

October 30, 2015

Dr. Sanjeev Kalaswad, Director of Conservation & Innovative Water Technologies
Texas Water Development Board
P.O. Box 13231
Austin, TX 78711-3231

Dr. Kalaswad,

Thank you for the opportunity to contribute to the TWDB's Brackish Groundwater Study. Please find attached the Hill Country Alliance's written comments regarding Aquifer Studies as directed by HB-30.

Thank you,

Charlie Flatten
Water Policy Program Manager
Hill Country Alliance
512/694.1121

Hill Country Alliance Public Comment

TWDB 2016 Brackish Groundwater Production Zone Study as Directed by HB-30 (Larson)

The long-term beauty and economic sustainability of the Hill Country is dependent on its water resources. The collection of data and mapping of Brackish Groundwater Production Zones is critical for water planning, maintaining the water balance, the protection of long-term spring-flow, the promotion of land stewardship for healthy water catchment areas, and sustained groundwater resources for current and future generations.

The Texas Water Development Board (TWDB) plays a critical role in our state's water planning process, and the Hill Country Alliance is appreciative of the efforts involved in designing studies to benefit the public and the legislature. Our comments reflect the collective vision of our Hill Country supporters, stakeholders, businesses and elected officials for the protection of fresh water resources relative to brackish water production in the state's science and policy.

Given the variability of individual aquifer composition, and inter-aquifer connectivity, ***our comments will encourage that site specific standards be applied.***

TWDB Key Questions for Stakeholders:

*HB-30 directs the Board to identify and designate local or regional brackish groundwater production zones in areas of the state with moderate to high availability and productivity of brackish groundwater that are separated by **hydro-geologic barriers** sufficient to prevent **significant impacts** to water availability or water quality in any area of the same or other aquifers that are not brackish.*

Define “significant impact”

- “Significant impact” is any negative impact to fresh water **quality** of an aquifer that would increase the cost for treating and/or pumping that water for municipal or agricultural purposes, whether or not that aquifer is being used as a municipal or agricultural water supply.
- A “significant impact”, also, is any negative impact to spring-flow and surface water base-flow volumes or rates that is more than negligible.
- A “significant impact” is any negative impact to fresh water **quantity** of a confined or unconfined aquifer that would increase the cost for treating and/or pumping that water for municipal or agricultural purposes, whether or not that aquifer is being used as a municipal or agricultural water supply.
- A “significant impact”, also, is any negative impact to Desired Future Conditions that is more than negligible.
- The determination of “negligible” is decided by the governing groundwater conservation district (GCD). For aquifers not covered by GCDs, the determination is decided by the TWDB.

- Due to geographic and temporal variables in every different aquifer, “Significant Impact” needs to be a local “on site” measure, not a statewide measure.

Define “hydro-geologic barriers”

- “Hydro-geologic barriers” are geologic features, spatial distances, and other obstructions that separate brackish zones that must separate brackish zones from freshwater zones well enough to protect the **quality** of fresh water zones from being significantly impacted by production from brackish zones, regardless of the location or character of the barrier.
- “Hydro-geologic barriers” are geologic features, spatial distances, and other obstructions that separate brackish zones that must separate brackish zones from freshwater zones well enough to protect the **quantity** of fresh water zones from being significantly impacted by production from brackish zones, regardless of the location or character of the barrier.
- Other non-geologic barriers such as distance may provide temporary protection for fresh water. However, over time these distance barriers may be compromised by continued brackish production. Hill Country Alliance recommends that all geologic and non-geologic barriers be subject to periodic review and re-evaluation over time.

*HB-30 prohibits brackish zones that are in brackish aquifers that are serving as a **significant source** of water for human or agricultural purposes...*

Define “significant source”

- A “significant source” is one that should include any usage of exempt water.
- A “significant source” should be defined as a measure of percent of overall rate as opposed to volume.
- Due to geographic and temporal variables in every different aquifer, “significant source” needs to be a local “on site” measure, not a statewide measure

Other implications:

- Though this study is not designed to have regulatory impact care should be taken to preserve individual groundwater conservation districts’ ability to manage by permit or otherwise.
- Similarly, care should be taken to preserve individual groundwater conservation districts’ ability to manage these new zones to existing DFC standards.

The Hill Country Alliance recognizes the importance that brackish groundwater production will play in the future of our state's water supplies. The hydrologic health of Texas's water system requires careful attention to the consequences of brackish over-draft on freshwater zones and spring-flow. More data and protections are needed to assure the future ecological and economic health of Texas's aquifers and surface water.