

Act Now Comal

Alamo, Austin, and Lone Star chapters of the Sierra Club Bexar Audubon Society Bexar and Travis-Austin Green Parties Bexar Grotto Boerne Together Bulverde Neighborhood Alliance Bulverde Neighborhoods for Clean Water Cibolo Center for Conservation Citizens for the Protection of Cibolo Creek

Creek
Comal Conservation
Comfort Neighbors
Congregation of Divine Providence
Environment Texas
First Universalist Unitarian Church of SA
Fitzhugh Neighbors
Friends of Canyon Lake
Friends of Castroville Regional Park
Friends of Dry Comal Creek
Friends of Government Canyon
Fuerza Unida
Green Society of UTSA
Guadalupe Riverkeepers
Guadalupe River Road Alliance

Guardians of Lick Creek

Hays Residents for Land & Water Protection Headwaters at Incarnate Word Helotes Heritage Association Hill Country Alliance Kerr County Water Alliance Kendall County Well Owners Association Las Moras Springs Association Leon Springs Business Association Llano River Watershed Alliance Native Plant Society of Texas -- NB Native Plant Society of Texas – SA Northwest Interstate Coalition of Neighborhoods Pedernales River Alliance - Gillespie Co. Preserve Castroville

San Marcos Greenbelt Alliance
San Marcos River Foundation
Save Barton Creek Association
Save Our Springs Alliance
Scenic Loop/Boerne Stage Alliance
Securing a Future Environment (SAFE)
SEED Coalition
Signal Hill Area Alliance

Preserve Lake Dunlop Association

San Antonio Audubon Society

San Antonio Conservation Society

River Aid San Antonio

Preserve Our Hill Country Environment

Solar San Antonio
Texans for Environmental Awareness
Texas Cave Management Association
Trinity Edwards Spring Protection Assoc.
Water Aid – Texas State University
Watershed Association
Wildlife Rescue & Rehabilitation

April 24, 2025

The Honorable Cody Harris, Chair
The Honorable Armando Martinez, Vice-Chair
The Honorable Members Ashby, Barry, C. Bell, Buckley, Fairly, Gámez, J. Garcia, M. González, Romero, Villalobos, and Zwiener
House Committee on Natural Resources

Re: Senate Bill 7, An Act Relating to the Oversight and Financing of Certain Water Infrastructure Matters Under the Jurisdiction of the Texas Water Development Board

The <u>Greater Edwards Aquifer Alliance</u> (GEAA) appreciates the opportunity to submit these comments on behalf of our sixty-two member groups that are allied in advocacy for the preservation of our ground and surface water resources in twenty-one counties within Central and South Texas. These comments are based on the version of the bill posted on the hearing notice as of 4.23.25; we have not yet seen the committee substitute for the bill.

We are grateful to Senator Perry, Representative Harris, and the members of this committee for their continued work to address the many challenges Texas is facing as it confronts major water supply concerns. We look forward to the passage this session, and approval in the fall of a long-term, dedicated revenue stream to secure our water future, ensure the continuance of Texas' strong economy, and, most importantly, protect the health and welfare of all Texans.

Texas faces several overlapping water issues. The American Society of Civil Engineers' 2025 Texas Infrastructure Report Card gives the state a D+ on drinking water, a C- on stormwater, and a D- on wastewater. Our natural and manmade water infrastructure is increasingly strained, and we could be facing a severe water shortage in some parts of the state within the next five years. The Texas Water Development Board is already equipped with the tools to address many of the issues facing our state's utilities, but has not been funded at levels sufficient to address these needs.

We would ask that you consider funding responsible, cost-effective, efficient, and secure water supply strategies as you consider Senate Bill 7 – strategies including water loss mitigation, non-potable and potable wastewater recycling (or water reuse), and continued support for aquifer storage and recovery (ASR) projects.

We would like to state our position as being "on" SB 7. We are supportive of HB 16 and hope that the reconciliation process will result in SB 7 and Senate Joint Resolution 66 more closely resembling HB 16 and House Joint Resolution 7.

¹ https://infrastructurereportcard.org/wp-content/uploads/2025/03/2025-texas-report-card-full-report-compressed.pdf

SJR 66, as written to date, would require at least 80% of the Texas Water Fund to be transferred only to the New Water Supply for Texas Fund. We are glad to see that ASR projects are listed under the projects on which the New Water Supply for Texas Fund can be spent in SB 7. We are dismayed, however, to see that water loss mitigation projects and water reuse projects are not listed under this fund in SB 7.

Water loss mitigation and water reuse projects would go a long way towards securing Texas' water future, are highly cost-effective, would provide a relatively firm supply, and can be implemented much more quickly than other supply strategies, such as building new reservoirs or cross-state water transfers.

Under SJR 66 and SB 7, the required transfer of 80% of the funds would mean that water loss mitigation and water recycling strategies are locked out of 80 percent of the funds, potentially leaving on the table hundreds of thousands of acre-feet of water that can be supplied relatively quickly and cheaply. Texas cannot afford to leave these strategies out of its major efforts to tackle our water crisis. To ensure its maximum potential, we would ask that SB 7 be amended in the reconciliation process to add water loss mitigation efforts and non-potable and potable water reuse strategies to the New Water Supply Fund for Texas.

Water Loss Mitigation

GEAA recommends adding water loss mitigation projects to the list of projects for which the New Water Supply for Texas Fund can be spent in the reconciled bill. Recovering water lost to leaking and deteriorating infrastructure represents immediate, cost-effective, and reliable new water supplies for Texans.

According to Texas Living Waters, Texas utilities lose at least 572,000 acre-feet of water each year due to aging infrastructure - more than the total annual needs of Austin, Fort Worth, El Paso, Laredo, and Lubbock combined. If utilities achieve a "good performance level" for mitigating water loss, they could provide roughly double their municipal need. All of this could be achieved at a much lower cost per acre-foot of water than many other supply-side projects.² Texas should concentrate on fixing the infrastructure already in place and recovering the water lost before it embarks on constructing large new infrastructure projects to transfer water across the state.

Water Reuse and Wastewater

GEAA was encouraged to see potable water reuse projects listed as an addition to the projects for which the New Water Supply for Texas Fund can be spent in HB 16, and we encourage the committee to ensure the reconciled bill retains this addition. We would also recommend non-potable water reuse projects be included to the list, as a means to reduce the strain placed on drinking water supplies. A study GEAA conducted on the potential for non-potable wastewater reuse in Comal County found that "Between mining water use and estimated outdoor municipal water use, roughly 10,600 acre-feet of water use in Comal County could potentially be served by non-potable recycled water, over one-third of the county's total water use in 2020." Imagine multiplying water supplies in this manner across all of Texas' thirsty counties.

The 2022 Texas State Water Plan recommends that roughly 15 percent of the state's water supply come from some form of water reuse. To date, only about 4 percent of the state's water supply is recycled water. Recycled water is a highly underutilized strategy; it is relatively drought-proof and, at its most basic implementation, can easily help offset many non-potable uses, lessening pressure on potable water supplies.

 $^{^2\,\}underline{\text{https://texaslivingwaters.org/wp-content/uploads/Hidden-Reservoirs-Addressing-Water-Loss-in-Texas.pdf}$

³ https://twj-ojs-tdl.tdl.org/twj/article/view/7170/6509

⁴ https://www.twdb.texas.gov/waterplanning/swp/2022/index.asp

Multiple cities across Texas have successfully implemented potable and non-potable water reuse projects, like El Paso's recent highly popular implementation of a direct potable reuse system, Big Spring's indirect potable reuse system, and San Antonio's long-successful non-potable reuse system. Many more cities recognize they will need to implement similar projects, and the New Water Supply for Texas Fund could help fund them. Recycling wastewater is a proven strategy that can offset a significant portion of existing potable water use and delay or eliminate the need to acquire other new supply sources.

We were also encouraged to see that wastewater infrastructure projects would receive assured funding under the Texas Water Fund, and we encourage the committee to ensure the reconciled bill retains this addition. Wastewater in Texas currently receives the lowest infrastructure grade across all categories in the 2025 Infrastructure Report Card; increasing population growth will further strain wastewater systems across the state. The report emphasizes that "to improve the current wastewater infrastructure conditions, the wastewater industry must secure additional funding for new infrastructure, rehabilitation, and replacement of existing supplies."

Reservoirs and Storage

GEAA was encouraged to see ASR projects remain listed as projects for which the New Water Supply for Texas Fund can be spent in both HB 16 and SB 7. We recommend the prioritization of ASR projects over new surface reservoir projects in order to ensure Texans' water supplies are protected to the highest possible degree from evaporative water loss and Texans' lands are preserved.

Surface reservoirs in Texas lose around 7.4 million acre-feet of water combined each year to evaporation, according to the Texas Water Development Board. Annual reservoir evaporative losses can often *exceed* the state's total annual municipal water use. Aquifer storage and recovery, meanwhile, provides Texas with a way to store water similar to surface reservoirs without losing millions of acre-feet to evaporation each year. ASR projects are not subject to many of the same drawn-out permitting and eminent domain concerns as are surface reservoirs and can help the state avoid losing millions of acre-feet of water to evaporation, especially as we face hotter and drier conditions. As such, ASR should be considered a priority for water storage in the state.

Flood Infrastructure Funding

GEAA supports the inclusion of the flood infrastructure fund (FIF) under funds for which money from the Texas Water Fund can be transferred in both SB 7 and HB 16, but we would recommend that prioritization under the FIF be given to multi-dimensional projects that can provide water supply and other benefits in addition to flood mitigation benefits. All 15 of the state's Regional Flood Planning Groups have adopted a similar recommendation for prioritizing flood mitigation projects that have a water supply component. HB 3915, HB 4460, and SB 1967, as proposed, speak to these types of projects. We would also recommend the establishment of minimum funding thresholds for each eligible program under the Texas Water Fund to ensure resources are not spread too thin across these critical programs.

Desalination and Produced Water

⁵ https://thewaternetwork.com/article-FfV/first-u-s-facility-to-turn-wastewater-directly-into-drinking-water-zWRSLCj1TiL91AalW-ngGA

⁶ https://twj-ojs-tdl.tdl.org/twj/article/view/7170

⁷ https://infrastructurereportcard.org/wp-content/uploads/2025/03/2025-texas-report-card-full-report-compressed.pdf

⁸ https://www.twdb.texas.gov/publications/reports/technical_notes/doc/TechnicalNote21-01.pdf

GEAA supports the inclusion of brackish groundwater desalination projects in the list of projects for which the New Water Supply for Texas Fund can be spent, and we encourage the committee to ensure the reconciled bill retains this section. Texas "has vast reserves of brackish water underground," and cities have already begun implementing brackish groundwater desalination projects. According to MIT researchers, "using even a fraction of the abundant brackish water in the U.S. could dramatically improve the prospects for water-starved communities." Brackish groundwater generally has lower salinity levels than seawater and often does not need as much energy to treat.

We do have strong concerns, however, about the inclusion of produced water treatment projects in the list of projects for which the New Water Supply for Texas Fund can be spent in SB 7 and HB 16. Oilfield wastewater is "up to seven times as salty as the sea, full of proprietary drilling chemicals and naturally occurring hydrocarbons, ammonia and radioactive elements from the earth. It can't be treated by the most common methods that use membrane filters."¹²

Treating produced wastewater will require energy-intensive solutions. Texas faces rapid increases in power demand, and "treating all the effluent of the West Texas oilfield would require up to 26 gigawatts of power, more than the total generation capacity of most U.S. states." Experts in the field do not believe that produced water recycling will amount to anything "more than a marginal solution, given its cost." 14

Texas may very likely be facing a severe shortage of water by 2030.¹⁵ Without sufficient funding, water supply and funding gaps could severely hamper the "Texas Miracle," creating job loss and GDP loss at levels that surpass, on average, both the 2007-09 Great Recession and the COVID Pandemic Recession, with fewer options available to bounce back.¹⁶

Water loss mitigation, wastewater recycling, and ASR projects are projects that can provide and protect relatively large amounts of supply in the short-term. These are strategies that should be made a priority *now*, even as other supply strategies that are meant to secure our supplies by 2050 and 2070 are planned and implemented. As such, we support the flexibility and balance provided by HB 16 and its accompany joint resolution and hope the reconciled bill will incorporate these provisions into SB 7.

Thank you for your consideration. Please consider GEAA as a resource that is at your disposal. We look forward to working with you on this issue.

Kachef Hares

⁹ https://www.texastribune.org/2025/03/31/texas-legislature-water-strategies-solutions/

¹⁰ https://www.tun.com/blog/brackish-groundwater-help-alleviate-water-crisis/

¹¹ https://ascelibrary.org/doi/10.1061/40927(243)448

https://insideclimatenews.org/news/24032025/texas-oilfield-wastewater-treatment-small-nuclear-reactors/?utm_source=InsideClimate+News&utm_campaign=34caa962f7-EMAIL_CAMPAIGN_2025_03_31_01_37&utm_medium=email&utm_term=0_29c928ffb5-34caa962f7-330573050

¹³ Ibid ¹⁴ Ibid

¹⁵ https://www.texastribune.org/2025/03/13/texas-water-explained-supply-demand/

https://texas2036.org/wp-content/uploads/2024/10/TxWater-Infrastructure-Assessment Texas-2036_2024.pdf?_bhlid=941fb09800d3d599c73a71ce61fdc3965776d7b9

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