

## **South Texas Regional Groundwater Alliance Project Description**

The South Texas Regional Groundwater Alliance made up of five groundwater conservation districts ( Bee GCD, Goliad GCD, Live Oak UWCD, Refugio GCD, Pecan Valley GCD) and one county commissioner's court (Victoria County) collecting ecological data, specifically recharge related data. The future of water production in these rural counties is of great importance to the San Antonio Bay, Copano Bay, Mission Bay, and Aransas Bay. Future water projects in these rural counties is a direct threat to the ecological health of this ecosystem, through the production of groundwater, baseflows will be decreased to the bays, and estuaries. Through the collection of data and information that effect groundwater recharge in the Gulf Coast Aquifer; Groundwater Conservation Districts will adopt policies and make decisions that directly affect the amount of available water in the aquifer. Through the addition of monitoring stations in each of the six counties in the South Texas Regional Groundwater Alliance, data will be collected in order to assure the residents of the counties that there will be a sustainable supply of groundwater for their individual uses, and the ecological uses of the bays and estuaries. The bays and estuaries in this area are of a great economical importance to the area.

This project is being performed in cooperation with the Texas Commission on Environmental Quality (TCEQ). TCEQ provides data logging, data telemetry, and data ingest and display on TCEQ's internet web pages.

### **Objective**

Through the collection of precipitation, evapotranspiration, soil moisture, and water levels the Alliance, and the region will gain a better understanding about the amount of recharge the Gulf Coast Aquifer receives. By using this data and other spatial data, brush management decisions can be made, this data can affect a whole host of other projects that all directly influence the amount of recharge. The data collected will support the following objectives:

- Monitoring of groundwater levels
- Monitoring of groundwater quality
- Establishment of database of recharge data
- Provide information to evaluate and estimate recharge, discharge, movement, and storage values
- Provide information to support the implementation of district rules
- Assist in defining drought trigger mechanisms, and implementing drought management plans
- Sharing of information with regional water planning groups
- Determine the amount of available groundwater