



# Opportunity for Preliminary Public Engagement

## Louisiana Trustee Implementation Group Restoration Plan #9: Chandeleur Islands Restoration

January 2024





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### Public Input Requested

Comments on this document will be accepted until February 15, 2024.

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PHOTO: CPRA, Todd Baker

## Introduction

The Louisiana Trustee Implementation Group (LA TIG) is preparing to build upon ongoing efforts under the Regionwide TIG's Chandeleur Islands, LA Component Engineering and Design (E&D) project ([DIVER ID 289e](#)) into the development of a future LA TIG Restoration Plan for restoration of the Chandeleur Islands. That future Restoration Plan would address the continued restoration and conservation of natural resources injured as a result of the 2010 *Deepwater Horizon* (DWH) oil spill.

Restoration of the Chandeleur Islands would address a diverse suite of injuries to multiple resources and loss of services caused by the DWH oil spill and could be funded with allocations for several Restoration Types identified by the DWH Natural Resource Damage Assessment (NRDA) Trustees. The ecosystem-level Restoration Approaches that could be applied to restoration of the Chandeleur Islands would benefit a broad array of injured resources and services they

provide. The upcoming LA TIG restoration plan could include a range of activities that could be funded through multiple funding streams in addition to NRDA, leveraging greater benefits for Chandeleur Islands resources.

The LA TIG has prepared this document to provide the public information about ongoing data collection and E&D efforts and to seek input regarding potential Restoration Types, Approaches, and Techniques that could be evaluated in the Louisiana TIG's upcoming restoration plan for the Chandeleur Islands, which is anticipated to be titled *LA TIG Draft Restoration Plan #9: Chandeleur Islands Restoration (RP #9)*. In order to provide an opportunity for preliminary public engagement before beginning work on *RP #9*, the LA TIG will accept comments on this *Opportunity for Preliminary Public Engagement* document for 30 days beginning on January 16, 2024. Information on how to provide comments can be found at the end of this document.

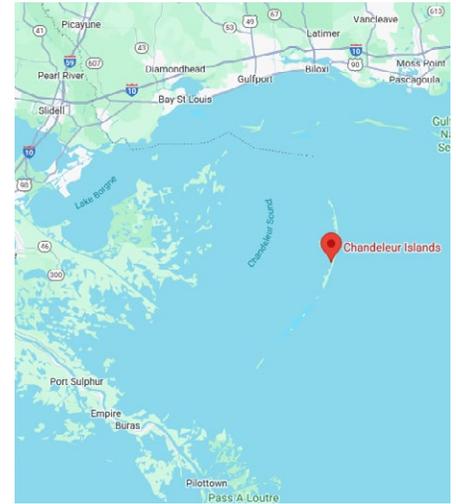
# Chandeleur Islands Restoration Planning

The Chandeleur Islands are a series of barrier islands in the Gulf of Mexico marking the outer boundary of the Chandeleur Sound off the southeast coast of Louisiana and eastern St. Bernard and Plaquemines Parishes. These islands, spanning nearly 50 miles, are a first line of defense for Louisiana's coastline against tropical cyclones and provide crucial habitat for a multitude of plant and animal species. More than 70 species of flora and fauna are designated as "species of greatest conservation need" on the Chandeleur Islands, some of which are not found anywhere else in Louisiana. However, more than 89% of the island chain has disappeared in the last century due to the combined effects of erosion and an inadequate sand supply. The Chandeleur Islands habitats, including associated seagrass beds, are state and federally owned and collectively managed by the U.S. Fish and Wildlife Service via a Memorandum of Agreement with the Louisiana Department of Wildlife and Fisheries as the Breton National Wildlife Refuge.

In 2016, the DWH Trustees issued the *Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (PDARP/PEIS)* which described injuries to resources of the Chandeleur Islands and how those injuries informed the Trustees' programmatic restoration plan. The DWH Trustees began more

focused restoration planning for the Chandeleur Islands in 2021, through the Regionwide TIG's completion of its *Deepwater Horizon Oil Spill Regionwide Trustee Implementation Group Final Restoration Plan / Environmental Assessment 1: Birds, Marine Mammals, Oysters, and Sea Turtles (Regionwide RP/EA #1)* (Regionwide TIG, 2021). In that plan, the Regionwide TIG analyzed alternatives to restore for bird injuries resulting from the DWH oil spill, including alternatives for the project Conservation and Enhancement of Nesting and Foraging Habitat for Birds: Chandeleur Islands, LA Component (Chandeleur Islands, LA Component). In selecting the Chandeleur Islands component, the Regionwide TIG funded data collection and E&D efforts that are ongoing.

Regionwide TIG project data collection and E&D efforts to date include surveys for submerged aquatic vegetation (including rare and imperiled marine seagrasses); nest surveys for colonial waterbirds, waterfowl, solitary nesting birds, and sea turtles; topographic, bathymetric, and magnetometer surveys; and reconnaissance for borrow areas and conveyance corridors. Geotechnical investigations have been performed, and subject matter expert teams with members from state and federal government, and non-governmental organizations have formed to participate in engineering and design development.

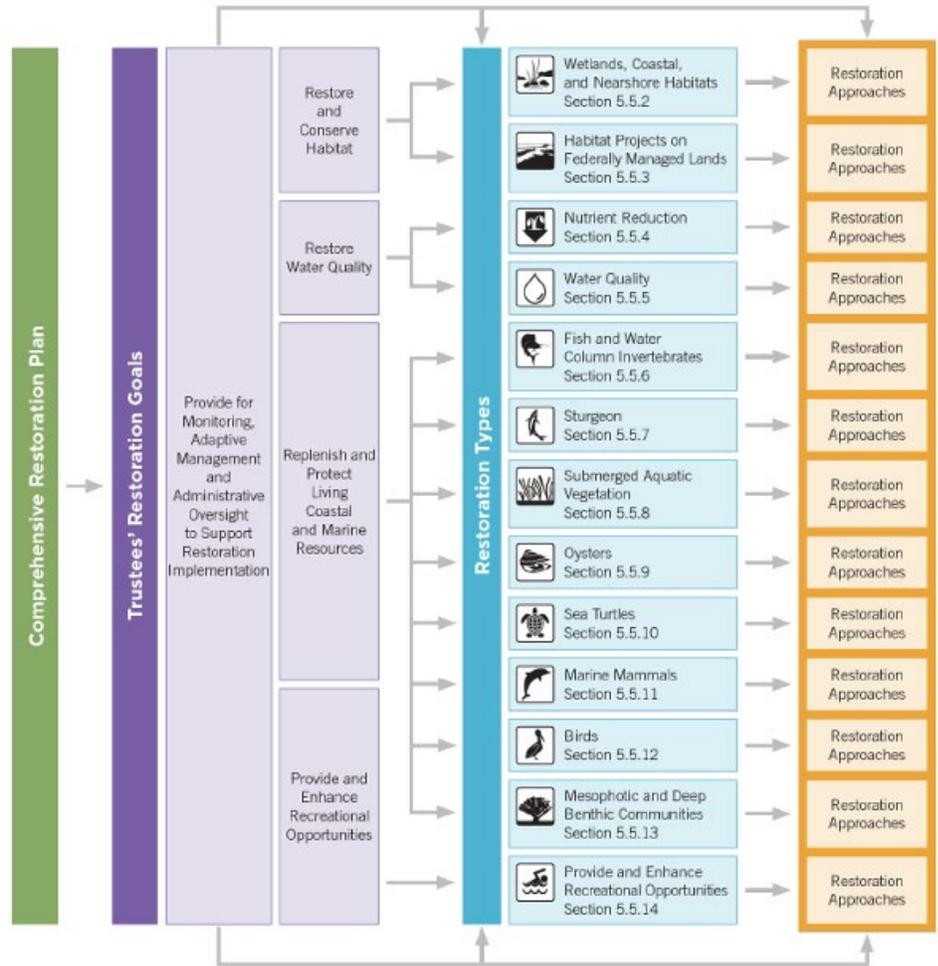


Given the importance of the Chandeleur Islands to the state of Louisiana, the LA TIG plans to build on the Regionwide TIG's initial investment by integrating the ongoing Chandeleur Islands E&D efforts into the next stage of restoration planning, which will culminate in the development of *LA TIG Draft RP #9*. *RP #9* will address wide-ranging injuries to natural resources as a result of the DWH oil spill, refine and analyze preliminary design alternatives developed in the RW TIG's E&D project, and potentially identify and analyze a final design alternative to carry forward and fund for construction. *RP #9* will include analysis of Chandeleur Islands restoration alternatives under the Oil Pollution Act of 1990 (OPA) and National Environmental Policy Act (NEPA). Once completed, the LA TIG intends to release the *Draft RP #9* for public review and comment before finalizing the plan and making a decision on which alternative, if any, to implement.

# DWH Restoration Planning – TIGs, Goals, Restoration Types, and Funding Allocations

Immediately following the DWH oil spill, the DWH Trustee Council, made up of the four federal trustee agencies (DOI, EPA, NOAA, and USDA) and trustees from all five Gulf States, initiated an injury assessment pursuant to OPA and associated NRDA regulations, which established the nature, degree, and extent of injuries from the DWH incident to both natural resources and the services they provide. The Trustees then used the results of the injury assessment to inform future NRDA restoration planning.

The Trustees' *PDARP/PEIS* detailed a proposed plan to fund and implement restoration projects across the northern Gulf of Mexico region. The *PDARP/PEIS* provided a comprehensive restoration plan at a programmatic level to guide and direct the ecosystem-level restoration effort. It established five programmatic restoration goals and serves as the programmatic document from which the Regionwide, Open Ocean, and state-geography TIGs tier subsequent restoration plans for project design and implementation. In the *PDARP/PEIS*, the DWH Trustees adopted a portfolio of 13 Restoration Types that addresses the diverse suite of injuries caused by the DWH oil spill (Figure 1). Under each Restoration Type, the *PDARP/PEIS* identified and analyzed various Restoration Approaches that would be appropriate to restore injured resources and their lost services.



**FIGURE 1:** The Trustees' comprehensive restoration plan showing the goals and their related Restoration Types connecting to Restoration Approaches. Graphic excerpted from the *PDARP/PEIS* Figure 5.4-1.

The *PDARP/PEIS* also established a distributed governance structure that assigned a TIG for each of the eight Restoration Areas. The LA TIG makes all restoration decisions for the funding allocated to the Louisiana Restoration Area. The Consent Decree and associated settlement, which resolved civil claims by the Trustees against BP arising from the DWH oil spill, allocated funding under each TIG for those Restoration Types for which that TIG is responsible for restoration (Figure 2).

As shown in Figure 1, under the “Replenish and Protect Living Coastal and Marine Resources” goal, the Trustees identified eight different resource-focused Restoration Types, each of which is intended to benefit species and life stages that have specific restoration needs or ecologic linkages with nearshore habitats. Under the “Restore and Conserve

Habitat” goal, the Trustees identified two Restoration Types: 1) Wetlands, Coastal, and Nearshore Habitats and 2) Habitat Projects on Federally Managed Lands. These two Restoration Types are intended to benefit injured coastal and nearshore habitats, as well as many injured species, by providing food, shelter, breeding, and nursery habitat.



PHOTO: USFWS, Sarah Clardy

Major Restoration Categories	Unknown Conditions	Regionwide	Open Ocean	Alabama	Florida	Louisiana	Mississippi	Texas	Total Restoration Funding*
<b>1. Restore and Conserve Habitat</b>									
Wetlands, Coastal, and Nearshore Habitats				65,000,000	5,000,000	4,009,062,700	55,500,000	100,000,000	4,234,562,700
Habitat Projects on Federally Managed Lands				3,000,000	17,500,000	50,000,000	5,000,000		75,500,000
Early Restoration (through Phase IV)				28,110,000	15,629,367	259,625,700	80,000,000		383,365,067
<b>2. Restore Water Quality</b>									
Nutrient Reduction (Nonpoint Source)				5,000,000	35,000,000	20,000,000	27,500,000	22,500,000	110,000,000
Water Quality (e.g., Stormwater Treatments, Hydrologic Restoration, Reduction of Sedimentation, etc.)					300,000,000				300,000,000
<b>3. Replenish and Protect Living Coastal and Marine Resources</b>									
Fish and Water Column Invertebrates			380,000,000						380,000,000
Early Restoration Fish and Water Column Invertebrates			20,000,000						20,000,000
Sturgeon			15,000,000						15,000,000
Sea Turtles	60,000,000	55,000,000	5,500,000	20,000,000	10,000,000	5,000,000	7,500,000	163,000,000	
Early Restoration Turtles	29,256,165							19,965,000	49,221,165
Submerged Aquatic Vegetation						22,000,000			22,000,000
Marine Mammals	19,000,000	55,000,000	5,000,000	5,000,000	50,000,000	10,000,000		144,000,000	
Birds	70,400,000	70,000,000	30,000,000	40,000,000	148,500,000	25,000,000	20,000,000	403,900,000	
Early Restoration Birds	1,823,100		145,000	2,835,000	71,937,300			20,603,770	97,344,170
Mesophotic and Deep Benthic Communities		273,300,000							273,300,000
Oysters	64,372,413			10,000,000	20,000,000	26,000,000	20,000,000	22,500,000	162,872,413
Early Restoration Oysters				3,329,000	5,370,596	14,874,300	13,600,000		37,173,896
<b>4. Provide and Enhance Recreational Opportunities</b>									
Provide and Enhance Recreational Opportunities				25,000,000	63,274,513	38,000,000	5,000,000		131,274,513
Early Restoration Recreational Opportunities			22,397,916	85,505,305	120,543,167	22,000,000	18,957,000	18,582,688	287,986,076
<b>5. Monitoring, Adaptive Management, Administrative Oversight</b>									
Monitoring and Adaptive Management		65,000,000	200,000,000	10,000,000	10,000,000	225,000,000	7,500,000	2,500,000	520,000,000
Administrative Oversight and Comprehensive Planning		40,000,000	150,000,000	20,000,000	20,000,000	33,000,000	22,500,000	4,000,000	289,500,000
Adaptive Management NRD Payment for Unknown Conditions	700,000,000								700,000,000
<b>Total NRD Funding</b>	<b>\$700,000,000</b>	<b>\$349,851,678</b>	<b>\$1,240,697,916</b>	<b>\$295,589,305</b>	<b>\$680,152,643</b>	<b>\$5,000,000,000</b>	<b>\$295,557,000</b>	<b>\$238,151,458</b>	

\* The total restoration funding allocation for the Early Restoration work; each Restoration Type; and monitoring, adaptive management, and administrative oversight is 8.1 billion dollars (plus up to an additional 700 million dollars for adaptive management and unknown conditions).

**FIGURE 2:** The Trustees’ comprehensive restoration plan showing the Trustees’ allocations by goal and Restoration Type (rows) and Restoration Area (columns). Graphic excerpted from the PDARP/PEIS Table 5.10-1.

# Looking Ahead to LA TIG RP #9: Chandeleur Islands Restoration Project

As described in the *PDARP/PEIS*, "...a single restoration project (especially larger or more complex projects with multiple components) may pertain to multiple Restoration Types and address multiple restoration goals across types." Although the *Regionwide TIG's RP/EA #1* funded the E&D for the Chandeleur Islands, LA Component out of its "Birds" Restoration Type allocation, the LA TIG intends to look beyond the "Birds" Restoration Type for Restoration Approaches, Restoration Techniques, and funding mechanisms for Chandeleur Islands restoration because of the project's ecosystem scale and resulting benefits to multiple Resource Types. In addition to the "Birds" Restoration Type, the LA TIG is considering Restoration Approaches that would benefit the "Wetlands, Coastal, and Nearshore Habitats" and "Habitat Projects on Federally Managed Lands" Restoration Types under the "Restore and Conserve Habitat" restoration goal and "Submerged Aquatic Vegetation" and "Sea Turtles" Restoration Types under the "Replenish and Protect Living Coastal and Marine Resources" restoration goal.

Exposure to DWH oil and spill response activities resulted in extensive injuries to multiple habitats, species, and ecological functions in the northern Gulf of Mexico. Opportunities for restoration in the Chandeleur Islands, including beach, dune, and sub-

merged aquatic vegetation (SAV) restoration, would address several of these resource injuries and provide ecosystem-level benefits to multiple resources.

Beach and dune restoration and creation has broad ecological and socioeconomic benefits because of the many resources that barrier island shorelines support and sustain. Restoration of the Chandeleur Islands would restore breeding habitat for colonies of wading birds and seabirds and wintering habitat for shorebirds and waterfowl, including federally listed species such as the threatened piping plover (*Charadrius melodus*), and rufa red knot (*Calidris canutus rufa*). The piping plover and rufa red knot overwinter and have designated and proposed critical habitat, respectively, in the Chandeleur Islands.

Beach restoration would benefit sea turtles in the region by restoring nesting habitat for these species and is particularly significant given the recent, and first in 75 years, sighting of Kemp's ridley sea turtle (*Lepidochelys kempii*) hatchlings on the Chandeleur Islands. SAV restoration would aid in the resiliency and persistence of the Chandeleur Islands and would provide multiple ecosystem benefits such as: reduced coastal erosion; increased sediment stability; more and improved habitat for fish and shellfish; and improved water

## Examples of Restoration Techniques for Beach, Dune, and SAV and Their Resource Benefits

- Placement of dredged sediments to create, stabilize, maintain, and restore degraded beach, dune, and back-barrier marsh habitats.
- Planting vegetation to contribute to the ecosystem function of dunes and back-barrier marshes, providing habitat for fish and invertebrates, birds, and other shoreline wildlife.
- Passive restoration techniques such as sand fencing help to retain sand and other materials necessary for maintaining a sand dune system healthy enough to support wildlife and naturally provide sand to eroding beaches.
- Filling scars and holes in SAV beds with sediment similar to that of the surrounding area to prevent further deterioration of the SAV bed as a result of erosion and to prepare the area for recolonization by neighboring or transplanted SAV.
- Restoring stability to the barrier islands to dissipate wave energy and enable SAV to naturally regenerate behind the barrier islands.

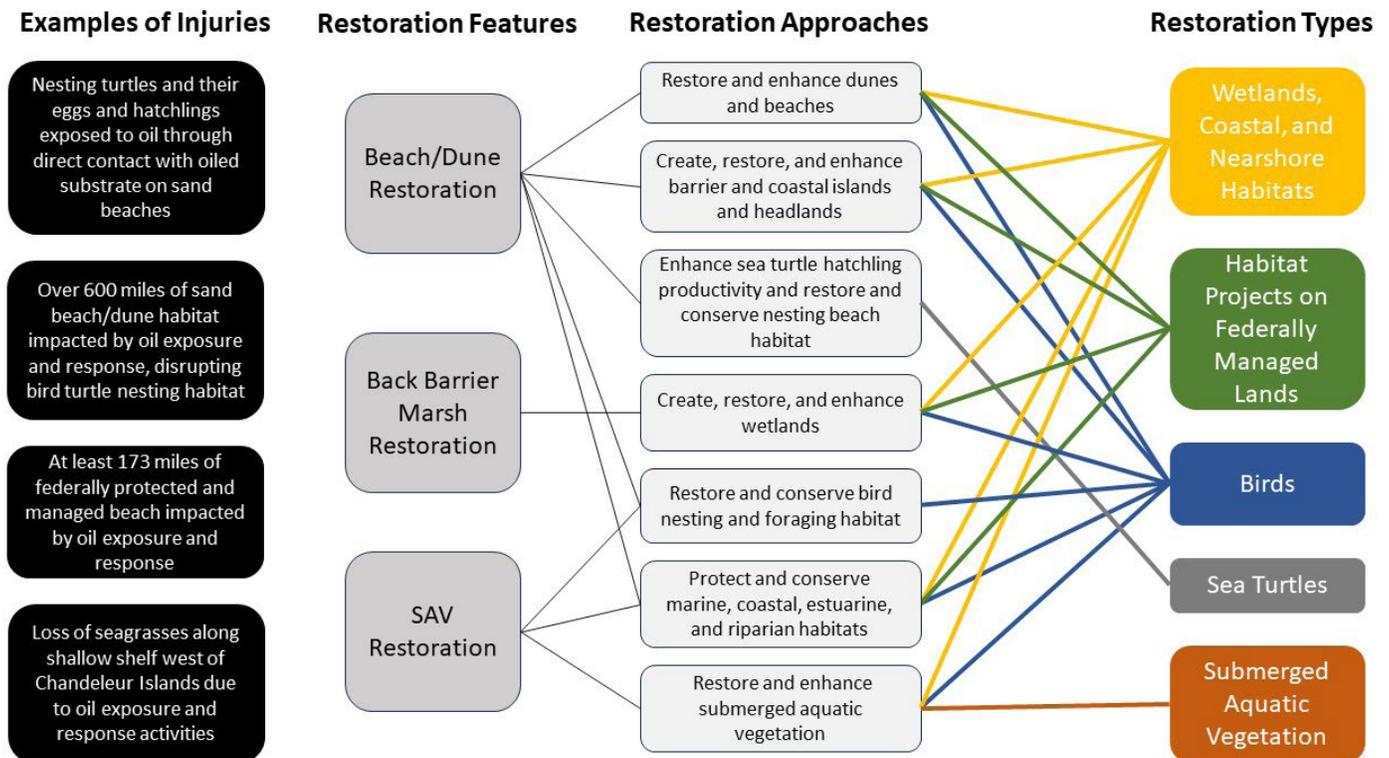
quality and carbon sequestration, ultimately benefiting numerous species of fish and wildlife, including the threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*).

LA TIG RP #9 will describe the DWH oil spill restoration planning process and analyze design alternatives for the project. The TIG anticipates the final plan will select a preferred alternative that best meets the project goals and compensates the public for injuries caused by the DWH oil spill and will also identify the restoration type allocations the LA TIG would use to implement the restoration. Should the ultimate design include components beyond the funding

available to the LA TIG at this time, the restoration plan could serve as a blueprint for a scope of activities that could be funded through additional funding streams, leveraging greater benefits for the resources of the Chandeleur Islands ecosystem. Examples of the natural resource injuries that beach, dune, and SAV restoration on the Chandeleur Islands could address, as well as the relationship between potential Restoration Techniques and their associated Restoration Type and approaches, are outlined in Figure 3. RP #9 would provide additional detail regarding how various Restoration Techniques could address natural resource injuries.



PHOTO: USFWS, Ryan Hagerly



**FIGURE 3:** Examples of DWH oil spill injuries that could be addressed through the Chandeleur Islands Restoration project, and their relationship to PDARP/PEIS Restoration Types and Restoration Approaches.

# Public Input

With the release of this document, the LA TIG is seeking public input regarding its intent to evaluate restoration alternatives for the Chandeleur Islands in *RP #9* to meet restoration goals, restoration types, and approaches consistent with the *PDARP/PEIS* and *Regionwide RP/EA #1*.

The public is encouraged to comment on the LA TIG's intention to address natural resource injuries through the Chandeleur Islands restoration project, including possible Restoration Techniques and Approaches, and the LA TIG's consideration of multiple Restoration Types that could provide funding for this restoration project. Comments can be submitted within 30 days of the public release of this Opportunity for Preliminary Public Engagement online at <https://parkplanning.nps.gov/LATIGOPPE> or via mail by sending a hard copy addressed to U.S. Fish and Wildlife Service Gulf Restoration Office, 1875 Century Blvd., Atlanta, GA 30345.

Please note that personal identifying information included in submitted comments (such as name, address, phone number, and email address) may be made publicly available. Personal information is not required to submit comments.

After the close of this opportunity for preliminary public engagement, the LA TIG will review comments for consideration in the development of their *RP #9*. The LA TIG will notify the public when the TIG initiates the process of writing the *Draft RP #9*.

The Chandeleur Islands provide crucial habitat for a multitude of plant and animal species.



PHOTO: USGS

## We Want Your Input

The public is encouraged to comment on the LA TIG's intention to address natural resource injuries through the Chandeleur Islands restoration project.

### ONLINE

<https://parkplanning.nps.gov/LATIGOPPE>

### BY MAIL

U.S. Fish and Wildlife Service  
Gulf Restoration Office  
1875 Century Blvd.  
Atlanta, GA 30345

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