echarge: Your Groundwater Resource

ost Oak Savannah Groundwater Conservation District Newsletter

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Water Links

Texas Alliance of Groundwater Districts - www.texasgroundwater.org

Texas Water Development Board www.twdb.state.tx.us

National Groundwater Association—www.ngwa.org

Texas Ground Water Association www.tgwa.org

Post Oak Savangah Groundwater Conservation District

General Manager Updates

District Hosts Groundwater Management Area 12 Meeting to discuss Desired Future Conditions

Over the last 4 months our District has been involved in District and Groundwater Management Area 12 (GMA 12) meetings. These meetings were held with the common goal of taking comments from stakeholders to be considered in setting Desired Future Conditions (DFCs) for our aquifers. Both the District and GMA stakeholder meetings had very good attendance and participation at each meeting. Within meetings we have heard presentations from both public and private entities.

With each report we have seen a growing concern for the future of our groundwater and the conditions we will manage for in the aquifers in this GMA. Presentations were given concerning current use, impacts from large groundwater withdrawals, ground & surface water interactions, GMA modeling, and landowner property rights. All comments are being carefully considered.

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The main topics of conversation during the GMA Stakeholder meeting were: 1) whether we should use the drawdown in artesian pressure (water levels in wells) to set and manage the DFCs; 2) concerns the DFC process could threaten land owner's property rights; 3) what effects will be seen on current groundwater users and also on surface water systems (rivers and streams) with possible projected increases in groundwater pumping in the GMA.

Below- Map of GMA 12



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The cities of College Station and Bryan along with Texas A&M University conducted a study on the impacts from large groundwater withdrawals. Through the use of the Central Carrizo-Wilcox Groundwater Availability Model (GAM) they modeled the effects from an accelerated pumping schedule based on the Texas Water Development Board (TWDB) population projections. Their study concluded that with current usage and projected growth, both Bryan and College Station will see a decrease in aquifer water levels and an increase in the cost of new supplies of water. This trend is expected to affect most of GMA 12 if current consumption of groundwater continues.

Environmental stewardship, a non-profit public group located in Bastrop and Lee counties, also gave a presentation concerning the interaction of ground and surface waters. This presentation provided information about the Vision of Environmental Stewardship and concerned the affects groundwater pumping will have on the river and streams systems due to the amounts of groundwater that enters the rivers and streams from the aquifers as the rivers and streams pass through the shallow parts of the aquifers. GMA 12 also received a presentation from the Texas Parks & Wildlife concerning the effects groundwater pumping will have on surface water systems. In their letter TPWD expressed a concern about the accuracy in which the Groundwater Availability Models (GAMs) have in predicting the amount of available surface water under future pumping predictions. In the letter Dr. Dan Opdyke states that, "Significant pressure reductions due to pumping causes water to move towards the zone of low pressure and away from the aquifers and surface water bodies."

Aqua Water Supply Corporation also presented a brief summary of their concerns for the future decisions of GMA 12. and how these decisions could affect Aqua's ability to service its growing customer base in Bastrop and Lee counties. filed a letter which discussed in great detail their beliefs on how the GMA should manage the DFCs. The letter stated that the GMA should not set DFCs based on artesian pressure, but rather on aquifer storage. Harden & Associates stated that "Artesian pressure decline represents reductions in groundwater pressure, not desaturation of aquifer pore space (i.e. reduction in aquifer storage)."

The final presentation was given to GMA 12 by the Brazos Valley Water Alliance, L.P. on landowner rights. Their presentation and letter expressed great concern with the possible restriction of pumping rights for landowners. They stated that their concern stems from a possible agreement for the sale of water to a municipality, and the problems associated with setting draw down limits in these aquifers.

Each of these presentations were discussed at length and will be taken into consideration by each of the districts in GMA 12 as these districts continue to work towards adopting DFCs. We thank all those who participated and attended these meetings. For complete coverage of all presentations and letters concerning the GMA process and dates for future meetings please refer to our website at <u>www.posgcd.org</u> & click on the "Joint Planning" tab.

POSGCD Mission Statement—Our mission is to strategically manage the groundwater resources of Burleson and Milam counties in order to protect against aquifer depletion and pollution and to ensure an adequate water supply for future generations. Through responsible management, we will accomplish this undertaking of preservation by collecting data, monitoring groundwater levels, regulating excessive production, permitting, educating the public and coordinating with neighboring districts for mutual benefit.

District Management Plan and Strategies

With the growing concerns of additional pumping and drawdowns of artesian pressures, i.e. water levels, in the aquifers throughout the District, we feel it is important to summarize some of the management strategies set in place to protect existing wells and landowner's water rights, as well as preventing harm to the aquifers in our district. The POSGCD rules and the Ground Water Management Plan (GWMP) contain measures put in place to protect landowner's availability of groundwater. Spacing requirements for the location of new wells is one way to help to achieves this. State law requires wells to be at least 50 ft. from property boundaries or another well. Additionally, District Rules require further spacing. In the Simsboro formation, spacing of new wells must be 1/2 foot per gallon per minute of production from the property line of each adjoining landowner, while wells in all other aquifers under the district shall be spaced at a distance of one foot per one gallon per minute from property lines. Spacing requirements for new wells are one foot per gallon per minute in the Simsboro, and 2 feet per one gallon per minute in the other aquifers, from existing wells. These measures are set in place to insure that interference between neighboring wells are reduced.

Below– Schematic showing characteristics of the aquifers in our District and possible impacts from a recent study on production from the Carrizo aquifer.

Along with spacing requirements the District has adopted rules and management strategies concerning limitations on drawdown of aquifer water levels in the management zones of the District. For instance, in the shallow parts of the aquifer, such as in the Rockdale area where wells may be as little as 300 feet deep, a 50 ft. drawdown in the District's monitor wells will trigger evaluations and reduction in pumping for this zone, and possibly adjacent zones if that is the location of the source of the impacts. This is also the case in the deeper zones. The trigger is set at 190 ft. in the Deep Carrizo zone in Burleson County, where wells are usually 800-1200 feet deep and there is much more water available in wells . If triggers are reached this does not mean that adequate water is not available, it simply signals the District to reevaluate current permitted amounts for pumping, and the affects on existing wells in that management zone. This alerts the District to take appropriate actions to protect the level of water in these wells. The triggers are set conservatively to allow adequate time to make evaluations and adjustments in permitted production so that the availability of groundwater is insured in existing wells. If the District should ever

> reach the point where permitted production is reduced and another applicant files for a permit, the existing permits for that zone will be adjusted to allow for water to be available to the new applicant. These management strategies will allow the district to actively protect our groundwater resources, while still insuring personal landowner's rights to access water beneath their property far into the future. To see the District's Rules and Groundwater Management Plan visit our website at www.posgcd.org.

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



Calendar of Events

January

13 - Post Oak Savannah GCD Board of Directors Meeting at POSGCD offices in Milano, TX

February

10 - Post Oak Savannah GCD Board of Directors Meeting at POSGCD offices in Milano, TX

<u>March</u>

10- Post Oak Savannah GCD Board of Directors Meeting at POSGCD offices in Milano, TX

ARE WE PROVIDING INFORMATION YOU NEED?

The District Staff would like to know what information you would like to see in this newsletter. Contact us at the District offices or email us at posgcd@tconline.net with your suggestions.



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).

Look for our next issue in Spring 2009!

POST OAK SAVANNAH GROUNDWATER CONSERVATION DISTRICT 310 EAST AVENUE C P.O. BOX 92 MILANO, TEXAS 76556

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