education
conservation
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hill country alliance

June 30, 2021

Ron Fieseler
P.O. Box 1516
Johnson City, Texas 78636

RE: The Hill Country Alliance's Public Comments on the Desired Future Conditions of Groundwater Management Area 9

Dear Mr. Fieseler,

Please accept this letter as the official comments of the Hill Country Alliance (HCA) for the Desired Future Conditions (DFCs) of Groundwater Management Area 9 (GMA 9). We want to begin by recognizing the critical role both Groundwater Conservation Districts (GCDs) and GMAs play in our state's water planning process. The regional cooperation of GCDs within the GMA framework is critical to the long-term protection of our groundwater, which sustains our rivers, supports both rural and urban livelihoods, creates incredible belowground ecosystems, and powers our economy. We commend the work being done by GCDs, the only entities protecting groundwater resources. GCDs know best the importance groundwater plays in supporting the livelihoods of Hill Country residents, landowners and our precious ecosystems. At HCA, we are dedicated to seeing more institutional resilience granted to GCDs through increased state funding and legal backing. Below, we offer our comments on GMA 9's proposed DFC of 30-foot drawdown for the Trinity Aquifer, provide our thoughts on ways to improve the public comment process, and suggest improvements to our groundwater planning and management framework.

Proposed 30 foot-drawdown of the Trinity Aquifer

Given the unknowns surrounding the localized impacts of an average 30-foot drawdown, as well as a lack of sufficient population and hydrological data incorporated into the current models, HCA believes that a more conservative drawdown is necessary to protect the aquifers in GMA 9. We recognize that the population of the Texas Hill Country is growing, that our current frameworks offer few tools for GCDs to deny permit requests that comply with the rules laid out by each district, and that we need more localized scientific studies to model the impacts of drawdown within distinct geographic areas of the Hill Country. In fact, the proposed 30-foot drawdown of the Trinity Aquifer is not adequately quantified, lacks important detail of aquifer characteristics and does not protect the health of thousands of private wells and the springs that keep Hill Country rivers flowing.

- *The proposed DFC does not adequately factor in potential environmental and socioeconomic impacts of drawdown*. The proposed DFC of 30-foot drawdown for the Trinity Aquifer will have unreasonable ecological and economic consequences for downstream users by reducing base flows to springs and rivers that sustain aquatic habitats and by impacting recreational uses of rivers. Continuous drawdown of groundwater will eventually deplete our aquifers to such an extent that they are unable to supply base flow to our rivers or well water for landowners. In the Hill Country, groundwater supports 30% of the baseflow for rivers and streams. The Trinity Aquifer supplies critical flow to springs and rivers throughout GMA 9. If base flows are reduced to a point where recreational and ecological services are considerably impacted, the substantial public and private investment that has been made in riverine parks and nature preserves would be jeopardized. Once water levels decline to the degree planned for in the proposed DFC, recovering springflow will be difficult, if not impossible. Groundwater is also increasingly relied on as surface water is now mostly allocated. We are at an inflection point where it is critical we manage our groundwater supplies conservatively, for their long-term health.

- *The proposed DFC does not account for the distinctive character of the Trinity Aquifer's Middle and Lower formations*. Using one regional average for drawdown across a large, complex aquifer is a misleading planning metric. In the last DFC explanatory report, in response to a similar comment, this answer was given: "*GMA-9 has chosen to include the entire Trinity aquifer in the DFC. In this way, we have obtained calculated MAG quantities for all Trinity aquifer layers which are useful in our regional planning.*" This does not offer an explanation for **why** this decision was made. Section 36.108(d-1) of the Texas Water Code allows for the creation of different DFCs for different "subdivision[s] of an aquifer within the boundaries of the management area." To date, the GCDs in GMA 9 have set DFCs based on their political jurisdictional boundaries. Yet, water knows no political boundaries. It is well within the authority of GMA 9 groundwater districts to instead establish DFCs based on the distinctive Middle and Lower subdivisions of the Trinity Aquifer and model accordingly.

- *There is too much averaging in model results and assumptions in the models to make accurate predictions about local conditions.* Due to the way a model must average all known conditions and stresses that occur within an area represented by a single model cell, a model underestimates the actual drawdown that results from the pumping of individual wells within the same area of a real aquifer. For example, projections of growth in groundwater pumping from exempt wells vary greatly, making it difficult to effectively estimate the actual water available.The model's coarse grid (one square-mile cell size) is a major limitation that diminishes the model's usefulness as a representation of reality. It is problematic to rely on the model, as currently formulated, as a tool for groundwater stewardship. Relying on the model to justify pumping increases and a 30-foot drawdown is particularly unwise.

Improvements to the DFC Public Comment Period

The DFC process is complicated, technical and ripe for innovation. It is HCA's vision to serve as an aid for connecting the public to this important management process, and supporting GCDs in managing groundwater more transparently and conservatively. We acknowledge the time and funding constraints GCDs are under. We also recognize that strong guidelines from the Texas Water Development Board could facilitate greater public participation and transparency. At HCA, we have the capacity to assist in creating educational and outreach materials for GCDs' use to increase public engagement in groundwater management. In order to best assist the public and encourage engagement, we have listed some aspects of the current DFC public comment period that we believe should be improved:

- *Establish a clear start date*. Currently, it is unclear when the public should get involved in the DFC planning process as there is no set start date. The clearest opportunity to comment on the DFCs comes at the 11th hour of planning, when models have been run and the DFC is all but set in stone. Establishing a clear start date, inviting public participation early in the process, and increasing coordination among neighboring GMAs would help clarify to the public the best time to get involved.

- *Release an explanatory report prior to public comment period*. As it stands now, the public is asked to submit comments without seeing a version of the explanatory report. The comments provided by the public could be more relevant and useful if an explanatory report was made public prior to the comment period.

- *Require less technical comments from the public*. Public commenting on DFCs requires interested individuals to submit technical comments as though they themselves are hydrogeologists. This emphasis on comments that are purely technical in nature precludes many stakeholders from participating.

Future DFC planning considerations

In addition to improvements to the DFC public comment period, we see other areas for improvement in the current DFC process. These improvements will require support and additional funding from state agencies. In particular, we would like to emphasize:

- *Reduce the hydrological disconnects between planning and reality.* DFCs should be established not along political county boundaries but along distinct hydrogeological areas. DFCs should consider surface water conditions, such as springflow or river baseflow, particularly where hydrologically connected to aquifers. More science and data are needed to more effectively manage groundwater, and data collection support should be provided by the state. We know these studies are achievable, and are encouraged to see such studies currently underway in the Blanco River Basin.

- *Improve stakeholder involvement*. In addition to improving the DFC public comment period, we would also like to see an increase in transparency and access in all GCD and GMA activities. Online meetings offer stakeholders who are unable to travel to in-person meetings the option of attending and staying informed on the issues they care about. Maintaining an online option to meetings is an easy way to increase public engagement.

- *Funding for GCDs should be better supported by the State*. GCDs are burdened by unfunded mandates. The DFC process is time and money intensive, diverting funds away from groundwater management as GCDs create exhaustive reports and documentation. GCDs across the state are struggling with insufficient funding and lack the institutional resilience granted other state agencies to sustain legal challenges. The Texas Legislature should act to better support GCDs in their mandated mission to protect, preserve and conserve the state's important groundwater resources. We also believe it is incumbent upon the TWDB to find ways to fund a state-wide training campaign for GCDs and modelling contractors. The TWDB has used Requests for Information (RFIs) in the past to learn more about innovations in the private sector. Something similar could be done to learn about different modelling capabilities available in other sectors. We encourage the TWDB to use its power to find creative ways to fund and implement training programs designed to increase data collection capacity and utilize the best available models to most effectively manage our precious groundwater resources.

So much of what we treasure in Texas--and what makes life and business here viable--relies on healthy groundwater. With each passing day it becomes more evident that the status quo approach to groundwater management will have detrimental impacts on our environment, society and economy. We believe the time has come to prioritize the preservation of this precious resource and take the bold steps necessary to use less and reuse more. Sustainable alternatives exist and funding is available for implementation.

These comments were prepared by the Hill Country Alliance and reflect the collective vision of our Hill Country supporters and stakeholders to protect long-term spring-flow, healthy water catchment areas and sustained groundwater resources for current and future generations. The undersigned represent stakeholders in GMA 9 who support our written comments.

Thank you for your consideration,

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