Funded Priorities List Planning Framework Priority Approach: Restore hydrology and natural processes



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 hydrology and natural processes

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

Primary goals

- Restore and conserve habitat
- Restore and preserve water quality and quantity
- Enhance community resilience

Primary objectives

- Restore, enhance, and protect habitats
- Restore, improve, and protect water resources
- Restore and enhance natural processes and shorelines
- Promote community resilience

In the context of ecosystem restoration, the term "hydrology" refers to the quantity, movement, and distribution of water as it relates to estuaries, floodplains, rivers, streams, and other parts of the coastal environment. Re-establishing more natural hydrologic regimes and other natural processes in order to restore and conserve critical coastal habitats, restore water quality and quantity, and provide community resilience benefits, is an essential component of efforts to sustain healthy coastal ecosystems.

Don't miss your chance to have your voice heard!	Spring 2019 Public Meeting Schedule		
	Date	Cities *	Time
We want to hear from you!	04/30/19	Spanish Fort, AL	6:00 pm - 8:00 pm
	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 www.restorethegulf.gov		

The RESTORE Council is considering the following types of hydrologic restoration techniques in geographic areas where altered hydrology represents a major threat to the ecosystem.

Restore hydrologic connectivity

Restoring natural hydrology often involves restoring or mimicking natural connections that have been broken or disrupted by infrastructure such as roads and levees. Potential activities to accomplish this include:

- Removing barriers to hydrologic flow by installing or enlarging culverts, gates and other structures so water can flow through existing barriers and re-establish connections to wetlands and other water sources
- Restoring forested wetlands, which can require restoration of hydrologic connections that have been disrupted by logging roads, drainage ditches, and other landscape modifications
- Building upon initial investments and working with the Council's funding partners to advance hydrologic projects already underway, such as backfilling existing man-made canals, replacing undersized culverts and other measures



Controlled river diversions

These diversions use channels and gated structures to restore more natural movement of sediment and fresh water from rivers into nearby coastal areas. Potential activities to accomplish this technique include:

- Modifying river levees and conveying river water under roads and other infrastructure
- Developing river diversion projects that can build upon and complement existing investments, such as those funded in the 2015 Initial Funded Priorities List

Restore natural salinity regimes

This technique involves re-establishing the complex, natural interactions between fresh and saltwater in coastal estuaries. Efforts to restore natural salinity regimes can focus on reducing artificially high levels of saline waters either by reducing saltwater inputs or increasing freshwater inputs. This might be accomplished through the following:

- Plugging canals, restoring natural dimensions of tidal passes and inlets
- Installing gates, channelization, locks, and other structures in navigation channels
- Increasing upstream water conservation, modifying management regimes for upstream dams and reservoirs, removing artificial barriers (e.g., roads, spoil banks) to freshwater input
- Building upon existing work to implement complementary products and programs, such as those funded in the 2015 Initial Funded Priorities List

Why is it important to restore hydrology and natural processes?

- To re-establish and conserve critical coastal habitats
- To restore water quality and quantity
- To increase the community resilience benefits healthy ecosystems provide
- To enhance living coastal and marine resources and the habitats that they depend on

Did you know?

Natural hydrologic processes are being modified across the Gulf Coast due to landscape changes, navigation canals, damming, roads, levees, deforestation, increased impervious surfaces, water consumption uses, channelization and more. These changes can alter freshwater inputs, salinity gradients, nutrient and sediment inputs, and other factors important to healthy coastal ecosystems.