Stakeholder advisory forum for the Gulf Coast Aquifer Brackish Groundwater Mapping Project

June 22, 2016 1:30–3:30 pm.

Meeting held in Room 1-100 at the William Travis Building, Austin, TX.

List of Stakeholder Statements (S), questions (Q), and responses (R).

Note: This list is based on meeting notes. A video recording was not made.

1. **Q: If the injection wells were not in the Chicot and Evangeline aquifers along the coast, would the lack of clay confining layers in the Chicot and Evangeline also prevent selection of Potential Production Areas?**
   A: INTERA response – Yes.

2. **Q: What is the surface area of the Potential Production Areas selected along cross-section 22?**
   A: INTERA response – Approximately 10 by 10 miles in southern Duval County.

3. **Q: What is the general total dissolved solids concentration of the Potential Production Areas?**
   A: INTERA response – 3,000 to 12,000 milligrams per liter total dissolved solids.

4. **Q: You considered public water supply wells as municipal wells but did you consider agricultural and domestic wells?**
   A: INTERA response – The submitted drillers report database was used and includes these types of wells. The public water supply well depth is not a driver except in Montgomery County in the Catahoula Formation.

5. **Q: On cross-section 6 in Montgomery County does the dark brown line act as an exclusion for designation of Potential Production Areas?**
   A: INTERA response – Yes. This is due to agricultural and Catahoula wells. No Potential Production Areas were designated.

6. **Q: Is the selection of 400 foot as the distance between the base of fresh water and the top of a potential production area an arbitrary value?**
   A: INTERA response - Yes, it is arbitrary but is based on the requirement that there can be no significant impact to fresh water in the same or adjacent aquifers. This will be evaluated with modeling.

7. **Q: The percent of tight clay versus not tight clay – how was this determined?**
   A: INTERA response – I eyeballed it. When modeling is performed we will see the results. Maybe these values are too conservative. We do not want to go too shallow and have impacts.

8. **Q: Typically one would see shallow fresh water and more saline water at depth. In the Lower Rio Grande Study performed by the Texas Water Development Board we saw inversions with areas having more saline water above fresher water and then becoming more saline with depth. What have you seen in other parts of the Gulf Coast?**
   A: INTERA response – You will see this in the sands on the cross-sections. We will only map the base of the major salinity zones. You will see funny total dissolved solids concentration in some formations. Absolutely you will see inversions of salinity.

9. **Q: So due to the scale of the study you will not map individual salinity zones?**
   A: INTERA response – No, you will not see this. Only formation averages.

10. **Q: What are the sizes of the Potential Production Areas?**
    A: INTERA response – I cannot tell you an exact configuration. These are estimated at this time. You need a high well density to define the Potential Production Areas. I selected Potential Production Areas only along the cross-sections where I had well logs to estimate the areas.

11. **S: When we [Bureau of Economic Geology and INTERA] were mapping sands and clays using geophysical well logs we used two tools: Spontaneous Potential and resistivity. The Spontaneous Potential tool will show higher deflections as the salinity and depth increase.**

12. **Q: When will the modeling start?**
    A: INTERA response – Some of the work has already started and the remainder of the project will focus on modeling the Potential Production Areas.