

December 22, 2015

Mr. Ronald Fieseler, Coordinator  
GMA-9  
P.O. Box 1516  
Johnson City, Texas 78636

Mr. Fieseler,

Please find below the Hill Country Alliance's Public Comments to the GMA-9 2016 Desired Future Condition submittal to the Texas Water Development Board. Attached are comments in the format prescribed by GMA-9.

HCA appreciates the good work that GMA-9 and its member GCDs do to protect and preserve the groundwater resources that make the Hill Country a self-sustaining gift to future generations. We respectfully request that GMA-9 address, and to the extent possible, incorporate these recommendations into policy and practice.

Thank you,

Charlie Flatten  
Water Policy Program Manager  
Hill Country Alliance  
512/694.1121

CC: Velma Danielson, Blanton and Associates; Larry French, TWDB

## **Hill Country Alliance Public Comment GMA-9 Desired Future Condition Proposal**

The Groundwater Management Area (GMA) water resource planning system plays a critical role in our state's water planning process, and the Hill Country Alliance is appreciative of the huge effort that is involved in creating regional Desired Future Condition (DFC) guidelines. Our comments reflect the collective vision of our Hill Country supporters, stakeholders, businesses, and elected officials for a groundwater planning tool that recognizes the need to protect long-term spring-flow, optimal inter-aquifer communication, and functional surface and groundwater interaction to provide sustained groundwater resources for current and future generations.

Our comments on the prescribed *GMA-9 Public Comment Form* (attached) will include that specific DFCs be set at a zero drawdown, and comments on specific aquifers' (non)relevance. Additionally, though it is beyond the scope of this specific planning exercise, Hill Country Alliance would like to submit broad recommendations for the improvement of the DFC process, specific commendations drawn from individual Groundwater Conservation District (GCD) policies outlined in their management plans, and recommendations for additional study and research.

Hill Country Alliance acknowledges that some of our recommendations may require action by the Texas Water Development Board and/or the Legislature, and may not be the sole responsibility of GCDs in this GMA; however, this planning group should press for the incorporation of these recommended concepts, as they are able.

**Broad Recommendations:** Only by constantly seeking improvements to the GMA groundwater planning process can we ensure that our aquifers continue to provide sustained aquifer levels, base-flow to Hill Country streams and rivers, and thus economic viability to the region for all future generations.

- In order to provide water for future generations, Hill Country Alliance recommends that the GMAs adopt and apply a set of **guiding principles** that will serve as a blueprint for long-term water sustainability. An example: *The economy and land values of Texas depend on meeting its water needs in a way that does no harm to rivers, streams, springs, and aquifers.*
- Due to the importance of spring-flow on the base-flow of our rivers, it is reasonable that Hill Country Groundwater Conservation Districts consider **management rules designed to protect minimum levels of spring-flow.**
- HCA would like to commend GMA-9's member GCDs for adhering to the rational practice of only permitting within the limits of its **MAG.**
- **Rainwater harvesting** should be widely encouraged to meet rural and urban domestic water demands, as well as use for limited irrigation, such as vineyards, orchards or small farms under drip irrigation. Livestock and wildlife can also be provided supplemental water by rainwater harvesting.
- Considering the challenge and cost of providing surging numbers of new water customers with finite water supplies, outdated infrastructure-intensive water management strategies need to be

discouraged in favor of innovative localized modern **water neutral solutions**. GCDs should prioritize and encourage new development with decentralized systems and new technologies that capture, use, and reuse water in place through groundwater management plan rules. Rainwater harvesting, aquifer recharge, and reclaimed water for non-potable uses are among a variety of alternatives to groundwater. While we understand that each GCD's authority will vary, protecting our groundwater resource will require more proactive management in the future.

**Study and Data Needs:** Hill Country Alliance would congratulate the excellent and persistent exploration of aquifer science by GMA-9 membership, and will continue to assist in all possible opportunities for specific studies that will serve to shed more information on specific aquifer qualities and quantities.

- **Aquifer Science** - The Hill Country is underlain by limestone aquifers in which there are many remaining hydrological questions. A basic, unbiased, scientific study that encompasses the hydrologic characterization of the inter-formational flow between these adjacent and associated aquifers and their contribution to surface water flows is needed in order for the local groundwater management entities to make informed management decisions and recommendations that maintain sustainable systems.
- **Headwaters Groundwater/Spring-flow Analysis** - Surface water base-flow in most Hill Country Rivers is derived almost exclusively from groundwater discharge through springs. However, development of management practices is impaired by a lack of understanding about how groundwater level elevations relate to spring-flow rates. Few monitoring wells are in place that can provide continuous water level readings, and no attempt has thus far been made to relate this data to spring-flows. A study is needed to evaluate this critical interaction so that future management decisions can be based on a more substantial level of scientific knowledge.
- **Groundwater/Surface Water Relationship** – Hill Country Alliance will continue to encourage the State (TWDB) to embrace this concept and focus water availability studies on this topic. This water supply policy definition can best be achieved when the relationship between groundwater and surface water is fully understood.
- **Unpermitted Withdrawals of Riparian Aquifer Water** - A significant amount of unpermitted riparian water is withdrawn from river alluvium that is unaccounted for in the Water Availability Models. GCDs should devise a survey method to establish a reasonable estimate of these diversions and regulate them where allowable by rule.