



SIERRA CLUB

LONE STAR CHAPTER

Comments from the Sierra Club Lone Star Chapter in support of Oyster Bay Closures for the Mesquite Bay Complex (Mesquite Bay, Ayres Bay, and Carlos Bay)

The Sierra Club is the nation's oldest conservation organization and the Lone Star Chapter has been actively engaged in Texas water issues since its inception in 1965.

The Sierra Club Lone Star Chapter strongly **supports** the permanent closure of bays laid out in today's proposal. The science is clear that by closing the bays *now*, we preserve them for future generations. Oyster reefs are integral to the health and safety of our coastal communities.

As the proposal clearly notes, the rate of oyster harvest in the Mesquite Bay Complex has continued to rise beyond what is sustainable, and the commission has a statutory obligation to preserve and protect this vital natural resource. There are also mounting stressors on Texas's coastal and estuarine ecosystems from climate-change related impacts such as hurricanes, drought, flooding, and sea level rise, as well as the increased oyster harvest.

Oysters Protect the Texas Coastline

The continued existence of oyster reefs is paramount to protecting Texas coastlines. Texas oysters perform vital ecological functions, and the state's oyster populations are increasingly threatened by factors including climate change impacts, water quantity variability, and water quality degradation. Climate change-induced sea level rise and coastal erosion will increase the salinity content in the bays disrupting salinity balance that is crucial for oysters. Changes in precipitation patterns and drought intensity will also likely result in declining freshwater inflows. These hydrologic changes can lead to direct oyster mortalities while eventually threatening the habitability of the bay systems for future oyster populations.

The Texas General Land Office estimates that the average erosion rate for the 367 miles of Texas coast is 4.1 feet per year. Sixty-four percent of the Texas coast is eroding at an average rate of about 6 feet per year, with some locations losing more than 30 feet per year. Oyster reefs reduce the risk of erosion and flooding for coastal communities and coastal habitat. In protecting Texas coastlines, oyster reefs also prevent saltwater intrusion, protecting the ecological integrity of freshwater wetlands that are vital to wildlife and buffer communities from extreme storms in the Gulf. Additionally, oysters provide an important water quality function, with a single oyster being capable of filtering up to 50 gallons of water per day, supporting the state's important nursery grounds for life in the Gulf of Mexico.

Many of these environmental functions and the overall health of the reefs are dependent on the reefs' vertical complexity and structure. Dredging has negative impacts on the structure of oyster reefs, and over-dredging of reefs will require a longer-term closure of these bays to give significant recovery time to the affected oyster populations.

Oysters Support our Vibrant Economy – and the Future of the Industry Requires Closures

The future of commercial oyster harvest is ultimately tied to the continued existence of these reefs. Recovery of oyster reefs to be fully established and “ready” for harvest is unlikely to be in the immediate future, and such systems must be closed for recovery for an extended period of time as to not jeopardize the progress made. In order for this fishery to survive, there must be a resource capable of being harvested.

With knowledge that these reefs will need clear long-term recovery time, Sierra Club supports efforts to transition the coastal workforce along with the fishery itself. To that end, we do support additional appropriations to TPWD to facilitate the buyback of licenses, which coupled with the current moratorium on new licenses, should prove an important tool.

While additional license buybacks will hopefully alleviate the harvest pressure, buybacks do not necessarily aid the broader workforce so much as the license-holder. So, in addition to those efforts, Sierra Club encourages TPWD to consider innovative programs including: providing support services for oystermen to transition to appropriate alternate jobs outside of commercial oyster harvest, especially in coastal related industries such as tourism or fishing; incentives to license holders to engage in habitat restoration; as well as training and hiring oystermen to help restore coastal habitat and join the growing restoration economy in the Gulf.

Both the displacement of workers (due to increased harvest and environmental factors) and the protection of frontline communities (by the oyster reefs themselves) are issues of environmental justice — but it’s how we collectively respond to these pressures that matters. The Lone Star Chapter recognizes that this decision to close bays is a difficult one, and we urge TPWD to explore options to mitigate the impacts this will have on the workforce.

Nevertheless, as we look toward the future, with clear awareness that we will be dealing with more severe sea level rise and increasingly severe hurricanes and tropical storms due to ongoing climate change, it’s imperative that we protect our coastline, our coastal communities, and preserve Texas gulf oyster populations for future generations of Texans and wildlife alike.

We appreciate the opportunity to comment in support of this proposal.

Sincerely,

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