

From: Darrell S. Peckham, P. G.
Sent: Friday, October 30, 2015 10:23 PM
To: Sanjeev Kalaswad; John Meyer
Subject: Comments on HB 30

Gentlemen,

I am sending these after State of Texas working hours on 10/30/15.

You may show them and formally speak to them if you would like. I certainly do not require a formal response. I have free time these days, if you would like some free thoughts and comments I will be happy to come in and discuss informally.

My comments on HB30 to the TWDB:

I recommend due to time constraints and the need to identify brackish water zone as per legislation that the TWDB ask contract consultants to delineate all of the "Subdivisions of a groundwater reservoir" as per the definitions in Ch. 36.

"Groundwater reservoir" means a specific subsurface water-bearing reservoir having ascertainable boundaries containing groundwater.
(7)

"Subdivision of a groundwater reservoir" means a definable part of a groundwater reservoir in which the groundwater supply will not be appreciably affected by withdrawing water from any other part of the reservoir, as indicated by known geological and hydrological conditions and relationships and on foreseeable economic development at the time the subdivision is designated or altered.

Within each subdivision of a groundwater reservoir the TWDB could apply a criteria for determination of "brackish water zone" to meet the direction of HB 30. Obviously, TWDB will establish subjective criteria as required by HB 30 which will most likely become statute when adopted by the Legislature. This is an important task as it will potentially impact the private property of millions of Texans. HB 30 only requires the TWDB to determine the amount of brackish groundwater that the zone is capable of producing over a 30-year period and a 50-year period without causing a significant impact to water availability or water quality in any area of the same (or other) aquifers that have an average total dissolved solids concentration of less than 1,000 milligrams per liter. This is simple direction with some very tough decisions to be made such as "significant impact". I recommend that when the TWDB addresses "significant impact" to water availability the TWDB use the estimated impact to Total Estimated Storage. An example would be to use a value of 0.1% estimated impact to estimated storage of water in place at the nearest fresh water well as a bounding condition. Using storage of water in place would be the best estimated parameter as it is the least sensitive estimated modeling parameters and most direct estimates of availability. The water quality could be a very simple allowable increase in Total Dissolved Solids at the same nearest fresh water well. Monitoring recommendations to achieve

compliance with boundary conditions could easily be obtained from the nearest fresh water well if properly equipped.

Again, I will be happy to discuss at your convenience.

Darrell S. Peckham, P.G.