Funded Priorities List Planning Framework Priority Approach: Reduce excess nutrients and other pollutants to watersheds



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: Reduce excess nutrients and other pollutants to watersheds

This priority approach supports the following Comprehensive Plan goal and objective:

Primary goal

Restore water quality and quantity

Primary objective

Restore, improve, and protect water resources

Reducing the amount of pollutants and excess nutrients in Gulf Coast water bodies is an important component of a strategy for restoring aquatic habitats and associated living resources sensitive to water quality impairment (e.g., oysters). Land-based habitats may also be restored under this priority approach by buffering waterways affected by contaminated inflows.

Don't miss your chance to have your voice heard!	Spring 2019 Public Meeting Schedule		
	Date	Cities *	Time
	04/30/19	Spanish Fort, AL	6:00 pm - 8:00 pm
We want to hear from you!	05/06/19	New Orleans, LA	6:00 pm - 8:00 pm
Please contact us at: <u>RestoreCouncil@restorethegulf.gov</u>	05/07/19	Tallahassee, FL	6:00 pm - 8:00 pm
Or visit us on the web at: www.restorethegulf.gov	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 ww.restorethegulf.gov		

The RESTORE Council is considering the following types of nutrient and other pollutant reduction techniques in geographic areas where degraded water quality represents a major threat to the ecosystem.

Agricultural and forest management

Management of agricultural land and forests can substantially reduce pollutants entering the Gulf of Mexico. This technique may include the following activities:

- Intercepting agricultural runoff by engineering drainage to retain pollutants on site (e.g., installing sediment basins)
- Planting wetland and water bank vegetation to absorb excess nutrients to provide a buffer between polluted runoff and nearby waterways
- Restoring soil and water flow around farmland perimeters to help filter and trap pollutants
- Implementing forest activities such as reforestation, hydrologic restoration, invasive species removal, and prescribed burnings

Stormwater management

This technique addresses domestic and municipal stormwater (not farmland or forestry) as a source of nutrients and other pollutants to Gulf coast watersheds. Some activities that can be used to control stormwater by retaining it for treatment and re-use include implementing rain gardens, permeable pavement, green roofs, rainwater harvesting, and stormwater wetlands.



Shoreline erosion and other sources of excess sediment input into waterways (e.g., increased soil runoff from cleared lands) can degrade water quality by reducing water clarity and introducing nutrients, pesticides, metals, petroleum, and other contaminants into water bodies. Methods for reducing erosion and soil loss may include removing roads (i.e., restoring as habitat), building sediment basins, and planting vegetation buffers. To remediate contaminated sediment, activities may include containment and treatment, either onsite or offsite, following dredging or other removal methods.

Wastewater system improvements

Recent advancements in chemical and biological wastewater treatment technologies can significantly improve a system's ability to remove pollutants (including excess nutrients) from wastewater. Upgrading treatment facilities and household septic systems (e.g., septic-to-sewer programs) can be costly, but may dramatically reduce the sources of pollutants and generate cost savings over time. Other activities may include wastewater reuse or construction of wetlands and treatment ponds to provide bioremediation to detoxify liquid waste emissions from treatment plants.

Why is it important to reduce excess nutrients and other pollutants to watersheds?

- The transfer of nutrients and other pollutants to coastal waters has created persistent water quality problems across the northern Gulf of Mexico, compromising living resources as well as recreational and economic opportunities.
- When water becomes over-enriched with nutrients, it can stimulate algal growth. The growth and decay of algal blooms can use up oxygen and create "dead zones". As a result, animals and plants that live in these habitats often cannot survive.
- Harmful algal blooms as well as biological pollutants (e.g., fecal bacteria) can generate disease-causing contamination, putting human health at risk and frequently prompting beach closures, restrictions on shellfish harvesting, and air quality advisories.

