



July 15, 2025

Texas House Committee on Natural Resources

Interim Hearing on High-capacity and large volume groundwater production from the
Neches and Trinity Valley Groundwater Conservation District

**Testimony of Vanessa Puig-Williams, Senior Director, Texas Water, Environmental
Defense Fund**

Chairman Harris and Members of the House Committee on Natural Resources:

Thank you for the invitation to provide testimony on this important issue. I am a licensed attorney in Texas and a Senior Director on the Climate Resilient Water Systems team at Environmental Defense Fund (EDF). EDF's water team focuses on ensuring that across the arid west, groundwater is proactively managed to meet the needs of both people and nature. For the past five years, I have led our work in Texas, working closely with groundwater conservation districts (GCDs), communities, and members of the Legislature to advocate for improved groundwater management.

Groundwater is the lifeblood of Texas – the invisible yet critical resource that provides over half of the state's water supply, over 30% of the water in our rivers and creeks, approximately 80% of the water used for agriculture, and is often the sole source of water for rural communities and landowners. Under state law, groundwater is considered real property in Texas, owned by the overlying landowner. Local groundwater conservation districts – regulatory entities charged with managing groundwater – have the difficult responsibility of regulating a shared resource that is also privately owned.

Texas has a good framework for managing groundwater, but the law does not give GCDs sufficiently clear authority or mandates to sustainably manage groundwater, ensuring it is available for communities, farmers, ranchers, and the environment in the long-term. This hands-off regulatory approach may have sufficiently protected groundwater when Texas had a smaller population and less demand for water. But the state is growing – over 1200 people a day – and large groundwater production projects, like the one before the Neches and Trinity Valley GCD, *will* impact other groundwater users. The only way to protect these users and the property rights of all who share the resource is through more robust, science-based regulations that enable local GCDs to make informed decisions.

Below, I provide some general policy ideas and solutions to strengthen GCD authority to conserve groundwater for the long-term, thereby protecting the property rights of Texans who depend on the resource.

Increased funding for groundwater science.

During the 89th Legislative Session, thanks to Chairman Harris' leadership, the Legislature took an important first step in ensuring that GCDs have access to funding to develop local groundwater data and science, by appropriating \$7.5 million to the TWDB to provide grants to GCDs for research and science. The Legislature must continue to invest in groundwater science both at the local and state level to ensure that GCDs have data, science and tools to proactively manage groundwater. For example, robust groundwater monitoring well networks, refined local groundwater models, and site-specific groundwater/surface water interaction studies can help a GCD understand how a large-scale groundwater production project may impact the desired future condition or other groundwater users in the district. Without this information, a GCD is making decisions with blindfolds on. Additionally, TWDB could benefit from increased funding to support the Board's ability to improve and more quickly update regional Groundwater Availability Models (GAMs) so that GCDs are using the best models to develop their long-term management goals.

Strengthen GCDs authority related to the consideration of export permits.

Large-scale groundwater export projects deserve careful consideration by GCDs, as these projects can disproportionately impact the future of the communities in the area where the groundwater is produced. While Section 36.122 of the Water Code has specific elements a GCD can consider when reviewing a transfer permit, additional criteria and clear authority to deny these applications are needed. For example, robust consideration of the economic and environmental impacts potentially caused by the export of groundwater is critical. Other states provide additional criteria that must be met for an export permit to be approved. For example, in Nevada, when determining if an application requesting an interbasin transfer of groundwater should be rejected, the Nevada State Engineer must consider whether the applicant has justified the need to import the water from another basin, whether the proposed action is environmentally sound as it relates to the basin from which the water is exported, and whether the proposed action is an appropriate long-term use which will not unduly limit the future growth and development in the basin from which the water is exported. In Florida, in determining whether to approve the transport of water outside of a county, water managers must consider whether there are economically and technically feasible alternative water sources for the project, such as conservation, desalination, or

wastewater reuse. The Legislature should consider incorporating these types of considerations into Section 36.122 of the Texas Water Code.

Require GCDs to consider the sustainable yield of aquifers when adopting management goals.

Perhaps the most important question a GCD must answer when confronted with a large-scale groundwater production project (whether the water is being exported or not) is how the production will impact the sustainability of the aquifer. However, most GCDs do not know how much groundwater production can truly be sustained over time from the aquifers they manage, and moreover, the law does not require them to consider the yield that can be realistically sustained from of an aquifer when setting management goals or when evaluating permits. As a result, many GCDs adopt DFCs that allow aquifer levels to decline over time. GCDs should be required to understand and then consider how much groundwater can be sustainably pumped in the long-term from the aquifers they manage without causing unreasonable impacts to other groundwater users. Doing so will enable GCDs to protect the property rights of all groundwater owners across their jurisdictions into the future.

Provide GCDs with clear authority to cap groundwater production to conserve groundwater for all users and to protect property rights.

Groundwater may be real property in Texas, owned in place by landowners, but it is very difficult for landowners to exercise their right to conserve it, rather than produce it. With increased pressure being placed on groundwater resources across the state, it is time for the Legislature to consider providing GCDs with clear authority to cap groundwater production when certain conditions are met. Additionally, because a cap on groundwater production from an aquifer will foment the creation of a regulated market (similar to the Edwards Aquifer Authority), landowners could enter into voluntary, incentive-based transactions to conserve groundwater, allowing them to derive value from groundwater conserved in place. The alternative is that aquifers deplete over time and groundwater becomes less valuable.

Require TWDB to conduct a statewide groundwater/surface water interaction assessment.

Groundwater and surface water are connected in Texas, and large-scale groundwater production projects can potentially impact surface water resources. For a GCD to understand whether a particular groundwater project could impact a river or a spring, a significant amount of site-specific data is needed. Although TWDB has been working to fill these data gaps in many watersheds, there is still a dearth of information related to the connections between groundwater and surface water in many rivers across the state. The

Legislature could require TWDB to work with GCDs across Texas to identify areas of the state where more data related to groundwater and surface water interactions is needed and prioritize these areas for study.

In conclusion, I applaud Chairman Harris and the members of this Committee for taking time to hear from communities and landowners who are urging the state to find ways to protect their private property, their drinking water and their way of life. The ideas in my testimony are foundational components to a sophisticated groundwater management framework that will benefit all Texans, not just the ones with the biggest pump, and warrant further discussion among stakeholders during the Interim.

Respectfully,

Vanessa Puig-Williams
Senior Director, Climate Resilient Water Systems
Environmental Defense Fund
vpuigwilliams@edf.org

