



SIERRA CLUB

LONE STAR CHAPTER

Testimony on Senate Bill 28

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Dear Chairman Perry, Vice Chairman Hancock, and members of the committee,

The Sierra Club Lone Star Chapter is neutral on SB 28. The Sierra Club is the nation's oldest conservation organization, and the Lone Star Chapter of the Sierra Club has been actively engaged in Texas water issues since its inception.

Our position on SB 28 recognizes the importance of securing Texas's water supply — but it is important that we center protecting Texans, Texas, and our wildlife in this process. The New Water Supply for Texas Fund is a fundamentally premature concept for a number of reasons, and notably, picks outcomes for addressing Texas's water supply rather than processes.

(1) Texas Should Focus on Repairing and Maintaining our Existing Water Infrastructure — And Conservation and Reuse

Texas needs to focus on addressing our crumbling water infrastructure. Without sufficient investment into existing infrastructure and updating obligations to existing infrastructure and water supply, the acquisition of new water supply runs the risk of being inefficient and wasteful.

The novelty of new water supplies also runs the risk of Texas turning away from taking care of this preexisting water supply, through both needed infrastructure investments and conservation and reuse. In fact, turning to the acquisition of new water could very well disincentivize conservation efforts that already exist across the state if the perception is that there will be more funding available for new water supplies rather than for conservation and reuse projects. For example: it has been brought up through the Sunset Review of the Texas Water Development Board that SWIFT does not currently meet its current reuse and conservation goals. By shifting TWDB's focus away from conservation and reuse and towards substantial new supply acquisition, Texas could set back years of progress on conservation and reuse. Localities may also see a newer opportunity to acquire water supply as higher priority than investing in existing infrastructure or conservation and reuse.

At the very least, eligibility for these funds through the New Water Supply for Texas Fund should be predicated, in some part, on whether these entities have plans for water conservation and reuse..

(2) Texas is Nowhere Near Ready for Produced Water Treatment Facilities — There is Substantial Risk Assessment Still Needed

As Sierra Club has consistently pointed out: when TCEQ adopted rules relating to the TPDES permitting process for produced water treatment, only the minimum federal standards were adopted. These standards were adopted at the federal level more than two decades ago, prior to the widespread use of fracking in the United States, making them clearly insufficient to protect Texas waters.

In fact, we know there still is substantial risk assessment that needs to take place. Produced water contains chemicals that are not well understood by TCEQ. EPA approved analytical methods do not exist for many constituents found in produced water. This problem is made worse by the existence of high total dissolved solids, which when found in produced water can interfere with EPA approved analytical methods and can significantly affect the ability to detect and quantify the level of some analytes.¹ Moreover, current drinking water standards and Surface Water Quality Standards were not developed with produced water in mind, so they do not sufficiently protect human health nor the environment from produced water.

If TCEQ is not yet ready to permit the treatment and discharge of produced water in a way that sufficiently protects human health and the environment, then the Railroad Commission (RRC) is even further behind. RRC is tasked with waste disposal outside of a treatment and discharge context, and does not have the scientific expertise to administer such a program.

The Texas Produced Water Consortium's Report even points out that Texas is *not yet ready* to reuse produced water outside of oil and gas operations. "There is still a need for continued and advanced testing and analysis of treated produced water samples utilizing various treatment technologies before verifying or recommending their application for beneficial use outside of the oil & gas industry."² Moreover, the Consortium's report is *so far removed* from the idea of making produced water treatment readily available for broad water uses, that it instead focuses

¹ Detailed Study of the Centralized Waste Treatment Point Source Category for Facilities Managing Oil and Gas Extraction Wastes EPA-821-R-18-004, EPA 9-1 (May 2018), https://www.epa.gov/sites/production/files/2018-05/documents/cwt-study_may-2018.pdf.

² Beneficial Use of Produced Water in Texas: Challenges, Opportunities and the Path Forward, Texas Produced Water Consortium, p. 83 (September 2022).

on fitness-for-purpose work. This is an appropriate framework, but further indicates that Texas is unlikely to be ready to permit produced water treatment and discharge/use in a way that protects the public and environment.

(3) Texas Still Has Substantial Work to do Before the Widespread Use of Desalination – Especially Protecting Texas’s Coastline, Coastal Communities, and Wildlife

TCEQ claims to have been conducting long-term studies of Texas coastal salinity but there have been no changes in the Surface Water Quality Standards despite evidence of saline sensitive species loss.

The State of Texas does not know the extent of the damage done, or the potential for more damage, to coastal ecosystems because TCEQ has no numeric criteria to protect coastal salinity gradients, even after 25 years of Clean Water Act authority. The existing narrative criteria are insufficiently protective of aquatic life in the long term, as evidenced by changes in coastal wildlife. This also creates regulatory uncertainty at TCEQ, making permitting these projects more difficult and risking increased likelihood of contested case hearings and lawsuits.

There is evidence that over the preceding 25 years, coastal salinity has already changed drastically. In addition to coastal land loss, there are clear aquatic life changes, including the near-total extirpation of the listed endangered Smalltooth Sawfish (*Pristis pectinata*) from the Texas Gulf Coast. The entirety of the Texas coast is part of its recent historical range. The juveniles of this species of sawfish require a delicate balance of coastal salinity to thrive. Lack of sawfish encounters ***undoubtedly signal shifts*** in Texas’s coastal salinity.

Moreover, Texas’s continued coastal land loss is attributable, at least in part, to degradation of coastal salinity gradients and saltwater intrusion.³ With increasingly drastic fluctuations in coastal salinity, there is a higher risk of saltwater intrusion into Texas’s brackish water and freshwater systems. Saltwater intrusion causes significant damage to native plant and animal life, and can result in a feedback loop by killing native plants and destroying marshland and benthic structure that helps prevent continued saltwater intrusion in addition to causing harm to the food web.⁴ This will become a more common occurrence with increasingly severe storm

³ Shannon Najmabadi, The Texas coastline is slowly disappearing. Here's how one community is coping. The Texas Tribune (Jan. 2, 2018),

<https://www.texastribune.org/2018/01/02/beach-project-aims-save-coastal-habitat-and-refineries-behind-it/>

⁴ Nat’l Oceanic and Atmospheric Admin., Conserving Coastal Wetlands for Sea Level Rise Adaptation, <https://coast.noaa.gov/applyit/wetlands/identify.html>, (last visited Apr 26, 2020); Stephanie S. Romañach, et al., Impacts of Saltwater Intrusion on Wetland Prey Production and Composition in a Historically Freshwater Marsh. *Estuaries and Coasts* 42, 1600–1611 (2019).

<https://doi.org/10.1007/s12237-019-00572-8>.

events, which the State Climatologist's Office has reported is likely over the coming decades due to climate change.

(4) Importing Water From Other States Could Have Disastrous Consequences Both Legally and Environmentally

Sierra Club has historically opposed the importation of water from other states. Importing water from other states creates opportunities for litigation, as well as major environmental justice risks. It would be flatly unethical to contract to purchase water from other states with the intent of enforcing a contractual obligation even in the event of natural disaster, drought, or other circumstances.

Moreover, the regulatory framework is unclear both intrastate and interstate. This raises questions including: Which state's agency is responsible for treatment and standards? Which agency will be responsible for protecting from adverse environmental and wildlife impact? What if surface water quality standards are markedly worse in the state selling its water? Which state will be responsible for groundwater treatment and monitoring if this sale comes from a private, out-of-state landowner to the State of Texas? Which party would own infrastructure and what type of infrastructure costs will be associated with acquisition of these supplies? Is this supply **economically** feasible given infrastructure costs?

(5) Conclusion

The Sierra Club Lone Star Chapter supports the ability for more TWDB authority through the creation of the Texas Water Fund especially for conservation outreach campaigns and addressing Texas's water loss issues, and would additionally support **research** funding through the New Water Supply for Texas Fund as laid out in Section 1 of the bill (with the caveat that TWDB should likely **not** disburse **grant funding** to entities other than institutions of higher education.)

Sierra Club sincerely appreciates the opportunity to make comments.

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