



# SIERRA CLUB

## LONE STAR CHAPTER

Contact: Alex Ortiz  
[alex.ortiz@sierraclub.org](mailto:alex.ortiz@sierraclub.org)  
(512) 923-4487

### **Comments from Alex Ortiz, Water Resources Specialist, on behalf of the Sierra Club Lone Star Chapter to the Texas House of Representatives Committee Natural Resources regarding Desalination Interim Charge**

The Sierra Club is the nation's oldest conservation organization. The Lone Star Chapter was incorporated in 1965 and has been actively engaged in Texas water issues since its inception, and appreciates the opportunity to offer comments on this interim charge.

Recent reporting by the Office of the State Climatologist confirms that not only is the global climate changing, but that climate change will have severe impacts on Texas. This includes more severe weather events in the form of both hurricanes and winter storms; increased flooding and drought; as well as the sea level rise and coastal land loss that threatens our coastlines. Many of these impacts will disproportionately affect Texas's coastal communities, many of which are predominantly communities of color.

While supplementing Texas's water supply is a worthy and necessary goal, water conservation and reuse strategies should always be the primary method of supplementing our water supply prior to novel projects like desalination. Furthermore, the Sierra Club Lone Star Chapter has frequently opposed the use of desalination as a tool for further industrialization and pollution of communities.

While desalination may prove to be a feasible tool in the future, there are still major environmental concerns that need to be addressed.

#### **Salinity Standards**

One major issue that must to be addressed prior to the widespread use of desalination is the adoption of salinity water quality standards by TCEQ. Climate change-induced sea level rise and coastal erosion are likely to increase the salinity content along the Gulf Coast, disrupting salinity balance in the long term. This means that every day that TCEQ waits to establish numeric salinity criteria, TCEQ necessarily is using the wrong baseline. Because of this, it is imperative that TCEQ have a quality baseline for salinity gradients along the Texas coast.

Tex. Water Code § 26.023 reads in relevant part "The commission shall develop standards based on all quality assured data obtained by the commission..." (emphasis added). Tex. Water code § 26.0135 further defines quality assured data as "data that complies with commission rules for the water quality monitoring program".

In all the time since water quality standards have been established at TCEQ's predecessor agency, there has been a frequent component of the standards listed at 30 Tex. Admin. Code § 307.4(g). That section reads in relevant part "Numerical salinity criteria for Texas estuaries have not been established because of the high natural variability of salinity in estuarine systems, and because long-term studies by state agencies to assess estuarine salinities are still ongoing." This provision of the standards has been in effect since TCEQ first received authority over the

NPDES program from EPA — more than two decades ago. In that time TCEQ has supposedly been studying salinity gradients in our bay and estuary systems without any clear progress on the establishment of numerical standards to protect our salinity gradients, in turn, leaving our waters, wildlife, and tourism industries vulnerable.

TCEQ's failure to establish such numerical standards has a clear effect on both the environment and regulated entities. Without sufficient baseline protections loss of native wildlife will continue. Communities will undoubtedly suffer impacts to their tourism industries due to loss of wildlife and loss of suitable fishing habitat. Moreover, ambient salinity in bay and estuary systems have been linked to harmful red algal blooms (termed "red tide") which are both a public health and environmental concern. For the regulated entities, numeric salinity criteria would provide clearer guidance on how to site desalination facilities and outfalls by establishing where hyper-saline discharges would have the least environmental impact. This may also decrease the amount of litigation and number of contested case hearings in the future, as TCEQ would have clear standards to rely on.

I sincerely thank you all for your time and the Sierra Club Lone Star Chapter looks forward to working with y'all on these, and other issues throughout the upcoming session.