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Petition Challenges Water Plan to Allow for More Groundwater Pumping Than is Available in the Hill Country

The Wimberley Valley Watershed Association has filed a Petition Appealing the 30' Desired Future Condition (DFC) Drawdown Set by Groundwater Management Area 9 (GMA-9) for the Trinity Group Aquifers in Hays County and is calling for the Hays Trinity Groundwater Conservation District (HTGCD) and GMA-9 to determine the 30' DFC as unreasonable and unsustainable.

The purpose of the appeal is to request action from the Texas Water Development Board to determine a realistic DFC for groundwater sustainability in the Texas Hill Country. The 30 foot average drawdown for the Trinity Aquifer, as adopted by GMA-9 on July 26, 2010, and as it applies to the Trinity Aquifer in the HTGCD allows a drawdown that will deplete the aquifer. Concern that the proposed 30' DFC mandate will negatively impact private well owners, landowners, aquatic habitats and businesses dependent on spring and base flows in rivers in the Hill Country is widespread.

John Ashworth, the geologist who wrote the TDWR Report 273 *Ground-Water Availability of the Lower Cretaceous Formations in the Hill Country of South-Central Texas*, states, "The Hill Country of Central Texas with its underlying Trinity Aquifer is a prime example of an area undergoing water supply management consideration. In some areas, withdrawals of groundwater from the Trinity have advanced beyond sustainable limits and are resulting in expanding mining of the resource."

The filed appeal states that the proposed DFC of a 30 foot average drawdown would allow more pumping in Hays County than the TWDB-approved management plan's available groundwater. Recent experience shows that current pumping by itself may be unsustainable, as evidenced by the unavailability of water in wells and springs during drought conditions in 2009. During 2009, forty two existing and operating groundwater wells in the Hays Trinity Groundwater Conservation District (HTGCD) were reported dry or had to lower pumps due to declining water levels. The Blanco River, Jacob's Well, Onion Creek, and many other perennial springs and rivers in the Hill Country went dry.

Jacob's Well is a prime example of how current pumping levels are already stressing the limits of water availability in the Trinity Aquifer. During the height of the 2008-2009 drought, daily mean flow at Jacob's Well essentially stopped for 167 days (6 months). Before 2000, the spring had never stopped flowing in recorded history. The 2009 cessation of flow occurred with only an approximate 2 to 3 ft drawdown upgradient of the spring, much less than the 19 ft average drawdown allowed in the proposed DFC.

Marcus Gary, a hydrogeologist specializing in karst aquifers, expresses his concern regarding the degree of groundwater extraction planned for the area included in Texas' Groundwater Management Area 9 (GMA-9). He states, "In my opinion, this mining of the Trinity Aquifer will have many negative consequences, including numerous domestic and public water wells becoming unusable, significant loss of direct contribution to the Edwards Aquifer through cross-formational flow, elimination of all base flow to surface streams in the Edwards Aquifer Contribution Zone, and cessation of all natural groundwater discharge features, including Jacob's Well north of Wimberley."

Geological data on the base flow in springs and rivers documents the critical nature of maintaining habitat, ensuring good water quality, sustaining property values along streams, sustaining businesses involved in recreation and tourism, and ensuring the long-term provision of water from the rock matrix that makes up an aquifer. The depletion of springs and rivers also jeopardizes the substantial public and private investment in river parks and nature preserves, such as Jacob's Well Natural Area and Blue Hole Regional Park. Investments in these two parks alone total over \$11 million to date.

Conservation and protection of groundwater to balance multiple and competing uses is the primary purpose of groundwater conservation districts. Both the HTGCD and Regions K and L Water Planning Groups have formally adopted management goals to ensure the long-term sustainability of aquifers and to prevent aquifer mining. The proposed DFC directly contradicts the stated goals of these groups, since it will allow permits to be issued for high quantities of groundwater that further deplete the Trinity Aquifer.

Rene Barker, a hydrogeologist with experience in karst hydrology and groundwater modeling states in his affidavit supporting the DFC Petition, "I am concerned that the regionally formulated DFC allowing for an additional 30 feet of regionally averaged (regionalized) water-level decline will significantly impact the production and reliability of individual groundwater wells. . . It is highly likely that this DFC will result in untold numbers of dry wells and significant periods of zero springflow, not only from relatively large springs such as Jacob's Well, but also from a multitude of backyard springs and shallow seeps." His testimony concludes that the DFC is inconsistent with sound water resource management policy.

Jack Hollon, President of WVWA, expresses further concern, "In summary, a 30-ft average drawdown of the Trinity Aquifer in GMA-9 would lead to a major degradation of economic, ecological, and quality of life conditions across the Texas Hill Country." To view and download the full DFC petition and supporting technical documents go to www.jacobswellspring.org and www.hillcountryalliance.org.