

November 11, 2021

The Honorable Arch H. “Beaver” Aplin, III, Chairman
Texas Parks and Wildlife Commission
4200 Smith School Road
Austin, Texas 78744

Dear Chairman Aplin,

The Harte Research Institute is aware that a number of conservation organizations are urging the Texas Parks and Wildlife Department (TPWD) to protect restored oyster reefs from harvest as a partial means of mitigating the degraded condition of oyster habitat in Texas bays. As you know, oysters are ecologically and economically important but are uniquely challenging to manage because they exist as both a habitat and a fishery. We know that harvesting by dredges has reduced the size and complexity of oyster reefs and has diminished key habitat for fish and crabs. Restoration can ameliorate lost oyster habitat *when coupled with protection from commercial harvest*, and there is compelling science to support the importance of protecting oyster reefs from harvest for biodiversity, shoreline protection, water quality, recreational angling, and more.

TPWD may wish to consider several solutions to protect natural and restored reefs from harvest:

- (1) Develop a sanctuary network for legacy oyster reefs in strategic locations where commercial harvest is prohibited;
- (2) Create a conservation strategy to provide permanent sanctuary status to restored reefs;
- (3) Incorporate measures of reef structure into management criteria.

We understand that TPWD may be concerned that limiting harvest will diminish the oyster fishery. On the contrary, data from various sources indicate that, when protected, oyster reefs directly enhance recreationally and commercially important species to a degree that more than offsets the opportunity cost of incrementally reduced oyster harvest. Protected reefs provide larval stock that recruit to natural oyster reefs distributed across a large geographic area. These reefs, whose physical complexity is not diminished by repeated physical disruption from harvest, also provide key habitat for a wide range of commercially and recreationally valued species, ultimately bolstering stocks.

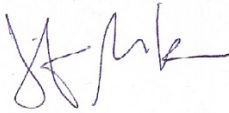
The economics are compelling: the estimated value of oysters in the water is \$2,000-\$40,000 per acre, which includes benefits of increased biodiversity and fish production, protected shorelines, and improved water quality. Additional benefits of oyster reefs for recreational angling are estimated at \$23,000 per acre. *The value of oysters in the water is much greater than that generated from commercial harvest* from degraded reefs, estimated at \$880 per acre.

Protection of restored and legacy natural reefs could also help TPWD ensure equitable access to a highly valued public resource and will promote equitable distribution of the benefits that reefs provide to coastal communities, including enhancing physical and economic resilience.

Protecting oyster reefs from direct commercial harvest can reduce their recovery time following storms, enhancing their efficacy as buffers for developed shorelines and increasing their value to communities with tourism and recreation-based economies.

Research indicates that Texas is one of the last places in the world where large scale oyster reef conservation and sustainable fisheries are still compatible, and we are grateful to TPWD for its efforts to sustain oyster populations and reef habitat. We also appreciate your commitment to data-driven management and your openness to alternative management strategies. We would welcome the chance to discuss the proposed changes and provide additional information about the science that supports them.

Sincerely,



Jennifer Beseres Pollack, Ph.D.
Chair for Coastal Conservation and Restoration
Associate Professor of Marine Biology



David W. Yoskowitz, Ph.D.
Senior Executive Director
Chair for Socio-Economics

Cc: Texas Parks and Wildlife Commissioners
Carter Smith, Executive Director
Clayton Wolf, Chief Operating Officer
Robin Reichers, Coastal Fisheries Division Director