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Meeting Minutes

To: TWDB

From: INTERA Incorporated

Date: January 22nd, 2025

Re: Seymour-Blaine GAM – Stakeholders Advisory Forum No. 1

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1 Meeting Agenda

- Virtual Meeting Start: 10:00 AM Central Time
    - Introductions: 10:00 AM – 10:03 AM
        - Project Objectives
        - Project Team
    - Background: 10:03 AM – 10:25 AM
        - Basics of Groundwater Flow
        - Numerical Groundwater Modeling
    - GAM Specifics: 10:25 AM – 10:47 AM
        - Model Conceptualization
        - Model Development
        - Model Limitations
    - Data: 10:47 AM – 10:50 AM
        - Key Data Sources
        - Data Requests
    - Schedule: 10:50 AM – 10:52 AM
        - Project Schedule
    - Questions & Answers, Discussion: 10:52 AM – 11:02 AM
- Virtual Meeting End: 11:02 AM Central Time

2 Attendance

- Attendance to the virtual meeting included the following:

1. Daryn Hardwick (TWDB)
2. John Ewing (INTERA)
3. Michelle Pedrazas (INTERA)
4. Allan Foster (INTERA)
5. Ray Brady
6. Adam Lee
7. Amy Bush
8. Andrew Donnelly
9. Bence Close
10. Blaine Hicks
11. Connie Beniquez
12. Evan Strickland
13. Jennifer Badhwar
14. Jevon Harding
15. Lynn Smith
16. Natalie Ballew
17. Robert Bradley
18. Whitney Wiebe
19. Andrew Donnelly
20. Kristie Laughlin

3 Questions & Answers

- Question from Lynn Smith:
    - How will pumping be addressed in the model?
        - Answer from INTERA
            - Use of updated pumping file by LRE (still in preparation).
            - 1980-2000 from original GAM.
            - 1980 – 2012 in Haskel Knox Baylor Pod.
        - Answer from TWDB
            - More recent pumping will be updated and provided by LRE (deliverable is late).
            - Final pumping should be delivered this week or next week.
            - This RFQ did not include updating the pumping file, just using pumping file. After review and or revision by TWDB, INTERA will also review for appropriateness prior to use in the modeling effort.

- Question from Lynn Smith:
    - Is this model going to more or less combine the two separate models (Seymour and Blaine) into a single model? And will those grid cells be smaller than you had back in in 2000 when you were working on that previously?
        - Answer from INTERA
            - We will be using and building prior studies (Ewing, 2004 and Jones, 2012, Finch, 2016, others) for this model update.
            - Refinement of the model grid to the Seymour Aquifer to 1/8*th* mile, Blaine Aquifer will still be 1-mile, but better constrained.
            - The Seymour and Blaine model representations will be connected as one-(1) model.
            - Relative to the 2004 GAM (Ewing, 2004), the big improvement to the Blaine is the structure, information based on the water quality information that shows the base of the aquifer. That came out of the Finch and others BRACS study in 2016. The Seymour will have increased 1/8th of mile cell size, which is an improvement from the 2004 GAM where the Seymour cells were 1 mile cell size.

- Question from Amy Bush:
    - Will pumping be more constrained to actual pumping locations? Or is it going to be done more like this, the recent update to the Ogallala, where it was kind of averaged out over a county?
        - Answer from INTERA
            - We're going to try to put it in individual wells if the data supports it. Sometimes, we only get pumping for an aquifer at a county level where you don't have well by well information so it it's hard to say exactly how we'll do.
            - We've done it differently on different aquifers. I've been involved with the, and been the lead modeler for six-(6) GAMs. Depends on the level of data you have.

- Question from Amy Bush:
    - Would it help to have locations of pumping even if you don't have pumping data for those?
        - Answer from INTERA
            - Yes, please share the data.

4 Discussion

- Lynn Smith compliment for John Ewing:
    - I guess the last thing I'd say is we appreciate you being willing to work on this model and getting this in before you retire is going to be a great thing for our GMA.

5 Miscellaneous Notes

- Lynn Smith comment on available pumping data:
    - Lynn will be doing some summer-time pumping data collection, which he'll send over, even if it's not used in the model, it will be useful for model update and sanity checks.
- Amy Bush comment on available pumping data:
    - We have a bunch of GIS files that the district has already created about where all the circles are and that kind of thing. I assume that you guys are already using Mesquite's like all of their, they have GIS files and everything of all the pumping for the last ten-(10) years and the locations of that.
- Lynn Smith comment on additional data sources to consider:

    - I think you know one of the things to keep in mind is not only does the BRACS group have some good data, particularly for the Blaine, but your Ag conservation people have pumping data.
    - Not so much rolling plains, but they certainly have a complete set of pumping data for maybe five-(5) or eight-(8) years at Mesquite GCD.
- Link from Daryn Hardwick in the virtual meeting chat:
    - Model webpage
        - https://www.twdb.texas.gov/groundwater/models/gam/symr/symr.asp

6 Contact Information