Item 5 | DFC Planning for all Managed Aquifers

There have been ongoing discussions with Post Oak Savannah (POSGCD) and Lost Pines (LPGCD) GCDs concerning the results of GAM run S7, the effects modeled by S7, and pathways forward for both districts. Both have stated they want little or no change to the existing DFCs in the Carrizo-Wilcox. GAM S7 radically increased the DFCs in both districts based on predictive pumping from permitted wells. S7 modeled the exact opposite for Brazos Valley GCD significantly lowering the DFC in the Calvert Bluff, Simsboro, and Hopper aquifers.

The Yegua-Jackson (YJ) Aquifer is another concern for Post Oak Savannah GCD after implementing a “Well Mitigation Plan” a couple of years ago. Pumping from the YJ in BVGCD has not increased since the last round of planning. This led to created pumping files very similar to 2015 files. POSGCDs pumping files have increase to approximately 14,000 ac-ft/yr for this round of planning as compared to 2015 values of 4,000 ac-ft/yr. Modeled results with the new pumping files predicts many YJ water wells in Burleson County will draw down below the current pump settings triggering mitigation. There is currently no real issue, only a modeled one.

The Brazos River Alluvium Aquifer/Sparta Aquifer issue presented by POSGCD is an ongoing matter as no GAM model runs have been executed at this time. POSGCDs concern is based wholly on one monitoring well in Burleson County and the BRAA model developed by TWDB. This model was never intended to model interaction between the BRAA and underlying confined aquifers.

BVGCD has 24 Sparta monitoring wells of which one (1) is .25 miles from the Brazos River, three (3) are within 2.25 miles of Burleson County, and six (6) are within 8-10 miles of the river. Water levels in these wells have been measured over an extended period of time and clearly indicate stable or rising artesian water levels.

It should also be noted that the BRAA deposits shift to the west side of the river into Burleson County near Hwy 21. This is the location of the lone POSGCD Sparta monitoring well. It is reasonable to believe that if there is significant BRAA/Sparta interaction and effect on artesian water levels that the culprit would be BRAA pumping in the vicinity of the monitoring.

As detailed above, there are a number of hurdles to be overcome this DFC planning round. We will continue to work closely with our neighboring districts to find solutions to these issues.