# Priority Project List 33 Candidate Projects



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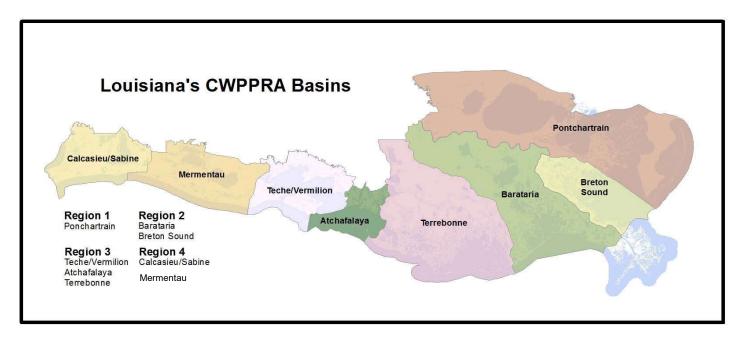


# Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

# **Priority Project List (PPL) Selection Process**

# **Project Nominations**

The 4 Regional Planning Teams (RPTs), consisting of representatives from the CWPPRA agencies and the coastal parishes located in those regions, will meet to propose projects to be included on the new PPL. Project nominations will be accepted in all the hydrologic basins below. *All proposals must be consistent with the 2017 State Master Plan to be considered as possible nominees; therefore, those wishing to propose projects are encouraged to work with representatives of the Louisiana Coastal Protection and Restoration Authority prior to the RPT meetings to develop projects that are consistent.* A lead agency will be assigned to each nominated project to prepare preliminary project support information (factsheet, maps, and potential designs, and benefits).



- Project nominations that provide benefits or construct features in more than one basin shall be presented in the basin receiving the majority of the project's benefits.
- Multi-basin projects can be broken into multiple projects to be considered individually in the basins which they occur.
- Coastwide Projects
  - Proposed technique applicable across the coast; refer to Appendix F of the CWPPRA Standard Operation Procedures for coastwide project guidelines
  - o Project nominations that are legitimate coastwide applications will be accepted separate from the 8 basins at any of the 4 RPT meetings.
- Demonstration Projects
  - o Demonstrates a technology which can be transferred to other areas in coastal Louisiana
  - Refer to Appendix E of the CWPPRA Standard Operating Procedures for demonstration project guidelines

If similar projects are proposed within the same area, the RPT representatives, including the CWPPRA agencies and *only* the parishes located within the project's basin, will determine if those projects are sufficiently different to allow each of them to move forward. If not sufficiently different, such projects will be combined into one project nominee and a federal sponsor will be determined. This decision to either combine similar projects or allow each to move forward will be made at the RPT meeting where the similar projects are proposed. If a mutually agreeable position on sponsorship cannot be determined by overlapping sponsors, voting by the RPT representatives (including agencies and only the parishes within the project's basin) will occur to determine sponsorship at the RPT meeting. For non-overlapping projects, a federal sponsor does not have to be identified prior to the coastwide vote.

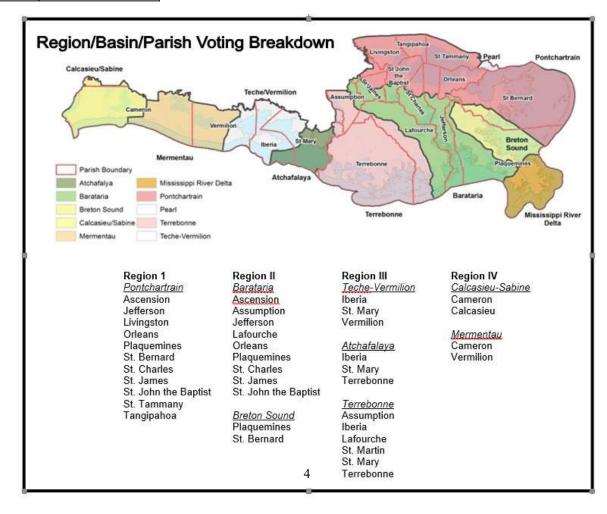
Prior to voting on project nominees, the Environmental Work Group (EnvWG) and Engineering Work Group (EngWG) will screen coastwide project and demonstration project nominations to ensure that each qualifies for its respective category as set forth in the CWPPRA Standard Operating Procedures (SOP).

Nominees	Basin
4	Barataria
4	Terrebonne
3	Breton Sound
3	Pontchartrain
2	Mermentau
2	Calcasieu/Sabine
2	Teche/Vermilion
1	Atchafalaya
1	Coastwide
22	TOTAL

# **Coastwide Electronic Vote**

The RPTs will vote after the individual RPT meetings via email to select nominee projects. The RPTs will select projects per basin based on land loss rates (see table on left) and up to 6 demonstration projects.

During the RPT meetings, all CWPPRA agencies and parishes will be required to provide the name and contact information for the official representative who will vote to select nominee projects. Each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote.



# **Preliminary Assessment of Nominated Projects**

Agencies, parishes, landowners, and other individuals will informally confer to further develop projects. The lead agency designated for each nominated project will prepare a brief project description that discusses possible features. Factsheets will also be prepared for demonstration project nominees.

During this preliminary assessment, the EngWG and EnvWG meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups also review the nominated demonstration projects. If it is determined that a demonstration project is unlikely to be utilized in restoration or has been evaluated previously, the Work Groups may recommend to the Technical Committee that these projects not move forward.

The P&E Subcommittee prepares a matrix of cost estimates and other pertinent information for nominees and demonstration project nominees.

# **Selection of Phase 0 Candidate Projects**

The selection of the Phase 0 candidate projects occurs at the spring Technical Committee meeting. The Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. They will select 10 candidate projects regardless of basin and may select up to 3 demonstration project candidates for detailed assessment by the EngWG, EnvWG, and Economic Work Group (EcoWG).

# Phase 0 Analysis of Candidate Projects

During Phase 0 analysis, the EngWG, EnvWG and Academic Advisory Group meet to refine project features and develop boundaries for the project and extended boundaries for estimating land loss.

The sponsoring agencies coordinate site visits for each project to observe the conditions in the project area. There will be no site visits conducted for demonstration projects. The sponsoring agencies develop draft WVAs and prepare Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates, using formats approved by the applicable work group. Demonstration project candidates will be evaluated as outlined in Appendix E of the SOP.

The EngWG reviews and approves Phase 1 and 2 cost estimates, the EcoWG reviews cost estimates and develops annualized (fully funded) costs, and the EnvWG reviews and approves all draft WVAs.

The Corps of Engineers staff prepares an information package for Technical Committee review and public distribution consisting of:

- 1) Updated project factsheets;
- 2) A matrix that lists projects, fully funded cost, average annual cost, WVA results in net acres and Average Annual Habitat Units (AAHUs), and cost effectiveness (average annual cost/AAHU);
- 3) A qualitative discussion of supporting partnerships and public support.

# Selection of the PPL

The selection of the PPL will occur at the winter Technical Committee and Task Force meetings. The Technical Committee meets and considers matrix, project factsheets, and public comments, then recommends up to 4 projects and up to one demonstration project for selection to the PPL. The Task Force will review the Technical Committee recommendations and determine which projects will receive Phase 1 (design) funding for the PPL.

Once a project completes Phase I, Phase II (construction) funding must be requested from the Task Force and much of the evaluation is updated using additional information gained since original analysis.



# Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

# **PPL 33 Schedule**

February 7, 2023	Region IV Planning Team Meeting
February 8, 2023	Region III Planning Team Meeting
February 9, 2023	Regions I and II Planning Team Meetings
February 23, 2023	Coastwide RPT Electronic Vote
March/April 2023	Agencies prepare factsheets for RPT-nominated projects
March/April 2023	Engineering/Environmental Work Groups review project features, benefits, & prepare preliminary cost estimates for nominated projects
April 2023	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates and benefits
April 6, 2023	Spring Technical Committee Meeting, select PPL 33 candidate projects
May/June 2023	Candidate project site visits
May 4, 2023	Spring Task Force Meeting
July/August/ September 2023	Eng/Eng/Econ Work Group project evaluations
September 7, 2023	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations
October 5, 2023	Fall Task Force Meeting, O&M and Monitoring approvals
October 2023	Economic, Engineering, and Environmental analyses completed for PPL 33 candidates
December 14, 2023	Winter Technical Committee Meeting, recommend PPL 33 and Phase I and II approvals
January 2024	Winter Task Force Meeting, select PPL 33 and approve Phase II requests

# \*DATES SUBJECT TO CHANGE\*

Visit www.lacoast.gov/calendar for up-to-date information regarding meetings dates, times, & locations.

# **Candidate Projects Located in Region 1**

## PPL33 Biloxi Marsh Shoreline Protection

# **Project Location:**

Region 1, Pontchartrain Basin, St. Bernard Parish, Lake Borgne and Biloxi Marshes (Biloxi Marsh WMA)

#### **Problem:**

Historic wetland loss in the area has been primarily due to shoreline erosion caused by seasonal wave action, sediment deprivation, and sea level rise. Additionally, changing salinity patterns from the Mississippi River Gulf Outlet (MRGO) has resulted in the loss of rangia clams that historically acted as natural shoreline buffers. Based on the hyper-temporal analysis conducted by USGS to detect land change trends from 1984 to 2022, the interior loss rate for the Biloxi Marsh area was calculated to be -0.32%/yr. Lake Borgne shoreline erosion rates (1988 – 2021) were calculated along the Biloxi Marshes Wildlife Management Area. Shoreline erosion rates in that area ranged from -15 ft/yr to -31 ft/yr with an average loss of coastal shoreline at a rate of -6.3 acres per year. It is estimated that without the project there would be 126 acres of marsh lost due to shoreline erosion over the next 20 years.

## Goals:

The project goals are to 1) protect approximately 15,592 feet of critical shoreline and 2) protect approximately 100-150 acres of highly productive brackish and saline marsh habitat over the 20-year project life.

# **Proposed Solution:**

Approximately 15,952 LF of Lake Borgne shoreline would be protected with the construction of a foreshore rock dike with a lightweight aggregate core built along the -3.0-ft contour. Geotech cloth would be placed on water bottom and rock would be placed on the cloth. The dike would be built to a +4.0 ft. NAVD 88 which is approximately +3.5 ft above existing marsh (+0.68 ft NAVD 88 Geoid12A). Existing bayous and waterways would be left open for fisheries and boating access as well as those areas where the rock dike spans small pockets of water.

#### **Project Benefits:**

The project would result in 118 net acres over the 20-year project life.

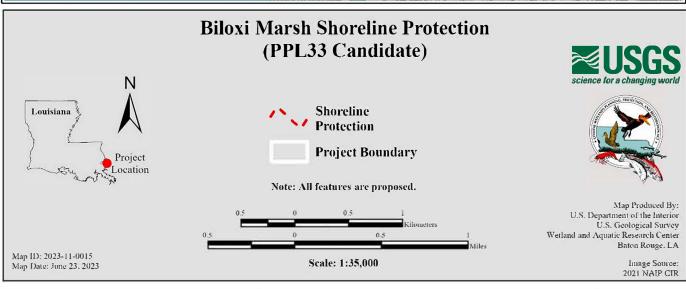
# **Project Costs:**

The total fully-funded cost is \$44,766,261.

## **Preparer of Fact Sheet:**

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# **PPL33 Bayou Ducros Marsh Creation**

# **Project Location:**

Region 1, Pontchartrain Basin, St. Bernard Parish, Golden Triangle near Bayou Ducros and adjacent to the Mississippi River Gulf Outlet (MRGO).

#### **Problem:**

Marsh loss in Bayou Ducros project area is due to past hurricanes, manipulation of the tidal prism from multiple canals, and lack of sediment input from the Mississippi River. The Mississippi River to Gulf Outlet (MR-GO) was completed in 1968. Construction of this ship channel combined with oil exploration and conveyance canals increased the tidal prism of local waterways which led to greater salinity that severely stressed the intermediate and brackish marsh environments, increased decomposition of organic matter via increased exposure to oxygen, and exported loosened sediments. The MR-GO was officially closed in 2008 and salinities have stabilized to around 2-3 ppt, but the area still suffers from lack of sediment from the previous exports and lack of input. The land area change rate determined by USGS between 1985-2023 is -0.63%/year.

#### Goals:

The goals of this project are to create/nourish 499 acres of marsh near Bayous Bienvenue and Ducros, reinforcing the structural integrity of the bayous to reduce the increased hydrologic exchange with the interior marshes. This would work synergistically with other restoration and flood protection projects to stabilize the landbridge between Lake Borgne and the MR-GO which would enhance ecological function for the communities of St. Bernard and Orleans Parishes and protect their varied and abundant critical infrastructure of local and national importance.

#### **Proposed Solution:**

Approximately 320 acres of marsh will be created and approximately 179 acres of marsh will be nourished (499 acres total) in four (4), fully-contained, marsh-creation areas (MCAs) utilizing approximately 2.4 million cyd of sediment hydraulically dredged from Lake Borgne. Earthen containment dikes are proposed for the entire area with sheet pile in deeper areas (~100 f. Upon in fill completion, earthen containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands by target year (TY) 3. Maintenance costs are included to plant 25% of the MCAs if they do not vegetate by TY3.

## **Project Benefits:**

The project would result in 310 net acres over the 20-year project life.

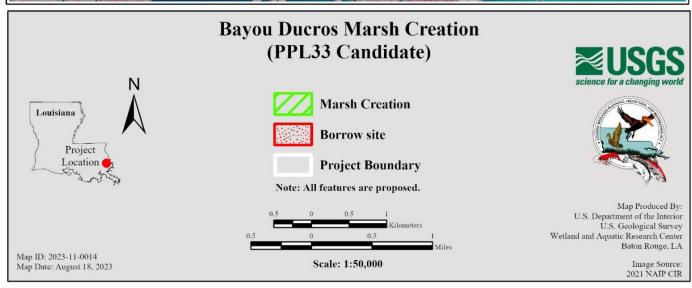
#### **Project Costs:**

The total fully-funded cost is \$34,453,561.

## **Preparer of Fact Sheet:**

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# **Candidate Projects Located in Region 2**

## PPL33 Northwest Little Lake Marsh Creation Extension

# **Project Location:**

The project is located in Region 2, Barataria Basin, Lafourche Parish, along the western shorelines of Little Lake and Bay L'Ours.

#### **Problem:**

Until 2021, the project area was relatively stable and experienced very little interior marsh loss. Shell deposits along the Little Lake shoreline provided for a stable shoreline feature with low erosion rates. A land change analysis conducted by USGS for 254 coastal subunits indicates a 1985-2020 land change rate of +0.09% per year for the Delta Farms Subunit, which encompasses the project site. However, in August 2021, the central and western Barataria Basin experienced thousands of acres of land loss with the passage of Hurricane Ida. One of the areas hardest hit by the storm was the northwestern shoreline of Little Lake. The extensive flotant marsh that previously carpeted the area was removed by the storm, converting the area to vast expanses of open water. Based on an analysis conducted by the USGS for the Northwest Little Lake Marsh Creation Extension, which includes Hurricane Ida marsh loss and shoreline erosion, loss rates in the area are estimated to be -1.76% per year (1984 to 2022).

## Goals:

The primary goals of the project are to restore marsh habitat in an area significantly impacted by Hurricane Ida and restore the western Little Lake shoreline. The specific project goals are: 1) create 225 acres of marsh, 2) nourish 87 acres of marsh, 3) restore approximately 1.9 miles of the Little Lake and Bay L'Ours shorelines with the construction of earthen berms, and 4) reduce shoreline erosion by armoring 4,471 LF of lakeshore containment with marine mattress revetment.

# **Proposed Solution:**

Sediments from Bay L'Ours will be hydraulically dredged and pumped via pipeline to create/nourish approximately 312 acres of marsh. A full containment system will be utilized with containment dikes gapped at the end of construction or no later than three years post-construction. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Marine mattresses will be placed along 4,471 LF of the lakeshore containment dike.

# **Project Benefits:**

The project would result in 200 net acres over the 20-year project life.

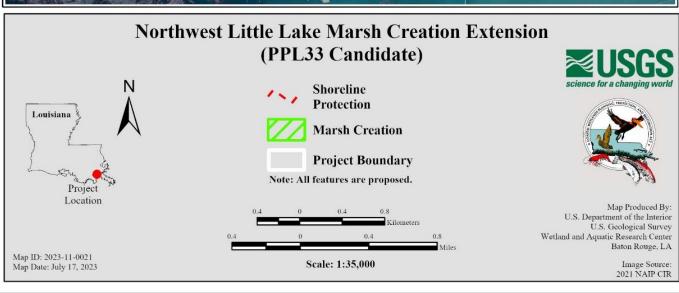
#### **Project Costs:**

The total fully-funded cost is \$32,119,728.

## **Preparer of Fact Sheet:**

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# PPL33 Southeast Golden Meadow Marsh Creation

# **Project Location:**

Region 2, Barataria Basin, Lafourche Parish, Southeast of Golden Meadow adjacent to the South Lafourche Hurricane Protection Levee.

#### **Problem:**

The project area has experienced extensive loss of emergent wetlands from subsidence, storms, canal dredging, and altered hydrology. Wetland loss has increased the vulnerability of the South Lafourche Hurricane Protection Levee to damage from tropical storms and hurricanes. Hurricane Ida, in August 2021, was particularly devastating to the area. At present, very little marsh remains for several miles east of the protection levee. The remaining emergent land consists of canal spoil banks and isolated stand of fragmented marsh. Based on the land-water analysis conducted by USGS for the extended project boundary, the land loss rate in the project area was -1.82% per year for the period 1984 to 2022.

#### Goals:

The primary goal of this project is to restore marsh southeast of Golden Meadow along the alignment of the South Lafourche Hurricane Protection Levee. The specific goal of the project is to create approximately 333 acres (294 acres of marsh creation and 39 acres of marsh nourishment) of marsh with dredged material from Bayou Lafourche.

Service goals include restoration/protection of habitat for at-risk species. This project would restore habitat potentially utilized by the threatened black rail and other at-risk species such as the seaside sparrow and saltmarsh topminnow.

#### **Proposed Solution:**

Sediments will be hydraulically dredged from a series of borrow sites in Bayou Lafourche and pumped via pipeline to create/nourish approximately 333 acres of marsh (294 acres of marsh creation and 39 acres of marsh nourishment). Full containment would be utilized. Containment dikes will be gapped at the end of construction or no later than three years post construction. Vegetative plantings are proposed along the eastern containment dike which is exposed to wave energy. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range.

#### **Project Benefits:**

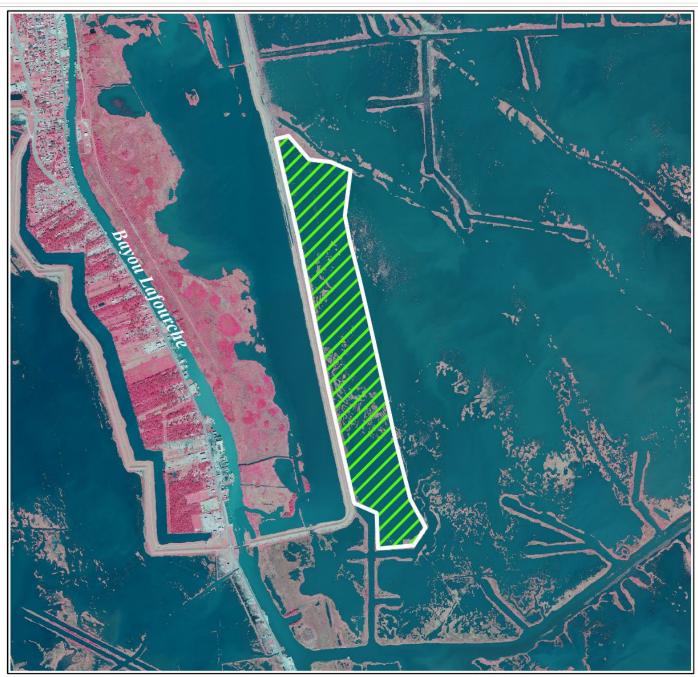
The project would result in 250 net acres over the 20-year project life.

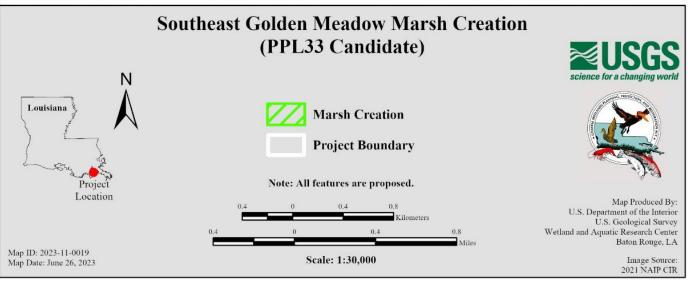
# **Project Costs:**

The total fully-funded cost is \$37,648,811.

# **Preparer of Fact Sheet:**

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# **PPL33 West Dupre Cut Marsh Creation**

# **Project Location:**

Region 2, Barataria Basin, Jefferson Parish, west of Dupre Cut of the Barataria Bay Waterway and along the eastern shoreline of Bayou Rigolettes

#### **Problem:**

Historic wetland loss in the Perot/Rigolettes mapping unit of the Barataria Basin has been caused by subsidence, sediment deprivation, and construction of access and pipeline canals. The Barataria Bay Waterway has also allowed salt water and higher tidal energies to enter the area causing marsh loss. Interior ponds have expanded and coalesced because of subsidence and increased tidal energies. As ponds expand increased wave fetch exacerbates interior shoreline erosion. More recently, the passage of Hurricane Ida further scoured the marshes increasing tidal exchange through the area. USGS determined a land change rate of -1.25% per year (1984-2022) for the extended boundary of the project area.

#### Goals:

The project goal is to create and nourish approximately 556 acres of low salinity brackish marsh along the Central Barataria Basin Landbridge.

# **Proposed Solution:**

The proposed solution would be to create approximately 479 acres and nourish 77 acres of estuarine marsh along the Central Barataria Basin Landbridge in two marsh creation areas (MCA). The eastern MCA will restore 467 acres of deteriorated marsh west of Dupre Cut, and the western MCA will restore 89 acres of marsh along the Bayou Rigolettes shoreline. The MCAs will be fully contained, and containment dikes will be degraded as necessary to establish hydrologic connectivity with adjacent wetlands no later than year three. Approximately 3.5 million cubic yards of sediment will be hydraulically pumped from a borrow area in Bayou Rigolettes to restore the marsh platform and backfill containment dike borrow areas. If the area does not re-vegetate on its own, the maintenance cost estimate includes funds to plant 15% of the created marsh in year three.

# **Project Benefits:**

The project would result in 430 net acres over the 20-year project life.

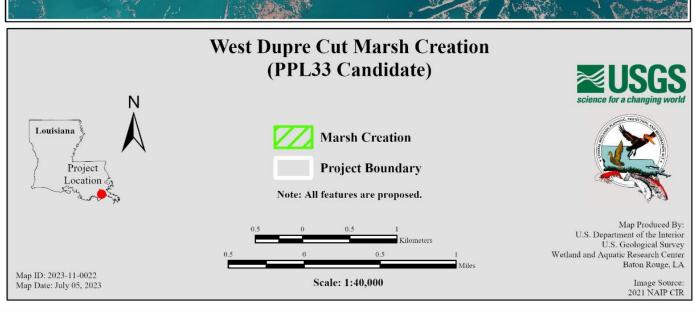
# **Project Costs:**

The total fully-funded cost is \$42,963,037.

# **Preparer of Fact Sheet:**

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#### PPL33 South Delacroix Marsh Creation

# **Project Location:**

Region 2, Breton Basin, Plaquemines Parish, immediately west of the community of Delacroix and south of Bayou Gentilly.

#### **Problem:**

Hurricanes Katrina, Rita, and Ida caused the majority of wetland loss in the project area. Wind erosion and saltwater intrusion have resulted in loss of marsh vegetation and wetland soils. Marsh loss has increased exposure of Delacroix to flooding from the south. The USGS expanded project boundary loss rate is -1.71%/year from 1985 to 2022 for the extended project boundary area.

#### Goals:

The project goal is to create and nourish approximately 413 acres (ac) of marsh utilizing a layout to help protect the community of Delacroix. The layout will be synergistic with projects funded for construction including the immediately adjacent Mid Breton Land Bridge Marsh Creation and Terracing Project (BS-32). Together these projects play a crucial role in completing the Breton Land Bridge as described in the 2023 State Master Plan. The project would increase fisheries productivity in the immediate area for commercially and recreationally important species. Much of the community of Delacroix's economy depends on the fishing industry.

# **Proposed Solution:**

Sediment would be hydraulically dredged from Petit Lake and placed in two confined disposal areas creating 390 ac of marsh and nourishing 23 ac of existing marsh. Containment dikes will be gapped no later than three years after construction to allow fisheries access and reestablish hydrologic connectivity. This project would be one of the final pieces in the overall Breton Land Bridge concept and the closest piece to the community of Delacroix.

#### **Project Benefits:**

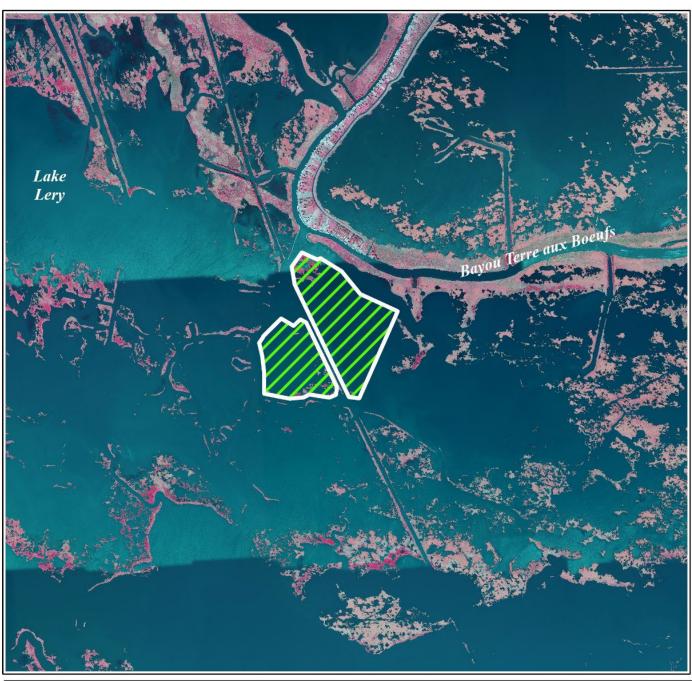
The project would result in 332 net acres over the 20-year project life.

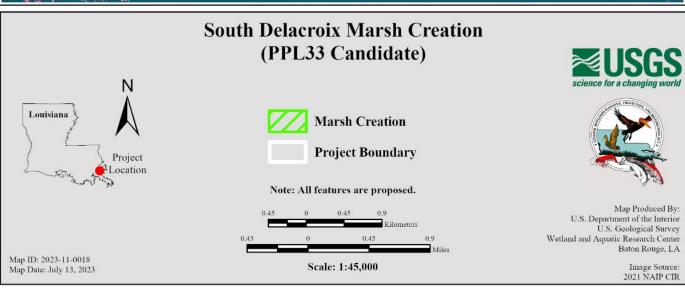
#### **Project Costs:**

The total fully-funded cost is \$46,666,731.

# **Preparer of Fact Sheet:**

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# PPL33 Bayou Terre aux Boeufs Ridge Restoration and Marsh Creation

# **Project Location:**

Region 2, Breton Sound Basin, Plaquemines Parish, down the bayou to the west of Delacroix, LA

#### **Problem:**

Historic ridge habitat loss occurs in the form of subsidence and shoreline erosion along Bayou Terre Aux Boeufs (BTAB). The shoreline erosion is caused by boat traffic from recreational and commercial vessels. The ridge is subsiding due to anthropogenic and natural processes. The habitat associated with ridges in Louisiana is Live Oak-Hackberry forest. This ecosystem is utilized by trans-gulf migratory bird species as a first and last stop when crossing the Gulf of Mexico. This critical habitat is rated as S1 and S2 priority by the state of Louisiana. Interior marsh loss in the project site is caused by subsidence, increased tidal prism and salinities due to construction of access and or transmission canals. The BTAB ridge is the barrier that separates brackish from intermediate marsh in the Breton Basin. Loss of this hydrological barrier could pose greater threats to already diminishing intermediate marshes. Based on the hyper-temporal analysis (1985-2022) conducted by USGS loss rates are estimated to be -0.88% per year.

#### Goals:

The primary goals of this project are: 1) create forested, coastal ridge habitat along the western bank of Bayou Terre Aux Boeufs, and 2) restore marsh habitat in the open water areas via marsh creation and marsh nourishment. Specific goals of the project are: 1) Create approximately 27,011 linear feet (32 acres) of forested ridge; and 2) create approximately 358 and nourish approximately 66 acres of marsh with dredged material from Petit Lake.

## **Proposed Solution:**

Lake sediments will be hydraulically dredged and pumped via pipeline to create 358 acres of marsh and nourish 66 acres of marsh. The bayou will be mechanically dredged to create 27,011 linear feet (32 acres) of ridge habitat. Containment dikes will be gapped, and the ridge will be planted.

## **Project Benefits:**

The project would result in 336 (311 marsh, 25 ridge) net acres over the 20-year project life.

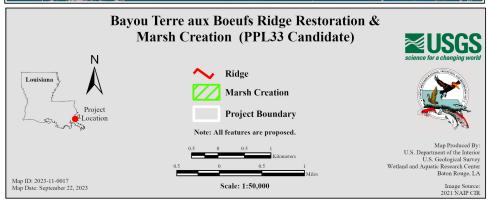
# **Project Costs:**

The total fully-funded cost is \$47,566,582.

# **Preparer of Fact Sheet:**

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# **Candidate Projects Located in Region 3**

# **PPL33 Carencro Bayou Diversion**

# **Project Location:**

Region 3, Terrebonne Basin, Terrebonne Parish, Carencro Bayou

## **Problem:**

Bayou Penchant is the largest bayou flowing across upper Terrebonne, however, where it connects to Carencro Bayou most of the water flow is diverted southwest to the Superior Canal and flows down Palmetto Bayou and back to Atchafalaya Bay. This short-circuits water movement from going east where marshes are deprived of the freshwater, nutrients, and sediments of the Atchafalaya River. The State Master Plan calls for diverting Atchafalaya River water to the east through the Gulf Intercoastal Waterway and various other distributaries throughout the Central Terrebonne marsh complex. The Western Terrebonne Hydrologic Restoration (WTHR Project ID: 342; Implementation Period 1) proposes to reconnect freshwater flows from Bayou Penchant to southern Terrebonne marshes by reestablishing flow through Bayou Carencro. The area has lost approximately 50% of the historic marsh to saltwater intrusion and subsidence. Although the project area has suffered significant loss in the past few decades, the most recent USGS project area land change rate is +0.01%/y, which indicates that the area has stabilized largely due to recent hydrologic improvements. This project would work synergistically with previous projects to further improve the area.

#### Goals:

The objective of this project is to introduce more freshwater, nutrients and sediments from Bayou Penchant into southern Terrebonne marshes to a general area east of Lost Lake to reduce saltwater intrusion and marsh loss in this area.

# **Proposed Solution:**

The project would: (1) reduce flow in the Superior Canal near the junction with Carencro Bayou by construction of a rock weir with a barge bay reducing the cross section of the canal from 200 feet wide and 30 feet deep to 80 feet wide and 10 feet deep; (2) restore the historic Carencro Bayou by dredging approximately 21,400 ft from the point where the bayou is narrower than 100 feet wide and 8 feet deep to where it intersects a north/south location; and (3) enlarging the existing Ducks Unlimited/ConocoPhillips water control structure to accommodate this increased flow.

## **Project Benefits:**

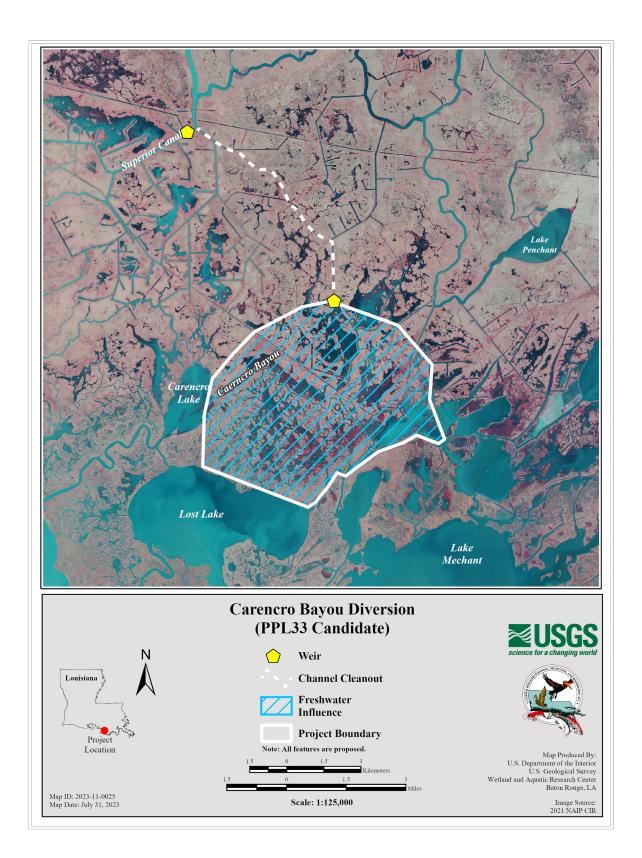
The project would result in 285 net acres over the 20-year project life.

## **Project Costs:**

The total fully funded cost is \$22,164,273.

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

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# PPL33 Eastern Terrebonne Land Bridge Marsh Creation Inc. I

# **Project Location:**

Region 3, Terrebonne Basin, Lafourche Parish, South of Catfish Lake

# **Problem:**

The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction, contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed significantly to wetland losses. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss could amount to 130,000 acres during the next 20 years. One-third of Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. Wetlands in the project vicinity are being lost at the rate of -1.89% per year (1984-2022) based on the USGS land-water analysis of the extended project boundary.

## Goals:

The primary goal of this project is to establish a land bridge in the eastern Terrebonne Basin by restoring marsh southwest of Golden Meadow near the alignment of the South Lafourche Hurricane Protection Levee. The specific goals of this project are to; 1) create approximately 490 acres (400 acres of marsh creation and 90 acres of marsh nourishment) of marsh with material dredged from Laurier Bayou and 2) create approximately 11,620 LF of earthen terraces.

#### **Proposed Solution:**

Sediment will be hydraulically pumped via pipeline from a large open water area near Laurier Bayou, just south of the proposed marsh creation areas. That sediment will be pumped to a slurry height of between +2.96 and +3.01 ft with a target marsh elevation of +0.98 ft and contained within earthen dikes. The containment dikes will be degraded and/or gapped no later than three years post construction. Earthen terraces will also be constructed (11,620 LF) south of the marsh creation areas with in-situ material to a height of +2.0 ft and with a 15 ft crown width to reduce erosion due to wind induced waves. The project will include planting smooth cordgrass plugs along the terrace side slopes.

## **Project Benefits:**

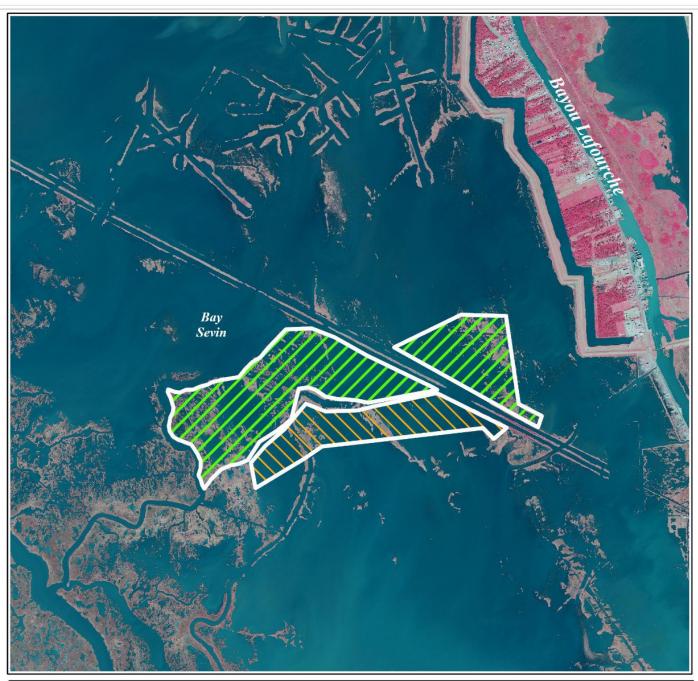
The project would result in a total of 370 net acres (343 acres of marsh creation and nourishment and 27 acres of marsh from terrace construction) over the 20-year project life.

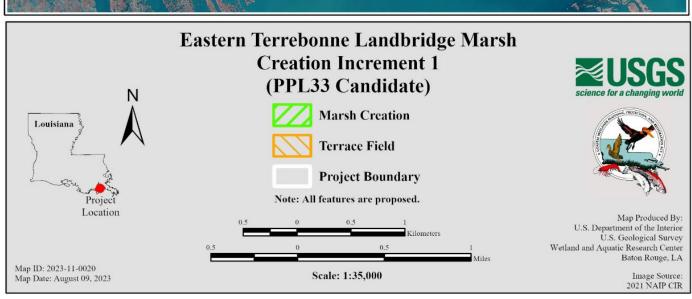
# **Project Costs:**

The total fully-funded cost is \$45,920,112.

## **Preparer of Fact Sheet:**

Robert Dubois, FWS, (337) 291-3127; robert dubois@fws.gov





# **Candidate Projects Located in Region 4**

# **PPL33 Gulf Shoreline Protection West**

# **Project Location:**

Region 4, Mermentau Basin, Cameron Parish, Gulf of Mexico, (Rockefeller State Wildlife Refuge).

#### **Problem:**

The Gulf shoreline in the vicinity of Rockefeller Refuge has some of the highest shoreline erosion rates found anywhere in Louisiana. Gulf shoreline erosion rates between Josephs Harbor and Price Lake Road, have been estimated to be -46 ft per year (1998 to 2010). Using maps from 1998 to 2021, USGS calculated Gulf Shoreline Erosion rates along the Rockefeller State Wildlife Refuge. Based on that analysis by USGS, Gulf shoreline erosion rates around the proposed Gulf Shoreline Protection West project are estimated to be -49 ft per year. Without protection along this critical stretch of shoreline, Rockefeller Refuge shoreline will continue to retreat landward. This could have substantial impacts on the refuge (including resident endangered species) as well as the surrounding area. Without stabilizing the Gulf shoreline at Rockefeller Wildlife Refuge, the shoreline may retreat over 980 ft within a 20-year timespan.

#### Goals:

The project goal is to slow Gulf shoreline erosion along a critical 2-mile reach where continued erosion will threaten the integrity of Price Lake Road and the watershed within Rockefeller Refuge as well as the recently constructed CWPPRA project ME-20. Only a thin strip of saline marsh separates the Gulf from approximately 4,500 acres of open water south of LA-82 (Gulf Beach Highway), a hurricane evacuation route.

## **Proposed Solution:**

The proposed project is similar to the Rockefeller Refuge Gulf Shoreline Stabilization Project (ME-18). The project would construct 10,560 LF of foreshore breakwater with a light-weight aggregate core along the -3.5-ft (NAVD88) contour (approximately 150-ft offshore). It would extend west from the Rockefeller Shoreline Protection Project (ME-37) and parallel the shoreline with gaps every 1,500 feet. The target top elevation of the breakwater is +2.5 ft. The project features may also trap sediments behind the breakwaters and stimulate oyster reef formation, as has occurred at ME-18.

# **Project Benefits:**

The project would result in a net benefit of 213 acres over the 20-year project life.

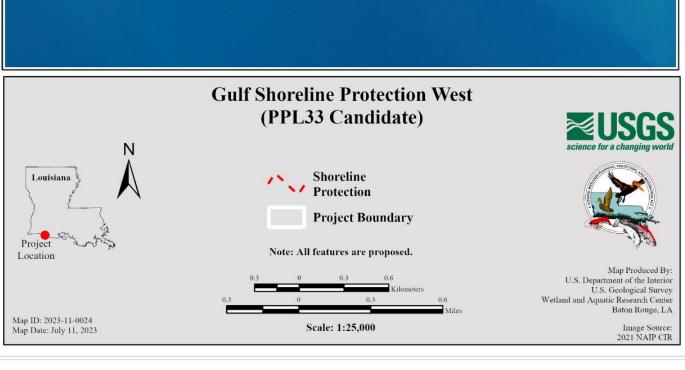
#### **Project Costs:**

The total fully-funded cost is \$47,844,379.

## **Preparer of Fact Sheet:**

Robert Dubois, FWS, (337) 291-3127; robert dubois@fws.gov





# **PPL33 Candidate Project Evaluation Matrix**

11/20/2023

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Total Fully Funded Cost	Fully-Funded Phase I Cost	Fully- Funded Phase II Cost incl O&M	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
Biloxi Marsh Shoreline Protection	1	St. Bernard	223	32	118	\$44,766,261	\$2,794,851	\$41,971,410	\$2,500,473	\$78,140	\$379,375
Bayou Ducros Marsh Creation	1	St. Bernard	499	175	310	\$34,453,561	\$3,304,512	\$31,149,049	\$2,046,600	\$11,695	\$111,141
Bayou Terre aux Boeufs Ridge Restoration & Marsh Creation*	2	Plaquemines	449	153	336	\$47,566,582	\$4,538,396	\$43,028,186	\$2,835,012	\$18,529	\$141,567
South Delacroix Marsh Creation	2	Plaquemines	413	152	332	\$46,666,731	\$4,345,285	\$42,321,446	\$2,803,899	\$18,447	\$140,562
West Dupre Cut Marsh Creation	2	Jefferson	556	174	430	\$42,963,037	\$3,763,952	\$39,199,085	\$2,593,031	\$14,902	\$99,914
Northwest Little Lake Marsh Creation Extension	2	Lafourche	312	95	200	\$32,119,728	\$3,057,830	\$29,061,898	\$1,904,401	\$20,046	\$160,599
Southeast Golden Meadow Marsh Creation	2	Lafourche	333	135	250	\$37,648,811	\$3,352,282	\$34,296,529	\$2,228,309	\$16,506	\$150,595
Eastern Terrebonne Landbridge Marsh Creation Increment 1	3	Lafourche	670	192	370	\$45,920,112	\$3,977,843	\$41,942,269	\$2,748,316	\$14,314	\$124,108
Carencro Bayou Diversion	3	Terrebonne	13,43 1	115	286	\$22,164,273	\$3,065,769	\$19,098,504	\$1,186,189	\$10,315	\$77,497
Gulf Shoreline Protection West	4	Cameron	258	88	213	\$47,844,379	\$2,070,038	\$45,774,341	\$2,663,141	\$30,263	\$224,621

<sup>\*</sup>Pending updates

# Coastal Wetlands Flanning, Protection and Restoration Act Technical Committee Meeting Announcement

Date: December 14, 2023

9:30 a.m.

Time:

**Location:** U.S. Army Corps of Engineers (DARM)

7400 Leake Avenue New Orleans, LA 70118

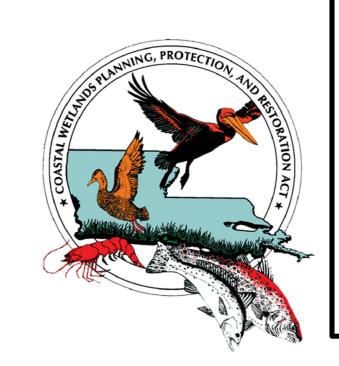
Virtual Component: WebEx

https://usace1.webex.com/meet/terri.m.vonhoven

Meeting Number: 2761 432 2324 USA Toll-Free: 844-800-2712 Access Code: 2761 432 2324

**Technical Committee Meeting** 

The evaluation results will be presented for all the PPL 33 candidate projects. The public is invited to attend and provide comments on the candidate projects. The Technical Committee will vote & recommend projects for PPL 33 selection. The Technical Committee will also consider requests for construction (Phase II) approvals.



Written comments may be provided no later than November 24, 2023 to the CWPPRA Task Force by email to:

Colonel Cullen A. Jones
District Engineer, New Orleans
c/o: Kaitlyn M. Richard

**Email:** 

Kaitlyn.M.Carriere@usace.army.mil