

Funded Priorities List Planning Framework

Priority Approach: Restore oyster habitat



Planning Framework Overview

The Gulf Coast Ecosystem Restoration Council (Council) has released the Gulf Coast Ecosystem Restoration Council Planning Framework draft for public review and comment as it continues to advance its 2016 *Comprehensive Plan Update: Restoring the Gulf Coast's Ecosystem and Economy*.

A Funded Priorities List (FPL) is a list of the final Gulf Coast restoration projects and programs that the RESTORE Council has approved for funding. Thus far, the Council has approved two FPLs. This Planning Framework describes the Council's current focus for development of the next Funded Priorities List (FPL 3). The complexities associated with Gulf ecosystem restoration necessitate some flexibility in decision-making. Therefore, the Council may choose to fund projects that do not align with this Planning Framework draft. The Planning Framework is intended to serve as a bridge, strategically linking the RESTORE Council's past and future funding decisions to its overarching goals and objectives. To that end, the Council will consider how future investments may build upon those in the Initial FPL as well as activities funded by other restoration efforts in the Gulf of Mexico region.

The Planning Framework draft is organized by priority restoration approaches and techniques, and the geographic areas where these approaches and techniques could be carried out. Approaches refine the options for how to achieve restoration goals and objectives. Techniques are methods used to carry out an approach. Together, they signal the resources, habitats, and locations that the RESTORE Council may consider when selecting projects and programs for FPL 3 funding.



Approach: Restore oyster habitat

This priority approach supports the following Comprehensive Plan goals and objectives:

Primary goals

- Restore and conserve habitat
- Replenish and protect living coastal and marine resources

Primary objectives

- Restore, enhance, and protect habitats
- Protect and restore living coastal and marine resources

Oysters are important both economically as a harvestable resource as well as ecologically as an important natural habitat. Oysters provide critical habitat to many species, help reduce shoreline erosion, promote coastal resilience, and improve water quality.

Don't miss your chance to have your voice heard!

We want to hear from you!

Please contact us at:
RestoreCouncil@restorethegulf.gov

Or visit us on the web at:
www.restorethegulf.gov

Spring 2019 Public Meeting Schedule

Date	Cities *	Time
04/30/19	Spanish Fort, AL	6:00 pm - 8:00 pm
05/06/19	New Orleans, LA	6:00 pm - 8:00 pm
05/07/19	Tallahassee, FL	6:00 pm - 8:00 pm
05/22/19	Long Beach, MS	6:00 pm - 8:00 pm
05/30/19	Corpus Christi, TX	6:00 pm - 8:00 pm

*meeting venues available at www.restorethegulf.gov

Potential Restoration Techniques

The RESTORE Council is considering the following types of oyster habitat restoration techniques in geographic areas where oyster habitat degradation represents a primary ecosystem stressor.

Substrate placement

The technique “substrate placement” refers to the placement of cultch” (usually oyster shells, crushed limestone, or crushed concrete) into water bodies such as tidal creeks, estuaries, bays, and along the margins of marshes to provide hard structure for oyster recruitment and to restore or create oyster reef habitat.

Habitat suitability modeling and ongoing investigation of conditions to determine appropriate restoration areas are key to making effective investments of substrate placement. Substrate placement is used to restore lost oyster reef habitat, expand existing oyster reef habitat, and enhance oyster abundance at existing reefs. Secondary benefits include water quality improvement, reduced shoreline erosion, and enhanced habitat for marine resources.

Living shorelines

Living shoreline restoration includes a variety of techniques intended to protect shorelines from erosion by helping to stabilize sediment and reduce wave energy reaching the shoreline. Often, this technique involves creating substrate oysters can attach to by placing rock, or specially manufactured concrete or limestone structures in intertidal areas. Like other oyster restoration activities, living shorelines also provide shelter for other species and can increase water clarity.

Enhance spawning reserves

Projects to enhance oyster spawning stocks and reserves in key locations across the Gulf of Mexico can help facilitate oyster productivity and abundance. To enhance spawning, young oysters can be planted on oyster cultch, or cultchless seed oysters (i.e., small oysters that are not attached to any other substrate) can be used on existing reefs with low productivity, as part of a living shoreline project, or in combination with cultch placement for new oyster reefs.

Alternatively, juvenile or adult oysters from reefs in areas with poor habitat conditions or obtained through hatcheries or from special oyster spawning reserve areas can be transported to desirable reef restoration sites. Creating special oyster spawning reserve areas is an increasingly common restoration strategy because of their importance as a source for oyster larvae. Spawning reserves can have the additional benefits of increased oyster size and larvae production, disease resilience, and greater overall ecosystem function.

Why is it important to restore oyster habitat?

- Historically, oyster reefs have been foundational components of the Gulf of Mexico’s ecosystem, with thriving reefs occurring in coastal waters of all five Gulf states.
- Oyster reefs filter bay waters, provide habitat for marine life, and act as natural breakwaters to protect shorelines from erosion caused by wave action.
- Over the last century, oyster reef habitat in the region has declined by as much as 85 percent because of a variety of stressors including increased sedimentation, pollution, drought, and overharvesting.
- These long-term declines were magnified in 2010 during the Deepwater Horizon oil spill and related cleanup efforts, all of which have severely impacted the coastal economies and long-term health of the Gulf.

