

Item 9c | GMA 12 DFC Planning Update | January 2021

The GMA 12 representatives met virtually on January 15, 2021 to continue the quest of adopting Desired Future Conditions (DFCs) for the 2021 planning cycle. Items on the agenda included:

- Presentation by Environmental Stewardship detailing their position of creating a DFC for surface water flow created by groundwater interaction
- Presentation by Steve Young for Post Oak Savannah GCD (POSGCD) relating to the proposed modifications of pumping files currently in Groundwater Availability Model (GMA) Run S-7 and corresponding to the Queen City, Sparta, Carrizo, and Simsboro aquifers
- Presentation by Steve Young on the Yegua-Jackson (YJ) GAM S-2 for consideration of proposed Desired Future Conditions (DFCs) for the YJe Aquifer
- Discussion of the need for additional GAM runs relating to the Queen City, Sparta, Carrizo and Simsboro aquifers
- Instruction to the consultants to prepare a presentation for the Brazos River Alluvium Aquifer effect of pumping GAM run

The Environmental Stewardship (ES) representative, Steve Box, followed up on his presentation advocating that GMA 12 develop a DFC for both the Colorado and Brazos rivers due to the interaction between the rivers and aquifers. The interaction occurs as rivers intersect the outcrops of the aquifers. ES has also submitted comments for initial surface water DFCs to be set for both river basins. This is a difficult task due to the complete lack of quantitative field data to support the amount of contribution by groundwater to the rivers in either basin. This will be one of the comments that BVGCD will consider at the time of DFC adoption.

GMA representatives had a robust debate concerning POSGCD proposed modification of pumping files currently contained in the GAM run S-7 for the Queen City, Sparta, Carrizo, and Simsboro aquifers. Three (3) of the four (4) proposed modifications dealt with predictive pumping. The proposed modification for the Carrizo Aquifer dealt with existing (actual) pumping now occurring with the district.

GMA 12 representatives agreed at the beginning of the current planning cycle to submit pumping files that reflected the actual and predicted pumping within their respective districts. GAM runs S-1 through S-3 measured the effect of pumping at 100%, 75%, and 50% of all permitted pumping. GAM runs S-4 through S-6 superimposed drought conditions on each of the above listed GAM runs.

GAM run S-7 then proposed allowing each district to make adjustments to predictive pumping files and to the ramp up of pumping over the 50-year planning horizon. This is the GAM run that POSGCD has an issue with and wants to modify. The proposed modifications for the Queen City, Sparta, and Simsboro all dealt with predicted pumping. The proposed modification of the Carrizo pumping file would insert 12,000 ac-ft/yr into the model and replace the 18,200 ac-ft/yr file that reflects actual pumping currently occurring from the aquifer.

GMA 12 members were asked to vote on whether to incorporate all of the listed pumping file modifications into an S-10 GAM run. Members of the GMA voted 4-1 to allow modified files to be used in an S-10 run for the Queen City, Sparta, and Simsboro aquifers and to exclude the proposed Carrizo Aquifer modifications.

Following the presentation by Steve Young concerning pumping effects in the Yegua-Jackson (YJ) Aquifer, GMA members voted to adopt the proposed DFCs generated by the YJ GAM run S-2. A 90-day public comment period will begin once the District is notified by the GMA 12 administrator.

The hydrogeological consultants were instructed by the GMA members to prepare a presentation of pumping effects on the Brazos River Alluvium Aquifer (BRAA). Only POSGCD and BVGCD will set a DFC for the BRAA. The presentation will occur at the February planning meeting with possible adoption of proposed DFCs occurring.

TWDB staff reported only one step remains for the proposed revisions to the current GAM to be officially incorporated into the model. The final step is the review by and signature of the TWDB Executive Director.

The next meeting on February 12, 2021 should result in focused approach to accomplishing the DFC adoption task. Deadline for DFC adoption by GMA 12 is May 1, 2021 with several hurdles remaining to be cleared.