of *Arundo* growth. If you believe you have *Arundo* growing on your land and would like to have it treated, please contact the District's River Authority Operations Manager.



## CLEAN RIVERS PROGRAM

In collaboration with Texas Commission on Environmental Quality, Nueces River Authority, and San Antonio River Authority, the District takes part in the Texas Clean Rivers Program. This statewide program is designed to monitor water quality within Texas rivers. Our District's focus is on the Medina River and the Sabinal River Basins within Bandera County. By monitoring the water quality and flow, the District is able to provide valuable data to partnered agencies that better enable the District to make informed decisions concerning the health and safety of the valuable resource for the citizens of Bandera County.

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*The importance of the Clean Rivers Program cannot be expressed enough. The goal of the program is to maintain and improve water quality in the rivers by providing high-quality data to TCEQ. The promotion of cooperative watershed planning between partnerships is crucial in the protection of Texas's most valuable resource.*

*-Levi Sparks, River Authority Operations Manager*



## EDUCATION AND OUTREACH AT THE BANDERA LIBRARY

Our Education and Outreach team had the unique opportunity to host story time at the Bandera Library. The age range of the group that attended the story time session included infants, toddlers and young children under the age of 5. The Education and Outreach team taught the young children about the water cycle through the use of felt boards and a stuffed raindrop. Following the presentation of the story, the children continued to learn about the water cycle by moving pieces along the felt board.

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*Teaching the children this young about the water cycle and the importance of protecting our natural resource is a tool that will help to protect and preserve our water for the future.*  
~Corrina Fox, Education and Outreach Manager

## EXPANDING YOUR HORIZONS

The Education and Outreach team had the wonderful opportunity to host a lab session at Schreiner University's Expanding Your Horizons. Expanding Your Horizons is an all girls, middle school STEM conference, geared toward increasing the interests of young girls in careers in STEM fields. During their lab sessions, the Education and Outreach team, Charley Curd and Hayli Phillips, led by Corrina Fox, taught the young girls about Water sheds and pollution. The girls were split into small groups and created their own watershed model with the supplied materials. Following their set up of the model, the Education and Outreach team simulated pollution and rainfall using food coloring and spray bottles. The girls also performed a water pH test on the water produced from the rain simulation.