Stakeholder advisory forum for the Rustler Aquifer Brackish Groundwater Mapping Project

June 17, 2016 1-3 pm.

Meeting held at the Pecos County Courthouse, Fort Stockton 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: Will the cross-section on the table be publicly available?

A: INTERA response - Yes, with the final draft of the report

2. Q: Are there injection wells in the Rustler Aquifer?

- A: INTERA response Yes, they will be discussed in this presentation
- S: That is disappointing [referring to there being injection wells in the Rustler Aquifer].

3. Q: Is the Tessey Limestone part of the Capitan Aquifer?

A: INTERA response - They are aware about the discussion, but they have not seen the data to support this. This question was a result of Slide 7, where the Tessey Limestone is shown to be a lateral equivalent of the Rustler and upper Salado in the Glass Mountains region of Pecos County.

4. Q: Is the Tessey Limestone part of the Rustler model for recharge?

A: INTERA response - The present study will not be revising the Rustler groundwater availability model. Discussion of the modeling task will occur later in the presentation.

5. Q: Is the faulting in the region compressional or extensional?

A: INTERA response - The faulting is extensional in response to collapse in evaporites underlying the Rustler. The question was a result of Slide 8 that shows offsets of the Rustler Aquifer by normal faults.

6. Q: INTERA asked if stakeholders knew of additional Rustler wells in the study area. We need to know about these when considering areas for exclusion from potential production areas. This statement is in response to Slide 38.

A: A representative of the Middle Pecos Groundwater Conservation District stated that there are some Rustler wells in the Coyanosa area. He indicated that the district could provide this data to INTERA.

7. Q: Are the contracted studies being conducted for House Bill 30 a good value for the money?

A: TWDB response - With respect to this Rustler study, there is tremendous value in advancing our geological understanding of the aquifer. Previous Rustler work mapped the top and bottom

of the aquifer. This study mapped the formal and informal geological members, relating the subdomain and faulting. This study is also helping advance our understanding of salinity distribution with well water quality data and geophysical well log analysis.

However, the timeframe imposed by House Bill 30 for the four aquifer studies that are due this December (Carrizo-Wilcox, Gulf Coast, Blaine, and Rustler) is very difficult. By the time TWDB initiated the contracts it was January 2016, leaving less than eight months to complete these studies. We will identify topics that require further work in the future when these studies are completed at the end of August of this year.

8. Q: Can these studies be used for aquifer subdivisions?

A: INTERA response - These are a good first step. We need a better definition of well use data. Some of these areas are poorly constrained. We need more data for modeling.

9. Q: How and when do you define significant impact?

A: TWDB response - We have not received a consensus definition of significant impact through our stakeholder meetings yet. Texas is a big state, each of the aquifers is different, and there are 100 groundwater conservation districts in Texas.

We have requested our contractors to evaluate different pumping rate scenarios using modeling and develop tables showing impact of head changes. The contractors will prepare a table showing pumping rate versus head change impact. It will be up to groundwater conservation districts to evaluate future permit requests and if permits are for brackish groundwater, these reports will help provide some understanding of how the brackish groundwater will behave. These studies are desktop evaluations. Anyone developing brackish groundwater well fields will need to drill test wells and monitor wells in order to understand how a well field will interact with fresh water resources in the same or adjacent aquifers. One aspect of these studies that has not been mentioned yet is that the TWDB will recommend monitor well evaluation of brackish groundwater well fields.