

# CWPPRA RPT Region 4

Calcasieu-Sabine Basin

**PPL36 PROJECT NOMINEE FACT SHEET**  
**February 3, 2026**

**Project Name**

Holly Beach East Shoreline Protection West

**Project Location**

Region 4, Calcasieu – Sabine Basin, Cameron Parish, west of the Calcasieu Ship Channel..

**Problem**

Chronic erosion in this area is caused by a deficit of sand and sediment in the littoral transport system due to stabilization of the Mississippi River and regulation of the Atchafalaya River to the East (U.S. Department of Agriculture, Natural Resources Conservation Service and Louisiana Department of Natural Resources (USDA-NRCS and LDNR 2001). In addition, the Calcasieu and Mermentau Rivers are not supplying coarse grained sediment to the area, and the Cameron jetties associated with the Calcasieu Ship Channel deflect what little material exists away from the project area (Byrnes et al. 1995, Byrnes and McBride 1995). CS-0033 restored 8.7 miles of dune and beach from the western Calcasieu River Jetty to the Holly Beach/Constance Beach breakwater field using 1.98 million cubic yards of sediment dredged from the Gulf of America (Gulf). Since that time this stretch of approximately 10,000 linear feet (LF) has eroded an average of 15 feet (ft) per year for an estimated loss of 34 acres between 2015 and 2025. Currently the average distance from the Gulf's edge to Louisiana Highway 82 (LA HWY 82) is approximately 244 ft. Without protection, the shoreline will continue to retreat landward toward LA Hwy 82, which could have substantial impacts on local infrastructure and travel, especially if the area has another impact from a hurricane.

**Proposed Solution**

The project would construct break waters over a span of 9,400 feet with a light-weight aggregate core along the -3.5-ft (NAVD88) contour (approximately 150-ft offshore). The project would parallel the shoreline with gaps every 150 ft The project feature should trap sediments from the Gulf, which could result in accretion behind the breakwater as has occurred at ME-18.

**Goals**

The project goal is to halt 10,000 LF of Gulf shoreline erosion which threatens the integrity of LA HWY 82 and the Oyster Bayou watershed as well as the recently constructed CWPPRA project CS-0059 Oyster Bayou Marsh Creation and Terraces. A total of 52.9 acres of shoreline would be protected by the project, with another 32.3 acres of net gain through accretion.

Service goals include the protection of shoreline beaches designated as critical habitat for the threatened piping plover and beaches used by the threatened red knot.

**Project Features:**

Foreshore Rock Dike – 9,400 lf

## **Preliminary Ranking Criteria:**

1) *What is the projects total net acres?*

Net Acres – 85 acres

- 52.9 acres of beach will be protected
- 32.3 acres will be gained through accretion

2) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*

The project will have synergistic effects with:

- CS-0059
- CS-0031
- CS-0033
- CS-0020

3) *What is the interior loss rate and/or shoreline loss rate? And what is the source of the data?*

Shoreline loss is approximately 15 feet per year since 2015.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc or is part of a land bridge feature?*

The project would protect marsh and beach along the Gulf of America

5) *Does any project feature directly or indirectly protect any critical and/or non-critical infrastructure?*

This project would protect LA HWY 82

## **Considerations/potential issues?**

This project has landowner support.

This project would have minimum O&M, demonstrated by CS-0031

## **Preliminary Costs:**

The estimated construction cost plus 25% contingency is \$20M - \$25M.

## **Preparer(s) of Fact Sheet:**

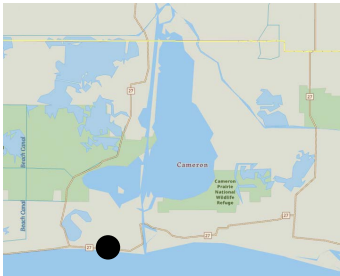
Dustin Farmer, USDA/NRCS, 318-312-2763, [dustin.farmer@usda.gov](mailto:dustin.farmer@usda.gov)

Eric Whitney, USDA/NRCS, 337-291-3069, [eric.whitney@usda.gov](mailto:eric.whitney@usda.gov)

# PPL 36 Holly Beach East Shoreline Protection Region 4, Cameron Parish



 Holly Beach East Shoreline Protection



Prepared with assistance from USDA-NRCS

Disclaimer:  
Not an official USDA-NRCS Conservation Plan Map



0 360 720 Ft

## PPL36

# Holly Beach East Shoreline Protection Region 4, Calcasieu-Sabine Basin



### Contacts:

Dustin Farmer, Wildlife Biologist, [dustin.farmer@USDA.gov](mailto:dustin.farmer@USDA.gov), 318/312-2763

Eric Whitney, Planning Engineer, [eric.whitney@USDA.gov](mailto:eric.whitney@USDA.gov), 337/291-3069



## PPL36 - Holly Beach East Shoreline Protection



Map Courtesy of BICM Program

2010 Holly Beach East Shoreline Approximately 40 - 50 feet from LA HWY 82.



## PPL36 - Holly Beach East Shoreline Protection



Map Courtesy of BICM Program

CS-0033, constructed in 2014, included 8.7 miles of dune and beachhead restoration. The 2015 shoreline (shown in blue) was approximately 350 feet from LA HWY 82.



## PPL36 - Holly Beach East Shoreline Protection



2024 Holly Beach East Shoreline, The shoreline has eroded approximately 15 lf per year since 2015 (Blue Line) Currently between 180 ft and 200 ft of shoreline between the Gulf of America and LA HWY 82. If these loss rates continue the beach will threaten to undercut LA HWY 82 within the next 15 years. (2041)



## PPL36 - Shark Island Shoreline Protection

PPL 36  
Holly Beach East Shoreline Protection  
Region 4, Cameron Parish

Date: 01/23/2025



Holly Beach East  
Shoreline Protection



USA is an equal opportunity provider, employer, and contractor.

Prepared with assistance  
from USDM/WRCS

Disclaimer:  
Not an official USDA/WRCS  
Construction Plan No.



0 360 720 Ft

### Goal:

The project goal is to halt 10,000 LF of Gulf shoreline erosion which threatens the integrity of LA HWY 82 and the Oyster Bayou watershed

### Solution:

- Construct 9,400 feet of foreshore breakwaters for shoreline protection and accretion
- Gaps Every feet 150
- -3 ft contour, 150 feet from shoreline

**Direct Benefits: 85 Acres**

**Est. Construction Cost + Contingency: \$20 - 25M**



**PPL36 PROJECT NOMINEE FACT SHEET**  
**February 3, 2026**

**Project Name**

Peconi Bayou Marsh Creation

**Project Location**

Region 4, Calcasieu-Sabine Basin, Cameron Parish

**Problem**

Wetland loss in the Calcasieu-Sabine Basin is due to altered hydrology, drought and inundation stress, subsidence, and hurricane-induced damage. For instance, data from the nearby CRMS 1743 station show an average marsh elevation of +0.52 ft NAVD88 GEOID 12B, whereas the 5-year average water elevation is +0.61 ft NAVD88 GEOID 12B. Additionally, deep subsidence from the GEOTIFF Raster file is 0.88 mm/yr or 0.06 ft over 20 years (CRMS 1743). Moreover, the USGS land change trend from 1985 to 2020 for the Lambert Lake subunit (024) is -1.00% per year; however, the USGS calculated 1984-2025 land loss rate for the extended boundary area is -1.19% per year. The project area is estimated to be 32% brackish marsh and 68% open water based on USGS 2023 NAIP land water analysis, and is located adjacent to the eastern Calcasieu Lake rim near the existing Peconi water control structure.

**Goals**

The project goal is to create 219 acres and nourish approximately 99 acres of brackish marsh to create intertidal habitat, and provide resiliency to the Calcasieu Lake rim and the Cameron-Creole watershed (Figure 1).

**Proposed Solution**

The proposed solution is to create and nourish approximately 318 acres of brackish tidal marsh along the Calcasieu Lake rim, using material dredged from Peconi Bayou. The project is being synergistically developed through efforts from the Calcasieu-Sabine Large Scale Marsh and Hydrologic Restoration project (CS-87), which would add additional drainage capacity through the lake rim including two sets of structures adjacent to the proposed project area. Sediment would be hydraulically dredged from Peconi Bayou, in an effort to also improve drainage conveyance, and placed in two confined disposal areas. Containment dikes will be gapped no later than three years after construction to allow fisheries access and reestablish hydrologic connectivity.

**Preliminary Project Benefits**

- 1) *What is the project's estimated total net acres after 20 years?*  
Net Acres – 200-250 acres
  
- 2) *What is the estimated construction cost plus 25% contingency and the estimated fully funded cost?*  
The estimated construction cost (CC) plus 25% contingency is \$15-20M. The fully funded cost (FFC) is \$26,924,865.
  
- 3) *What is the project cost effectiveness using fully funded cost/net acres?*

Cost effectiveness - \$131,985 FFC/net acre

FFC (\$26,924,865) / Total Net Acres (204 ac) = Cost effectiveness (\$131,985 FFC/net acre)

4) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? (Provide details including proximity, funding/project status, and how the projects collectively contribute to restorations benefits larger than their individual footprints)*

- CWPPRA CS-04a Cameron-Creole Maintenance
  - Adjacent to the north of the project footprint, constructed
- CWPPRA CS-17 Cameron-Creole Plugs
  - 0.8 miles south of the project footprint, constructed
- CWPPRA CS-54 Cameron-Creole Watershed Grand Bayou Marsh Creation
  - 1.3 miles south of the project footprint, constructed
- CWPPRA CS-49 Cameron-Creole Freshwater Introduction
  - 6.0 miles east of the proposed project, constructed
- CWPPRA CS-78 No Name Bayou Marsh Creation
  - 6.8 miles to the southwest of the proposed project, under construction
- RESTORE CS-87 Calcasieu-Sabine Large Scale Marsh and Hydrologic Restoration
  - Adjacent to the west and south, funded for construction
- Venture Global (VG) Calcasieu Pass 2 (CP2) Liquefied Natural Gas (LNG) facility beneficial use of dredged sediment (BUDMAT) marsh creation cells
  - 4.5 miles to the southwest of the proposed project, under construction

The Peconi Bayou Marsh Creation project along with the above projects will work together to restore and maintain the Cameron-Creole watershed (Figure 2).

5) *What is the interior loss rate and/or shoreline loss rate? And what is the source of the data?*

The land loss rate is -1.00% per year for the Lambert Lake subunit based on the USGS land trends spreadsheet from 1985 to 2020. The USGS calculated 1984-2025 land loss rate for the PPL35 extended boundary area is -1.19% per year.

6) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc or is part of a land bridge feature?*

The proposed project will maintain and restore structural components of the coastal ecosystem, specifically by maintaining the integrity of the eastern Calcasieu Lake rim and improving the hydrology of the northern Cameron-Creole watershed. The project proposes to create and nourish approximately 318 acres of brackish intertidal marsh, using material dredged from Peconi Bayou which would also improve the drainage capacity of this waterway. The proposed project would work in coordination with multiple restoration projects, including the CS-87 project which also addresses structural framework of the lake rim and improvements to hydrology of the Cameron-Creole watershed.

7) *Does the project result in net positive and direct benefits on critical infrastructure?*

This project will provide a net positive direct benefit to critical infrastructure. The positioning of the project adjacent to the Calcasieu Lake rim is to provide maximum benefits to the integrity of the lake rim and the integrated water exchange points (both the existing and planned water control structures). The project is also located in proximity to the Calcasieu Ship Channel, the Gulf Intracoastal Waterway, and LA Highway 27 (a critical evacuation route for the residents of Cameron, Creole, and Grand Chenier), as well as multiple oil and gas pipelines.

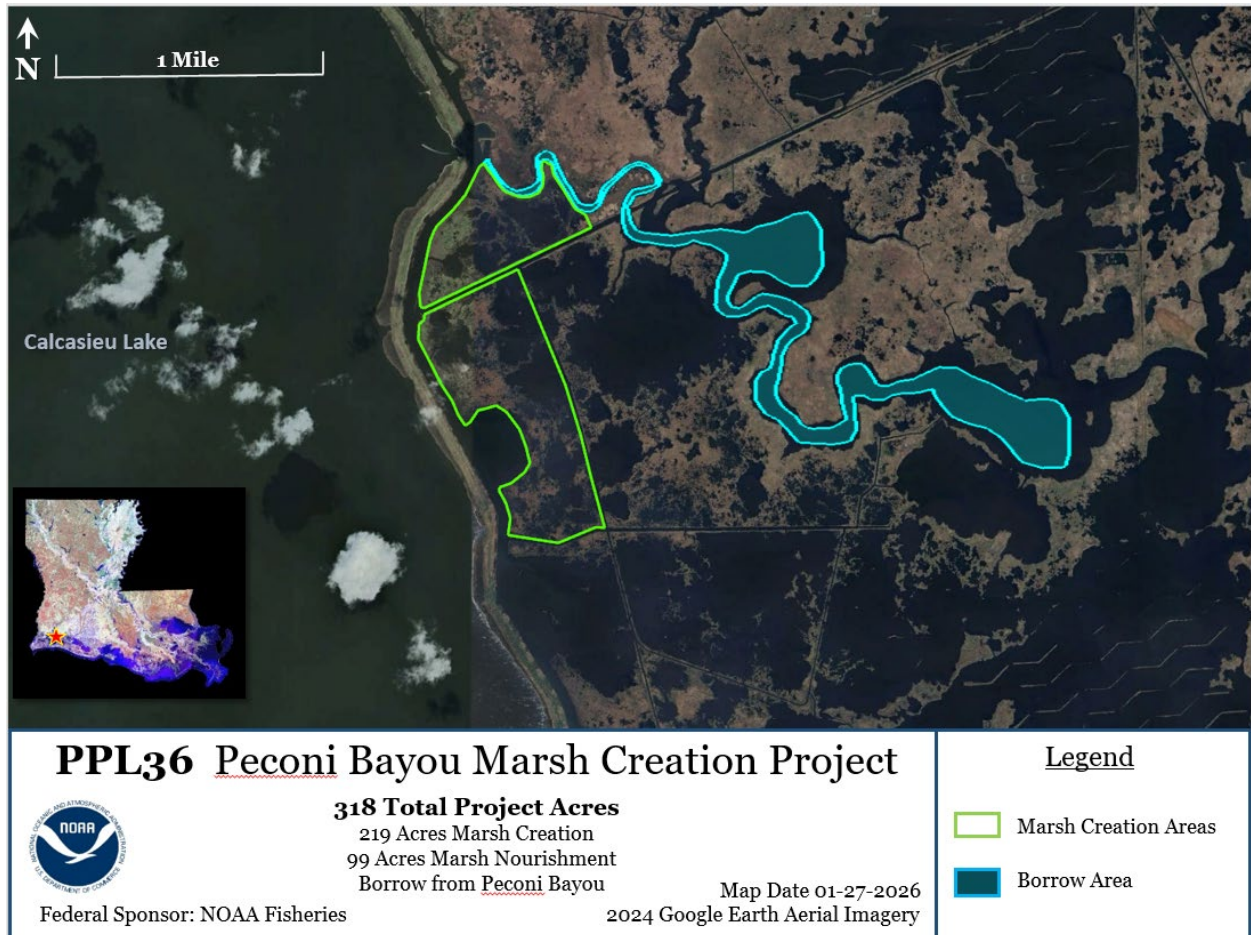
**Other Considerations**

Calcasieu Lake public oyster seed grounds and pipelines.

**Preparer(s) of Fact Sheet and Contact Information**

Craig Gothreaux, NOAA Fisheries, (337) 280-0544, craig.gothreaux@noaa.gov

Jason Kroll, NOAA Fisheries, (225) 335-9659, jason.kroll@noaa.gov



**Figure 1.** Project Map.



**Figure 2.** Synergy, Critical Infrastructure, and Critical Landscape Features.



**NOAA**  
**FISHERIES**

# Peconi Bayou *Marsh Creation Project*

## REGION 4: Calcasieu-Sabine Basin

*Presenter: Craig Gothreaux, Fish Biologist, NOAA*

### *Special Thanks*

*Sweet Lake Land*

*Miami Corporation*

*CPRA CS-87 Team*

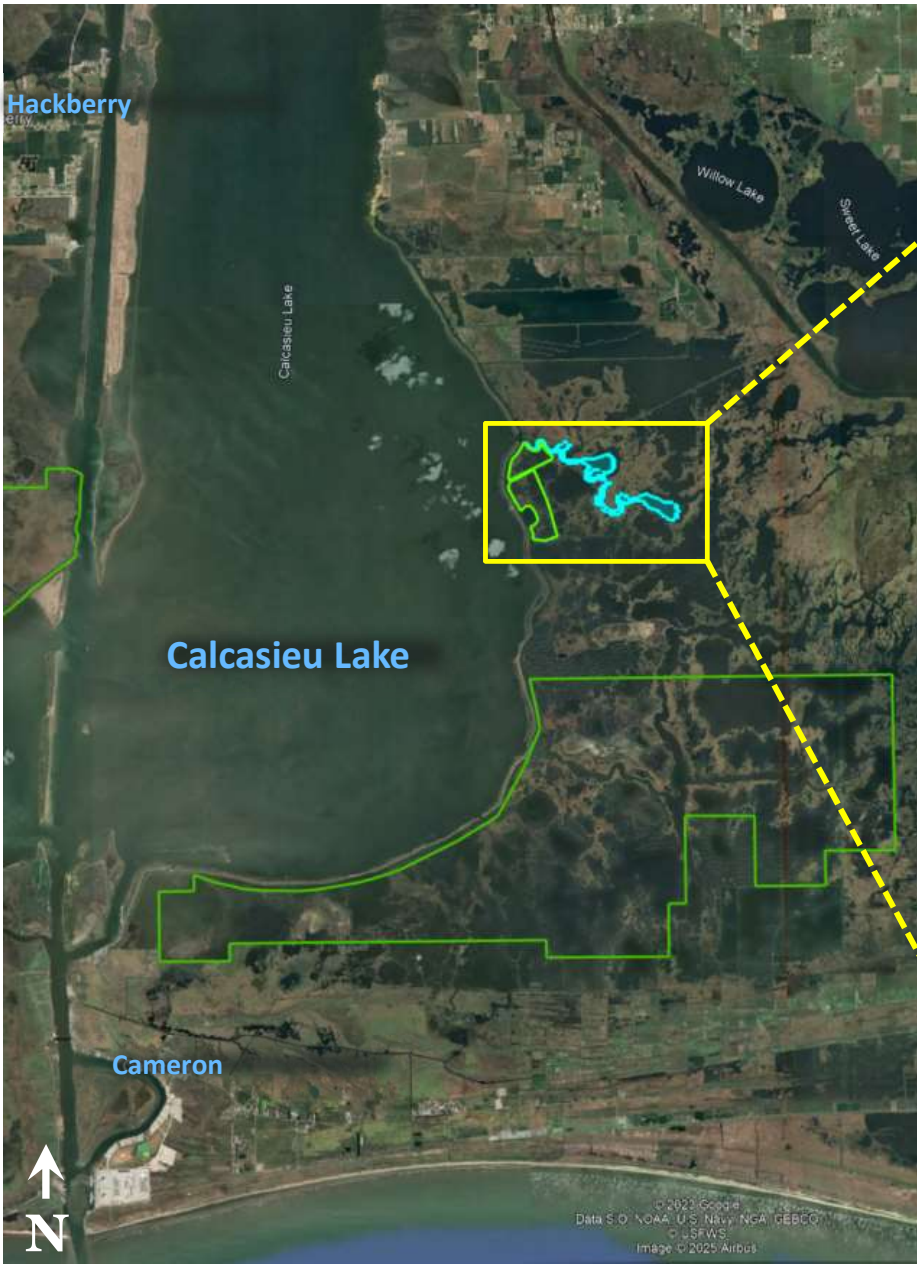


**PPL 36 CWPPRA Regional Planning Team Meeting**

February 3, 2026

# Project Vicinity

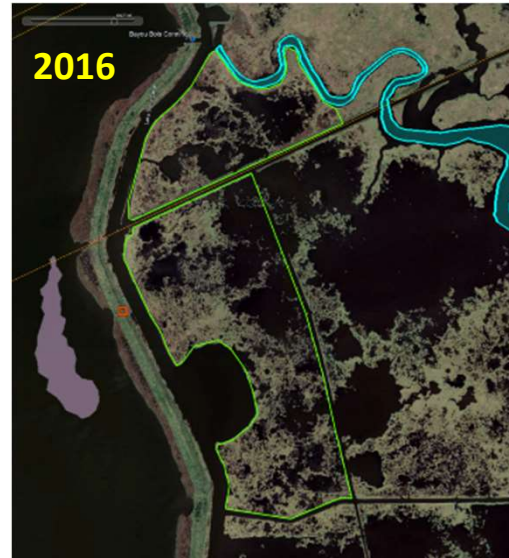
# Peconi Bayou Marsh Creation Project



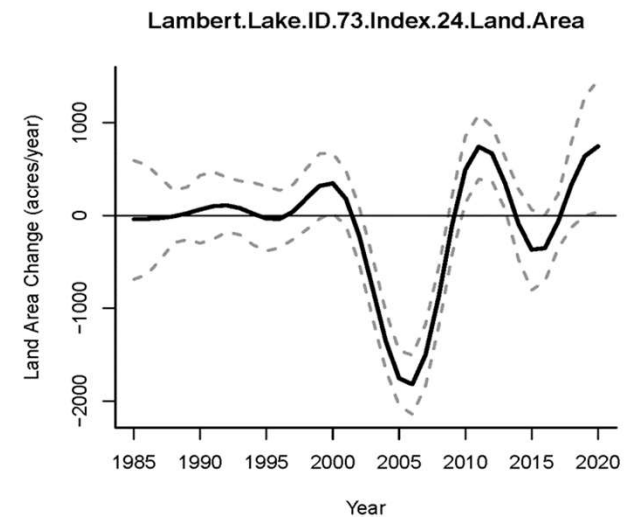
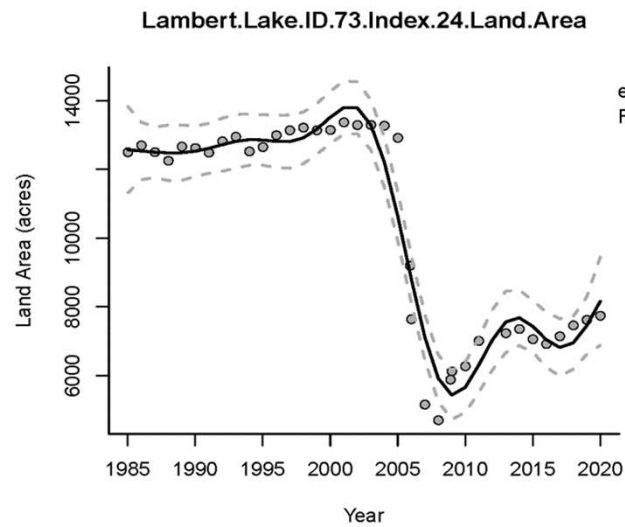
## 318 Acres of Marsh Creation/Nourishment

# Project Area Problems

# Peconi Bayou MC

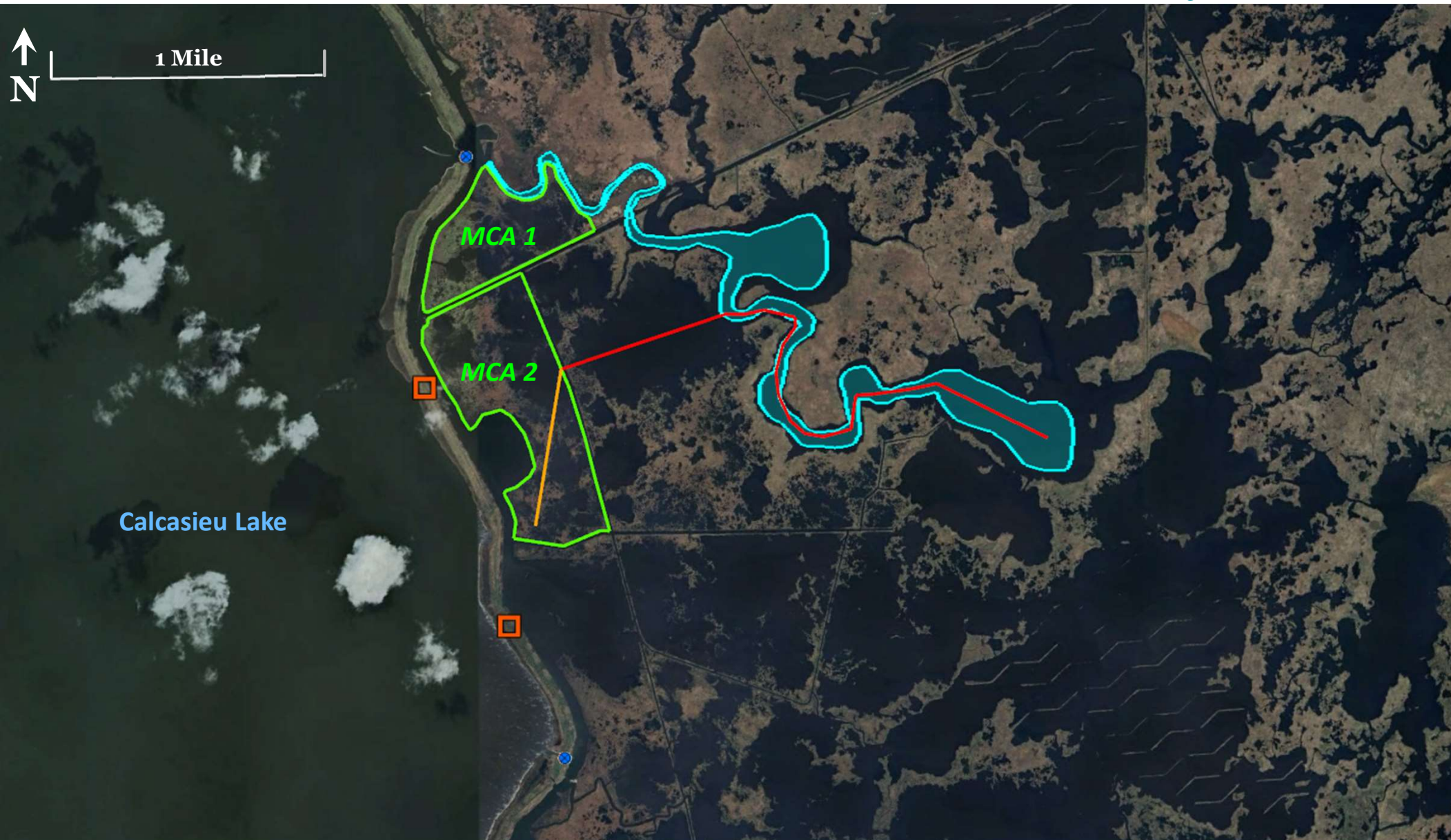


Land change rate (1985-2020 USGS data) for the Lambert Lake subunit (024) is **-1.00%/yr**



# Project Elements

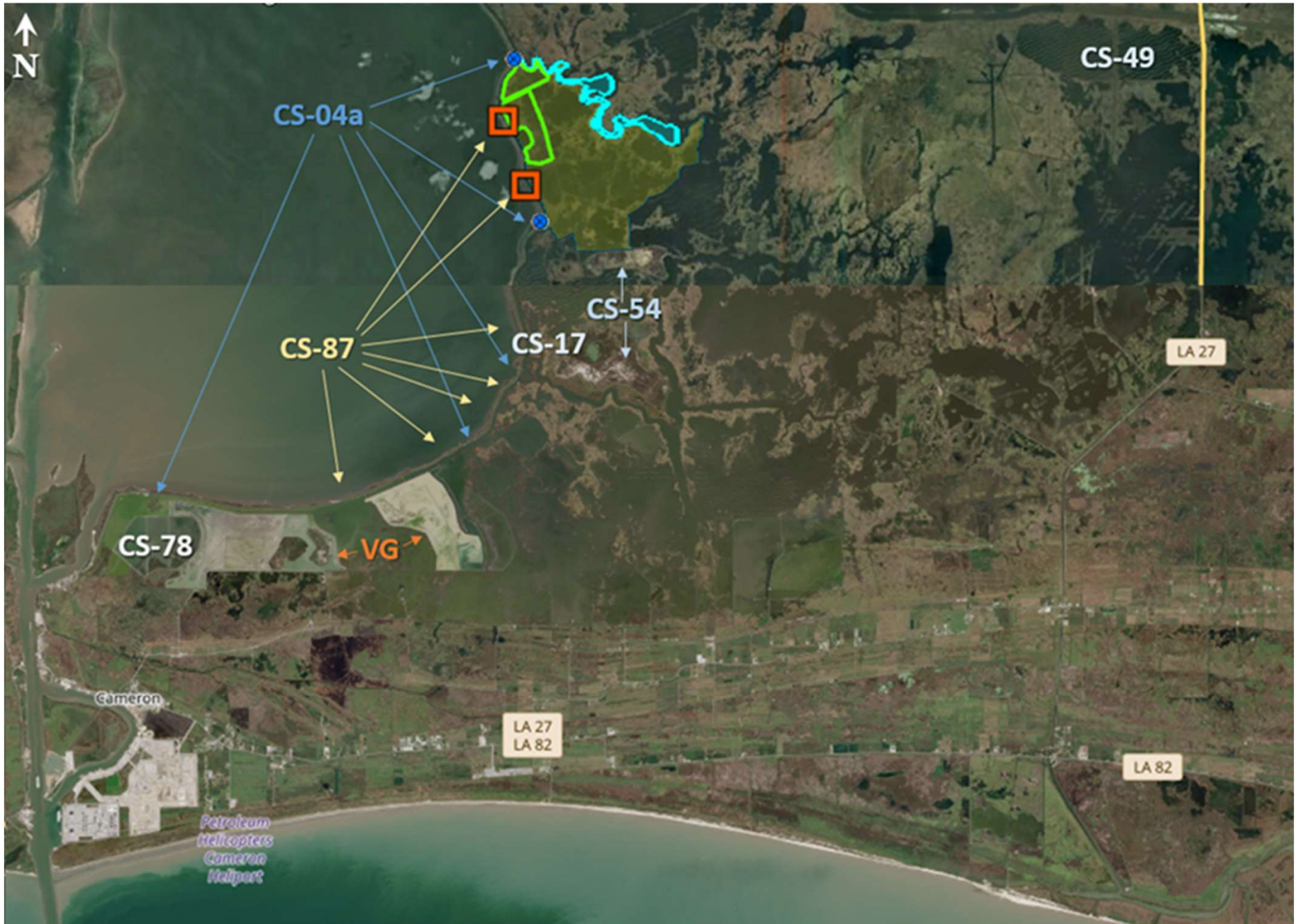
# Peconic Bayou MC



- ❖ MCA 1 = 108 ac
- ❖ MCA 2 = 210 ac
- ❖ 318 Total Project Acres
- ❖ Bayou Peconi Borrow

# Selection Criteria

# Peconi Bayou MC



# Summary

## Peconi Bayou Marsh Creation Project

- ❖ **318 Total Project Acres**
  - 219 Acres Marsh Creation
  - 99 Acres Marsh Nourishment
    - MCA 1 = 108 ac, MCA 2 = 210 ac
    - *Borrow from Peconi Bayou*
  
- ❖ **Construction Cost + 25% Contingency: \$15M – \$20M**
  
- ❖ **Net Benefits: 200 – 250 Acres**

Contact information:

Jason Kroll, 225.335.9659

[jason.kroll@noaa.gov](mailto:jason.kroll@noaa.gov)

Craig Gothreaux, 337.280.0544

[craig.gothreaux@noaa.gov](mailto:craig.gothreaux@noaa.gov)

# PPL36 CONCEPT FACT SHEET

January 30, 2026

## Project Name

Mud Lake South Marsh Restoration

## Master Plan Strategy

Mud Lake Marsh Creation (2023 Master Plan Project ID 210, Implementation Period 1): Creation of Marsh within a footprint of approximately 8,100 acres at Mud Lake south of West Cove Calcasieu Lake to create a new wetland habitat, restore degraded marsh, and reduce wave erosion.

## Project Location

Region 4, Calcasieu/Sabine Basin, Cameron Parish

## Problem

The area has experienced wetland loss due to storm events, subsidence and saltwater intrusion. The area faces issues with inundation and poor drainage. The land loss rate for this area is -1.05%/year.

## Proposed Solution

The proposed project would create/nourish marsh using sediment dredged from the Gulf and placed into the project footprint composed of two marsh creation cells (200 ac). The dredged material would be fully contained. Containment dikes would be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands. The created marsh would be planted at 50% density. An estimated 15,610 LF of terraces would be constructed along the north side of the project area, and fully planted. Lastly, two Chenier Ridges would be constructed (total 7,746 LF) and fully planted.

## Project Benefits

The proposed project would restore degraded wetland habitat and provide increased protection from storm surge and flooding while ensuring the project area has sufficient hydrologic connectivity to properly drain. Specific goals of the project are to create approximately 128 acres and nourish approximately 72 acres (200 ac) of marsh with dredged material from the Gulf to create shallow habitat for the Eastern Black Rail (*Laterallus jamaicensis jamaicensis*), including planting the proper plant structure/species composition with spots of elevated refuges to escape high water events; create approx. 15,610 LF of terraces, planted with appropriate species; construct 7,746 LF of Chenier Ridge habitat and plant it with woody and herbaceous species.

## Project Innovation

- Multiple restoration strategies (MC + TR + RR)
- Create stable, shallow water marsh habitat for Black Rail

## Project Costs

The estimated construction plus 25% contingency is \$15M - \$20M

- 1) *What is the projects total net acres?*  
Approximately 200 net acres.
- 2) *What is the total project construction cost plus 25% contingency?*  
The estimated construction cost, including 25% contingency, is approximately \$19.1M.
- 3) *What is the project cost effectiveness using total net acres/project construction cost?*  
Cost Effectiveness – \$95,500  
Construction cost (\$19.1 M) / Total Net Acres (200 ac) = Cost effectiveness – (\$95,500/acre)

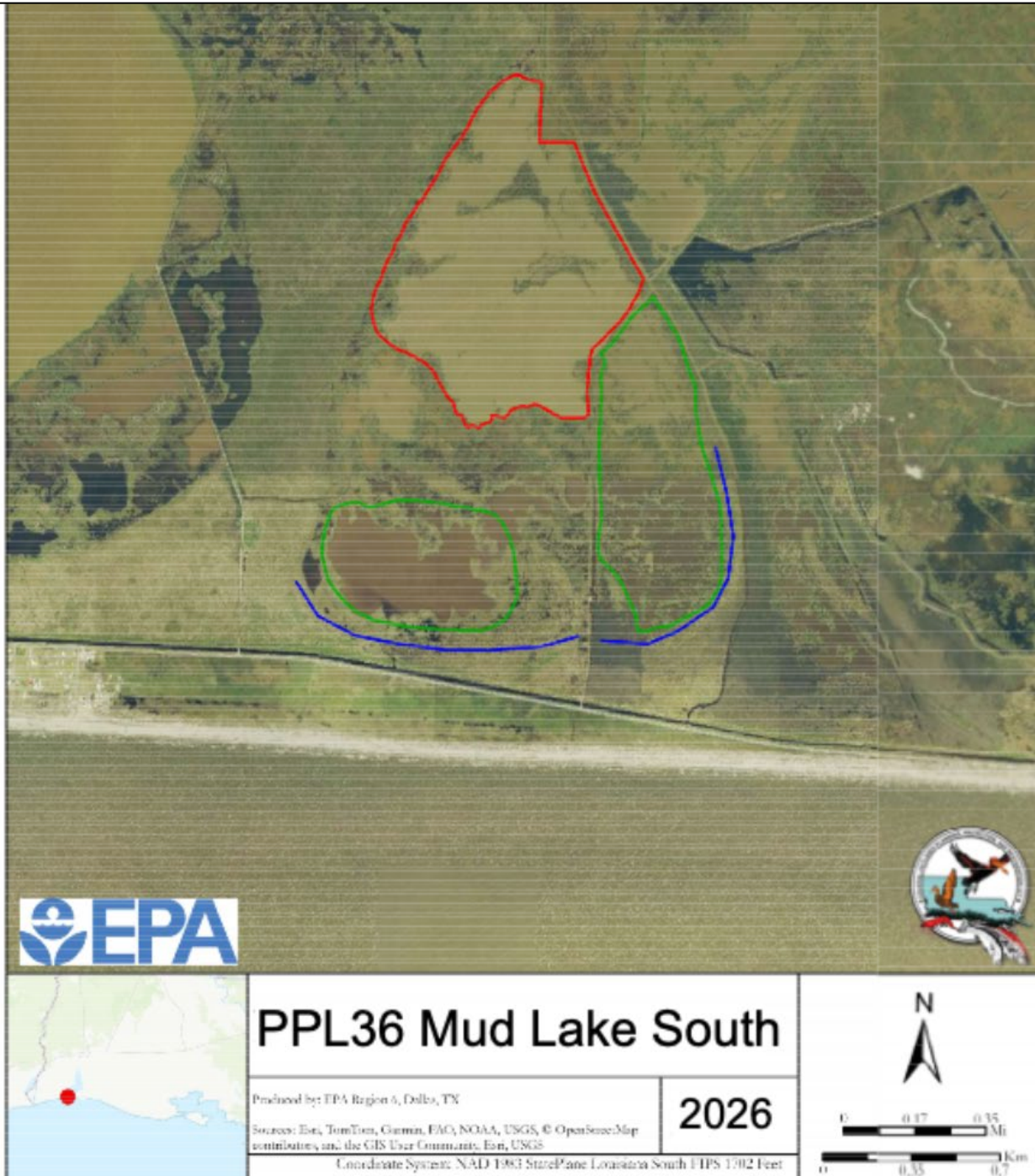
- 4) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*  
The proposed project would be synergistic with Oyster Bayou Marsh Creation and Terracing (CS-59), Oyster Lake Marsh Creation and Nourishment (CS-79), East Mud Lake Marsh Management (CS-20) to the northwest, and Holly Beach Sand Management (CS-31).
- 5) *What is the interior loss rate and/or shoreline loss rate?*  
The 1984 to 2020 USGS land loss rate for this area is -1.05%/year from the PPL31 WVA.
- 6) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc or is part of a land bridge feature?*  
This project would restore marsh in a fragmented area which will help protect the surrounding Chenier Plain of Louisiana.
- 7) *Does any project feature directly or indirectly protect any critical and/or non-critical infrastructure?*  
The proposed project would restore degraded wetland habitat and provide increased protection from storm surge and flooding while ensuring the project area has sufficient hydrologic connectivity to properly drain. This project would also protect the Gulf Beach Highway LA-82 which is a hurricane evacuation route and provide a measure of resiliency for the town of Holly Beach which is immediately adjacent to Hwy 82 to the southwest

**Preparer(s) of Fact Sheet**

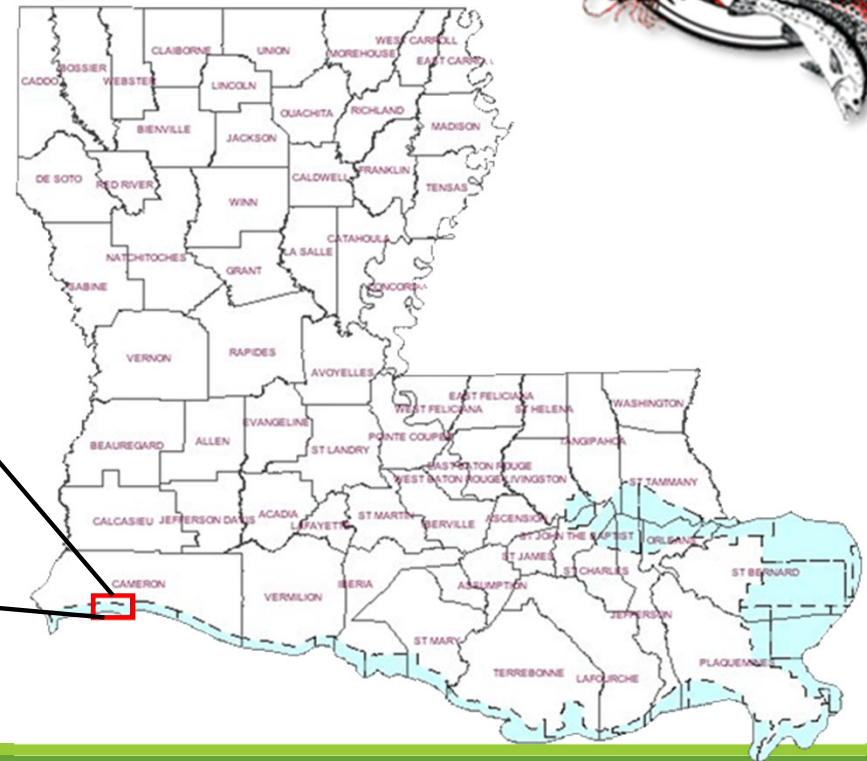
Andrew Pressly; EPA; (214) 665-2758; Pressly.andrew@epa.gov

**Feature descriptions:**

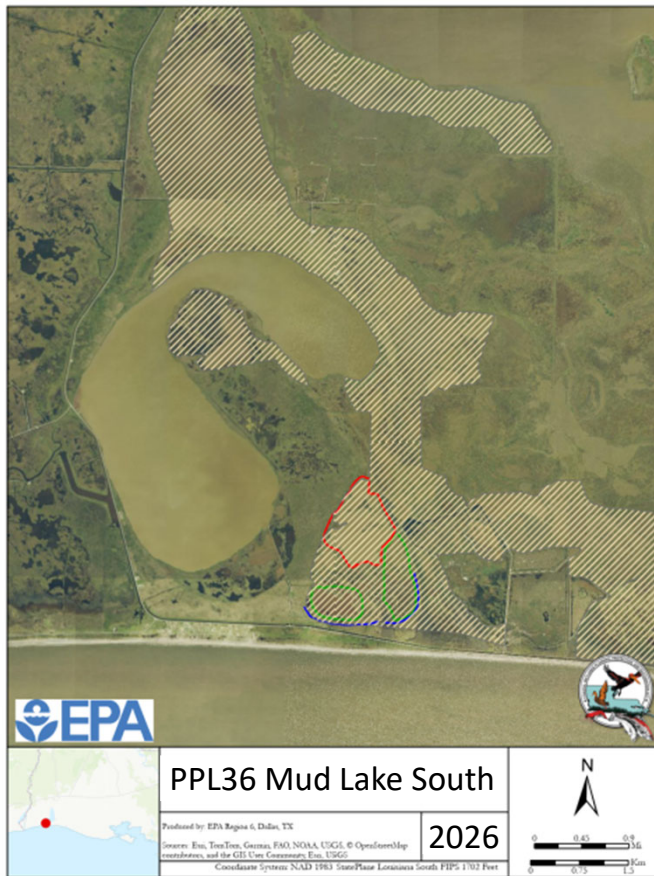
- Green polygons – MCAs, 200 acres.
  - Fully contained
  - Built higher up to create suitable Black Rail habitat.
  - 50% planting
- Blue lines – chenier construction, 7,746 LF
  - Planted
- Red polygon – Terracing area, planted
  - Estimated 15,610 LF within that cell
- Hydrologic restoration (not pictured)
  - Gapping of ECDs by year 3
  - Investigate hydrologic connectivity to Oyster Bayou
- Borrow – Gulf



# Mud Lake South Marsh Creation PPL36



# 2023 Master Plan Strategy



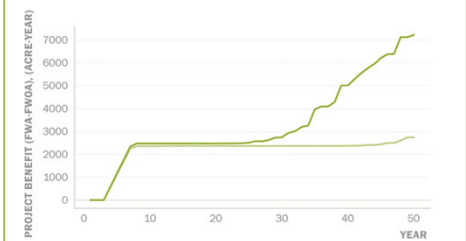
## Description

Creation of marsh within a footprint of approximately 8,100 acres at Mud Lake south of West Cove Calcasieu Lake to create new wetland habitat, restore degraded marsh, and reduce wave erosion.

## Estimated Cost and Duration

	Planning, Engineering & Design	Construction	Operations, Maintenance & Monitoring	Total
<b>Cost</b>	\$21M - \$26M	\$270M - \$330M	\$9.1M - \$11M	<b>\$300M - \$360M</b>
<b>Duration</b>	3	4	43	—

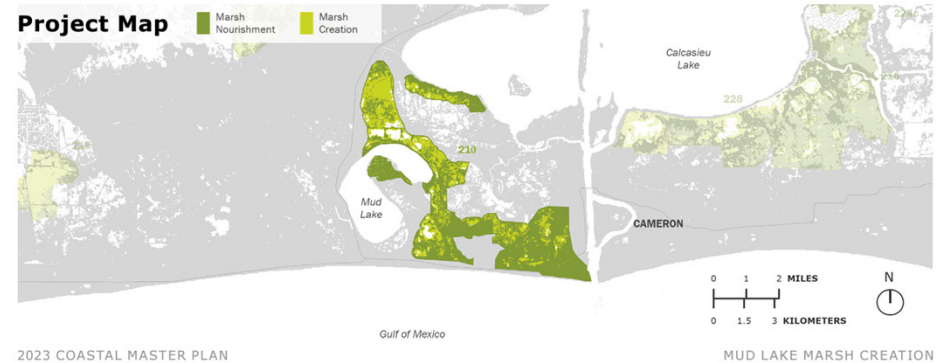
## Project Benefits



PROJECT BENEFITS TABLE

	Lower Scenario	Higher Scenario	Average
<b>Max. Annual Benefit (Acre)</b>	2.7K	7.2K	5.0K
<b>Min. Annual Benefit (Acre)</b>	0	0	0
<b>Years of Pos. / Neg. Benefit</b>	47 / 0	47 / 0	47 / 0

## Project Map




Creation of Marsh within a footprint of approximately 8,100 acres at Mud Lake south of West Cove Calcasieu Lake to create a new wetland habitat, restore degraded marsh, and reduce wave erosion.

# Summary of Information and Features

---

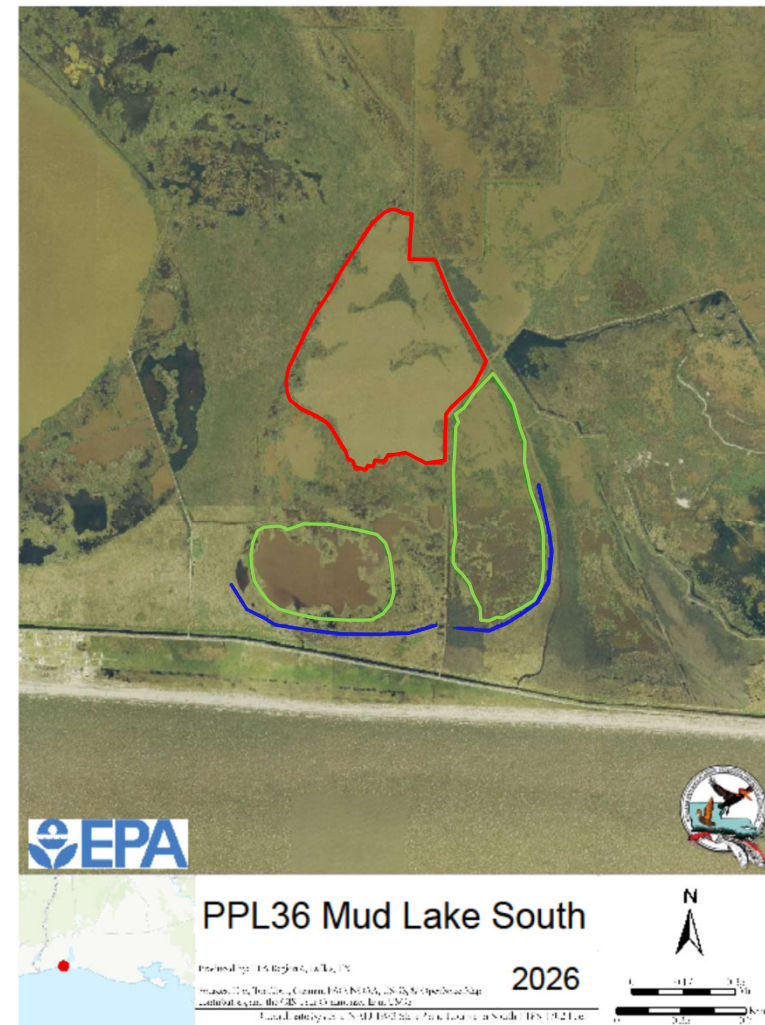
<b>Problem</b>	Wetland loss due to storm events, subsidence, sea level rise, inundation/poor drainage, and saltwater intrusion. Land loss rate of - 1.05%/year
<b>Benefits</b>	Create 200 ac shallow, intertidal marsh, planted; Construct 15,610 LF of terraces, planted; Construct 7,746 LF of Chenier Ridge, planted.
<b>Cost</b>	\$15-\$20M
<b>Innovation</b>	<ul style="list-style-type: none"><li>* Multiple restoration strategies (MC + TR + RR)</li><li>* Create habitat tailored for endangered Black Rail</li></ul>

---



# Project Description

- Green polygons – MCAs, 200 acres.
  - Fully contained
  - Built higher up to create suitable Black Rail habitat.
- Blue lines – chenier construction
  - 7,746 LF
- Red polygon – terracing area
  - Estimated 15,610 LF within that cell
- Hydrologic restoration (not pictured)
  - Gapping of ECDs by year 3
  - Investigate hydrologic connectivity to Oyster Bayou
- Borrow – Gulf



# EPA Region 6 CWPPRA Team Goals

---

- ❖ Protect human health and the environment, including water quality, by restoring coastal wetlands
  - ❖ Improve local community resilience
    - ❖ Restore wetland habitats and protect critical infrastructure
      - ❖ Support local stakeholder priorities in synergy with EPA's mission



## CWPPRA Team

Andrew Pressly, [pressly.Andrew@epa.gov](mailto:pressly.Andrew@epa.gov)  
Danielle O'Neil, [oneil.danielle@epa.gov](mailto:oneil.danielle@epa.gov)  
Robert Cook, [cook.robert@epa.gov](mailto:cook.robert@epa.gov)  
Daniel Landeros, [landeros.daniel@epa.gov](mailto:landeros.daniel@epa.gov)  
Doug Jacobson, [jacobson.doug@epa.gov](mailto:jacobson.doug@epa.gov)