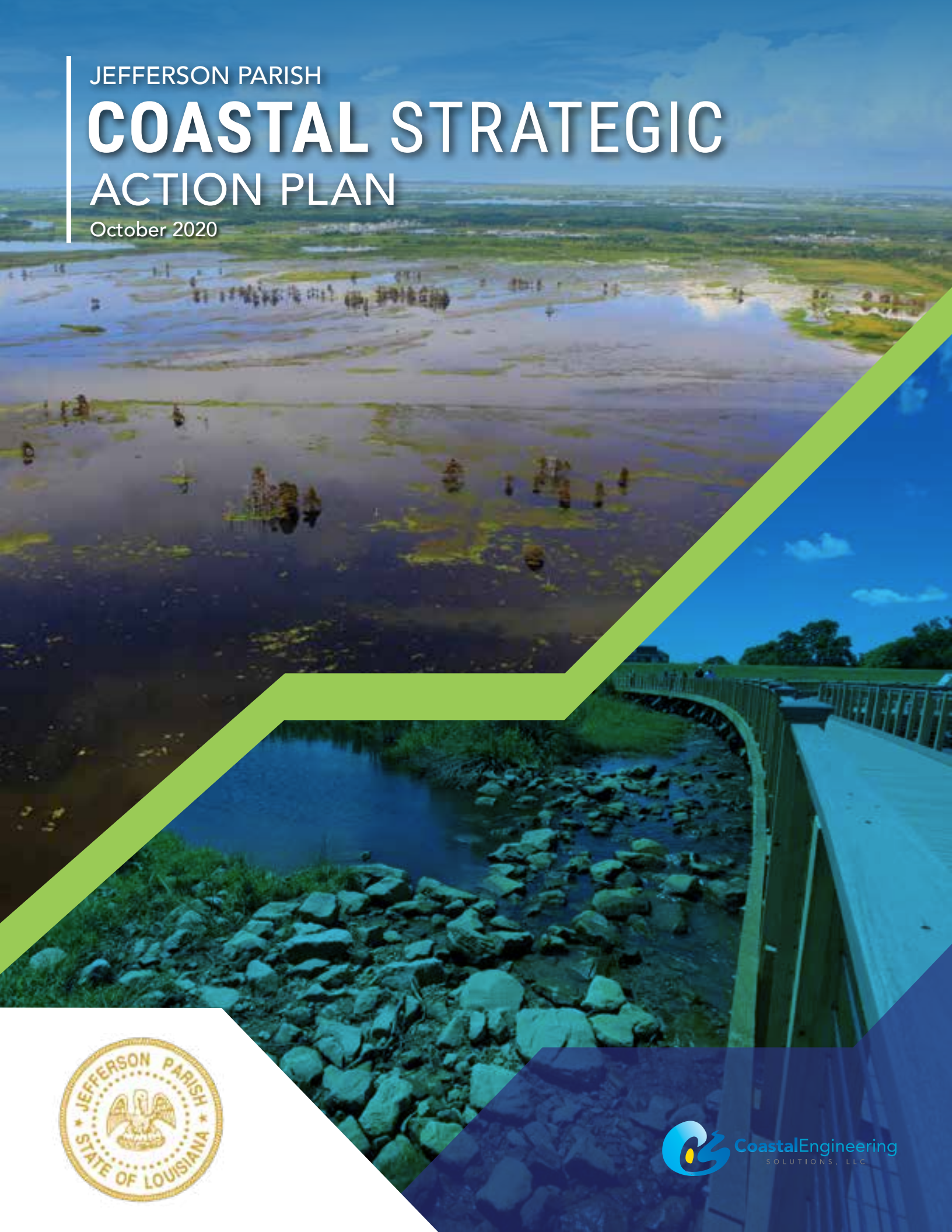
JEFFERSON PARISH

COASTAL STRATEGIC ACTION PLAN

October 2020



JEFFERSON PARISH
STATE OF LOUISIANA

CoastalEngineering
SOLUTIONS, LLC

Jefferson Parish President

Honorable Cynthia Lee Sheng

Jefferson Parish Council

Ricky J. Templet
At-Large Division A

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At-Large Division B

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District 1

Deano Bonano
District 2

Byron Lee
District 3

Dominick Impastato
District 4

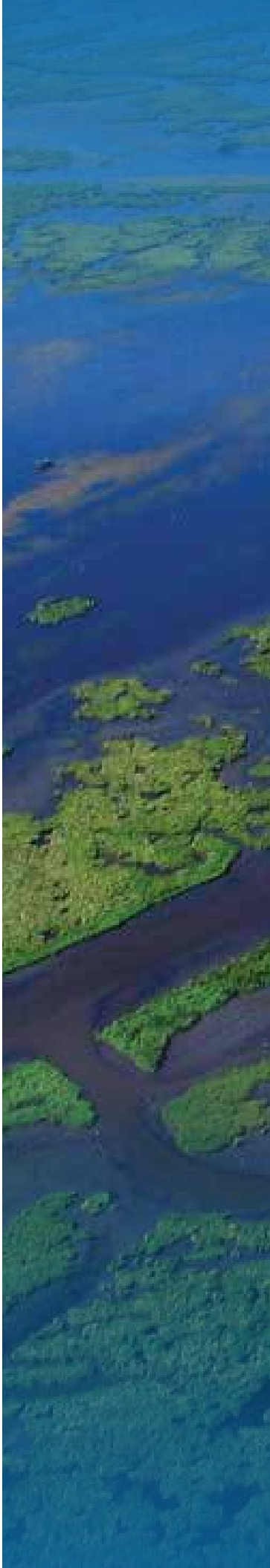
Jennifer Van Vrancken
District 5

Jefferson Parish Government

Terri Wilkinson, Ph.D., AICP
Chief Administrative Assistant, Land Use & Development Parish President's Office

Michelle M. Gonzales, CFM
Director, Ecosystem & Coastal Management

Maggie Olivier Talley, CFM
Director, Floodplain Management & Hazard Mitigation



Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

CONTENTS

ACRONYM LIST

BA	Barataria Basin
BI	Barrier Islands
BS	Bank Stabilization
BUDMAT	Beneficial Use of Dredge Material
CAP	Continuing Authorities Program
CDBG	Community Development Block Grant
CWPPRA	Coastal Wetland Planning, Protection, and Restoration Act
CPRA	Coastal Protection and Restoration Authority
GILD	Grand Isle Independent Levee District
GIS	Geographic Information System
GIWW	Gulf Intracoastal Waterway
GOMESA	Gulf of Mexico Energy Security Act
GRSC	GOMESA Revenue Sharing Coalition
HSDRRS	Hurricane and Storm Damage Risk Reduction System
JP-CSAP	Jefferson Parish Coastal Strategic Action Plan
LA SAFE	Louisiana's Strategic Adaptations for Future Environments
LCA	Louisiana Coastal Area
LDWF	Louisiana Department of Wildlife and Fisheries
LILD	Lafitte Area Independent Levee District
M	Million
NOAA	National Oceanic and Atmospheric Administration
NGO	Non-governmental organization
NFWF	National Fish and Wildlife Foundation
PACE	Parishes Advocating for Coastal Endurance
PO	Pontchartrain Basin
RESTORE	Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States
STEM	Science, Technology, Engineering, and Mathematics
USACE	U.S. Army Corps of Engineers

EXECUTIVE SUMMARY

Jefferson parish has 336 square miles of water and only 305 square miles of land, resulting in more than 50% of Jefferson Parish being water. The coastal areas of Jefferson Parish are home to world-class commercial and recreational fisheries along with hosting a vast array of birds, reptiles, and other wildlife. This complex ecosystem is disappearing and now is a critical time to invest in strategic coastal restoration and projection projects. The projects and strategies identified in this plan will strengthen Jefferson Parish's fight to save our coast which in turn will provide protection for our communities, habitat for wildlife, and recreation for generations to come.

Louisiana's coast represents one of the largest estuaries in the world, providing unique critical natural habitats, economic resources, and a natural barrier of protection to communities. Coastal Louisiana also provides economic benefits through tourism, world-class recreational and commercial fishing, beaches, boating, oil and gas production, and port commerce and represents a major portion of the nation's seafood and energy supply. The Barataria Basin, which includes coastal Jefferson Parish, accounted for 23 percent of Louisiana's commercial seafood landings in 2019, valued at $60 million.

Coastal barrier islands and wetlands also serve a critical role as multiple lines of defense for storm surge dissipating wave energy and to protect upland communities from surge and storm flood impacts. This important and fragile ecosystem is disappearing at an alarming rate. Without further coastal protection or restoration actions, an additional 112 square miles—or 42 percent of the land area in Jefferson Parish—could be lost in the next 50 years, jeopardizing the culture and heritage so important to Louisiana as well as increasing risk of coastal flooding.

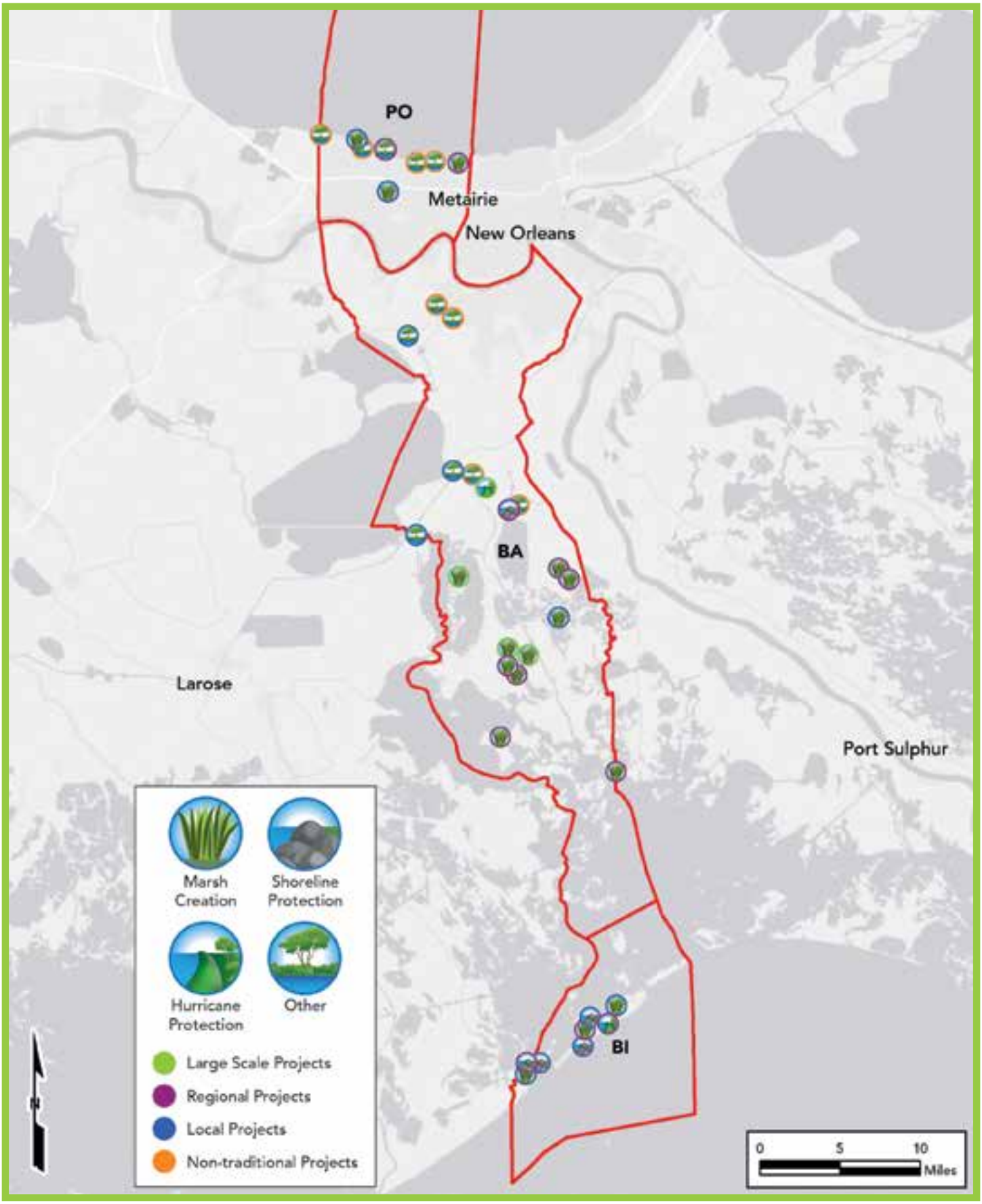
The geologic development of the Louisiana coast was the result of an active delta cycle, a process by which a river naturally changes course, depositing material as part of the natural delta building process. The formation of the Barataria Basin in Jefferson Parish was part of the Lafourche Delta, which was active 1,000 to 300 years Before Present (Figure 8). Currently, the Barataria Basin is in the abandoned delta geologic process, where the new land formation created by the delta lobe continues to settle over time in the absence of new material being deposited by the river into the system. Fresh water and sediment input to the Barataria Coastal Basin was almost eliminated by the construction of the Mississippi River and Tributaries Levee System and the closure of Bayou Lafourche at Donaldsonville, which have contributed to erosion and subsidence within the basin.

The Jefferson Parish Coastal Strategic Action Plan (JP-CSAP) builds upon previous planning efforts and identifies a list of projects that can reduce hurricane-related storm risks; protect existing wetlands, infrastructure, and communities; promote recreation and education; and maximize funding opportunities. The JP-CSAP is also a complementary document to the Louisiana Coastal Master Plan and the Jefferson Parish 2020 Hazard Mitigation Plan. The Louisiana Coastal Master Plan provides a long-term vision for coastal Louisiana and is the vehicle for coordinating Louisiana's local, state, and federal responses to land loss and potential threats from hurricanes and storm surge events. It provides a 50-year horizon list of projects that build/maintain land and reduce risk to our communities by seeking to improve flood protection, harness the natural processes that built Louisiana's coastal landscape, sustain our unique cultural heritage, and ensure that our coast continues to be both a Sportsman's Paradise and a hub for commerce and industry (CPRA, 2017a). All projects included in the 2017 Louisiana Coastal Master Plan and projects submitted for consideration for the 2023 Louisiana Coastal Master Plan included in the JP-CSAP.

More than 109 projects were evaluated and submitted to Parish leadership for review and prioritization. The plan narrows down 32 projects with a value greater than $780M. Because direct funding to the Parish is limited and falls far short of the funding needed for all 32 projects identified in this plan, it is important that existing funding be used for projects with the greatest opportunity for additional funding and partnerships identified in the plan.

Along with the prioritized project list, the plan identifies potential funding sources for the projects identified, as well as Goals, Objectives, and Strategic Actions for the greatest opportunity in successful implementation of the plan. In all, the JP-CSAP presents an analysis of the problem, describes a history of the program, identifies available funding sources, and lays out a plan of action for the greatest likelihood of successful implementation of the program.


GOALS
Identify projects that prevent future damages
Identify strategies for potential funding
Enhance public awareness of future risks
OBJECTIVES
Find and develop opportunities
Ensure the Parish is represented
Ensure the Parish is prepared
Increase involvement
STRATEGIES
Seek state and federal grant funding
Undertake risk and vulnerability studies
Perform planning and design of projects
Monitor previously implemented projects
Promote public support


PO
Metairie
New Orleans
BA
Larose
Port Sulphur
BI
Marsh Creation
Shoreline Protection
Hurricane Protection
Other
Large Scale Projects
Regional Projects
Local Projects
Non-traditional Projects
N
0
5
10
Miles

Jefferson Parish Coastal Strategic Action Plan Projects

PROJECT ID	TYPE	PROJECT NAME
LARGE-SCALE PROJECTS		
WBA-01	Marsh Creation	West Barataria Marsh Creation Corridor Project
WBA-02	Marsh Creation	West Barataria Waterway Marsh Restoration
BA-21	Marsh Creation	Bayou Perot and Bayou Rigolettes Peninsula Restoration
LILD	Hurricane Protection	Lafitte Levees
REGIONAL PROJECTS		
BA-195	Marsh Creation	Barataria Bay Rim Marsh Creation
JP-15	Marsh Creation	Bay Dosgris Marsh Creation
JP-07	Marsh Creation	Bayou Dupont Sediment Delivery #4
BA-15	Shoreline Protection	Goose Bayou Ridge Creation and Shoreline Protection
BA-04	Marsh Creation	Northeast Turtle Bay Extension
JP-14	Marsh Creation	South Cheniere Traverse Bayou Marsh Creation
BA-02	Marsh Creation	Three Bayou Bay Marsh Creation
GILD-1	Shoreline Protection	Cheniere Caminada Breakwaters
GILD-7	Hurricane Protection	Grand Isle Back Levee
JP-09	Marsh Creation	Grand Isle Bayside Marsh Creation
JP-02	Marsh Creation	Bucktown Marsh Restoration and Living Shoreline
JP-03	Other	Lake Pontchartrain Marsh Protection Feasibility Study West
LOCAL PROJECTS		
JP-42	Other	Bayou Villars Channel Management
JP-41	Other	Lake Salvador / Bayou Perot Channel Management
JP-16	Marsh Creation	Northeast Lake Cataouatche Marsh Creation
JP-23	Marsh Creation	Upper Barataria Terracing Project
GILD-2	Shoreline Protection	Bayou Thunder Rock Dike Project
GILD-3	Marsh Creation	Cheniere Caminada Marsh Restoration
GILD-6	Marsh Creation	Fifi Island Restoration
GILD-5	Shoreline Protection	Grand Isle Bayside Segmented Breakwaters Completion
GILD-4	Shoreline Protection	Grand Isle Gulfside Segmented Breakwaters
JP-24	Marsh Creation	Lafreniere Marsh Restoration
JP-43	Marsh Creation	Laketown Breakwaters / Living Shoreline
NON-TRADITIONAL PROJECTS		
JP-22	Shoreline Protection	Northeast Pen Shoreline Protection
JP-35	Other	The Wetlands Center
WHARF	Other	Wetland Harbor Activities Recreational Facility
JP-08	Other	Jefferson Tree Planting
JP-21	Other	Severn Lakefront Restoration

Photo courtesy of PJ Hahn Photography

CHAPTER 3
INTRODUCTION

- Jefferson Parish Coastal Strategic Action Plan (JP-CSAP)
- JP-CSAP Goals, Objectives, and Strategies
- 2020 Hazard Mitigation Plan

3 INTRODUCTION

Louisiana's coast represents one of the largest estuaries in the world providing unique critical natural habitats, economic resources, and a natural barrier of protection to communities.

Photo courtesy of PJ Hahn Photography

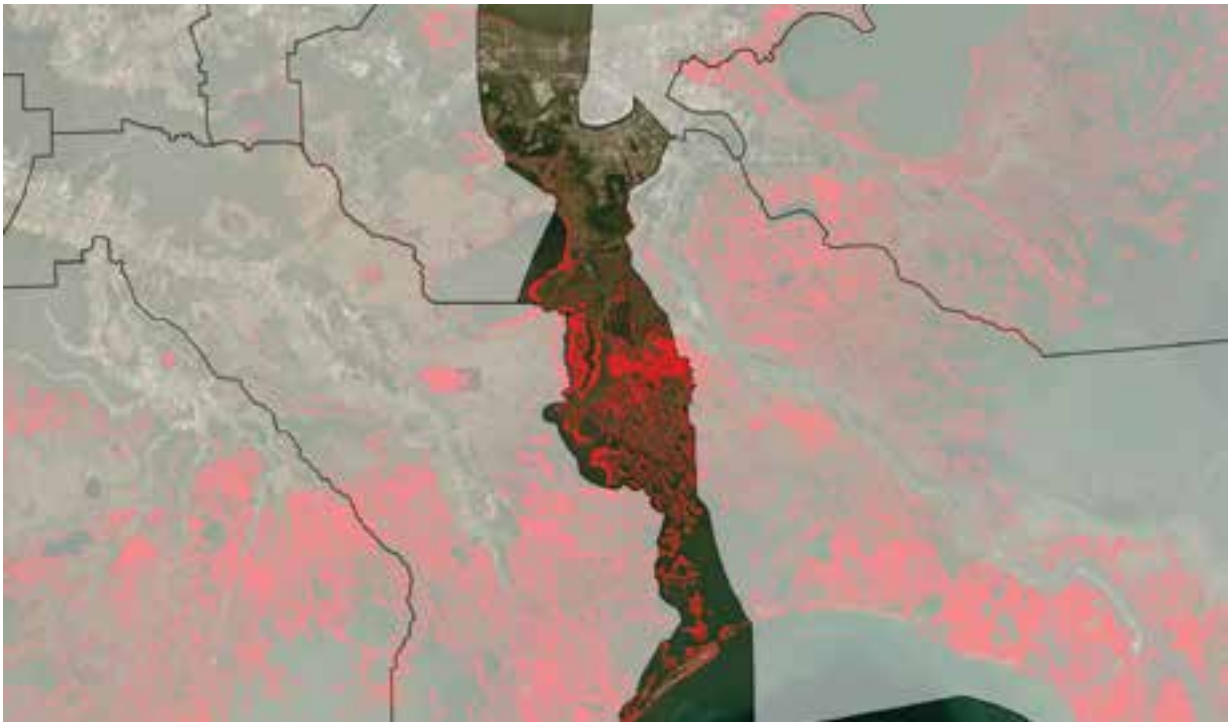
Coastal Louisiana also provides economic benefits through tourism, recreational fishing, commercial fishing, beaches, boating, oil and gas production, and port commerce and represents a major portion of the nation's seafood and energy supply. The Barataria Basin, which includes coastal Jefferson Parish, accounted for 23 percent of Louisiana's commercial seafood landings in 2019, valued at $60 million.

Coastal barrier islands and wetlands also serve a critical role as multiple lines of defense for storm surge dissipating wave energy and to protect upland communities from surge and storm flood impacts. The coastal community of Grand Isle and its other neighboring barrier islands take the initial brunt of a hurricane's force, thus protecting the 1.4 million plus residents of the greater New Orleans metropolitan area. It is estimated every 1 mile of wetlands reduces storm surge between 0.2 to 1.3 feet, depending on geography, vegetation type, storm direction, speed, and size (Wamsley et. al., 2010).

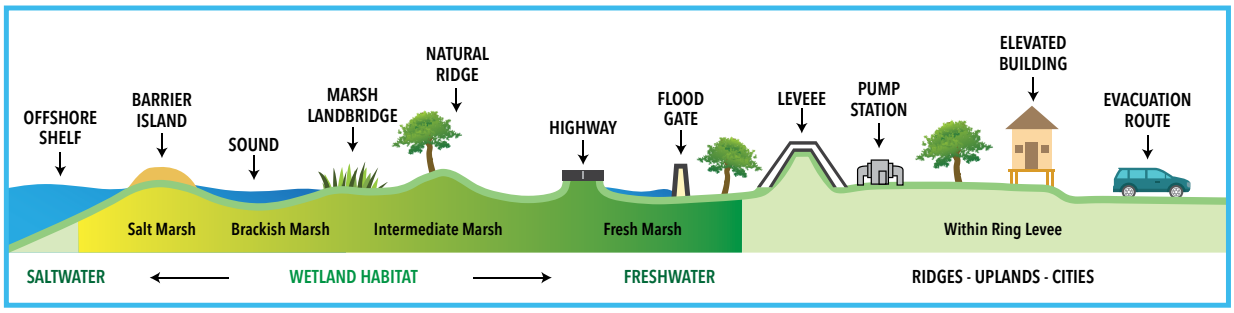
Due to the construction of the Mississippi River and Tributaries Levee System, subsidence, sea level rise, and increased oil and gas activity over the last century, Louisiana has lost approximately 2,000 square miles of land since the 1930s. Figure 1 shows the land loss in the Parish between 1932 and 2010. While local levees, the Mississippi River and Tributaries Levee System, and the Hurricane and Storm Damage Risk Reductions System (HSDRRS) have provided critical flood

control for development and economic growth, these protection systems have deprived the surrounding coastal ecosystems of needed sediment, fresh water, and nutrients essential to wetland sustainability. Additionally, navigation and oil and gas exploration and the resulting miles of canals and pipelines have altered hydrology and accelerated habitat degradation. These man-made alterations compound other land loss contributors to collectively reduce the natural landscape and its effectiveness as our first line of defense against hurricane events, posing an increasing substantial and real threat to the longevity and sustainability of the Parish and coastal Louisiana. Future coastal land loss estimates prepared as part of the 2017 Louisiana Coastal Master Plan modeling efforts indicate that, if no additional action is taken, an additional 2,250 square miles of coastal Louisiana could be lost in the next 50 years because of these factors.

Over the past several years, the region has been impacted by Hurricanes Katrina, Rita, Gustav, Ike, and Isaac, as well as the Deepwater Horizon oil spill, reinforcing the importance of restoring and sustaining barrier islands, marshes, swamps, and ridges that serve as multiple lines of defense because structural protection (levees, floodgates, floodwalls) alone cannot adequately safeguard communities as storm impacts become greater with the loss of coastal wetlands (Figure 2).



▲ **FIGURE 1:** Land Loss in Jefferson Parish between 1932 and 2010



▲ **FIGURE 2:** Multiple Lines of Defense

3.1 JEFFERSON PARISH COASTAL STRATEGIC ACTION PLAN

Recognizing the importance of this issue, the Parish has been actively engaged with the State of Louisiana, neighboring coastal parishes, levee districts, local communities, and the federal government's efforts to restore and protect coastal Louisiana.

The JP-CSAP is intended to be a subpart of Jefferson Parish's Hazard Mitigation Plan, which seeks to reduce the risk of loss throughout the Parish. It incorporates and builds upon numerous planning efforts, both local and state, undertaken to date that have been informed by numerous studies as well as planning efforts by local stakeholders, preliminary reconnaissance-level work done by Jefferson Parish, as well as the overarching Louisiana Coastal Master Plan development studies performed by the Coastal Protection and Restoration Authority (CPRA).

The JP-CSAP provides a list of priority projects for the Parish to focus efforts for traditional restoration and protection project types as well as "non-traditional," which includes other initiatives that are important socioeconomic drivers like outdoor recreation, workforce development, and resilience initiatives. Given the Parish's limited funding, it is important that decisions and actions be made in coordination with CPRA's and other agencies' objectives to maximize funding opportunities for the projects identified.

"Marsha" - Jefferson Parish Coastal Mascot

3.2 GOALS, OBJECTIVES, AND STRATEGIES

GOALS

Identify projects that prevent future damages to natural resources and the built environment from subsidence, sea level rise, and coastal land loss that are consistent with the goals of CPRA's Coastal Master Plan to the maximum extent practicable.

Identify strategies to maximize potential funding sources and create synergies among local, state, and federal partners.

Enhance public awareness of future risks and economic benefits of the Parish coastal environment.

OBJECTIVES

Find and develop opportunities to work with other agencies to leverage funds for projects and share information about risks and benefits.

Ensure the Parish is represented in the determination of regional, state, and federal project selection.

Ensure the Parish is prepared to maximize access to state/federal grant funds and other kinds of assistance.

Increase involvement with citizen and technical groups for communication of coastal risks and benefits.

STRATEGIES

Undertake risk and vulnerability studies for the refinement of projects.

Perform survey, geotechnical, and engineering of projects in a coordinated manner to maximize funding potential.

Monitor previously implemented projects to ensure functioning properly.

Promote public understanding, support, and demand for coastal restoration and protection efforts.

Seek state and federal grants to fund mitigation activities.

Implement elements of this Plan and monitor results.

3.3 HAZARD MITIGATION PLAN

Additionally, the JP-CSAP aligns with the goals, objectives, and strategies detailed in the 2020 Hazard Mitigation Plan (Jefferson Parish, 2020). Selected goals, objectives, and strategies are taken from Section 5 of this Plan describes the Parish's priorities for mitigation actions as follows.

HAZARD MITIGATION GOALS

No. 1	Identify and pursue preventive measures that will reduce future damages from hazards.
No. 2	Enhance public awareness and understanding of preparedness and risks through education and notification programs.
No. 3	Identify and pursue protective measures that will benefit the built environment and natural systems.
No. 5	Invest in structural and green infrastructure projects to manage future risk.

Photo courtesy of PJ Hahn Photography

HAZARD MITIGATION OBJECTIVES

No. 1	Reduce the exposure of residential areas to flooding and storm surge from the Mississippi River, Lake Pontchartrain, and the Gulf of Mexico.
No. 4	Find and develop opportunities to work with other agencies to leverage mitigation funds and to share information about the risks of natural hazards.
No. 6	Promote partnerships among federal, state, parish, interstate commissions, and local governments to identify, prioritize, and implement mitigation actions.
No. 7	Improve the Parish's Community Rating System rating through the National Flood Insurance Program to allow citizens to purchase flood insurance at a discounted price.
No. 8	Maintain continuity of operations and economic productivity of Parish businesses by preventing damage from hazards.
No. 9	Ensure the Parish maximizes its opportunities for access to state and federal grants and other kinds of assistance.
No. 12	Ensure the Parish continues to be represented in the determination of region-wide mitigation actions.
No. 13	Stay involved with citizen and technical groups concerning measures related to hazard mitigation.

HAZARD MITIGATION STRATEGIES

No. 1	Maintain awareness of the potential effects of natural hazards on Parish assets. Use new information from damaging events to increase local knowledge of risks.
No. 2	Undertake vulnerability and risk studies to better understand the potential for future damages.
No. 4	Implement cost-effective projects and actions to reduce risk from natural hazards for Parish assets and operations as well as for residents and businesses in the planning area.
No. 8	Monitor mitigation measures to ensure they are functioning efficiently.
No. 10	Continuously monitor this Plan to ensure that it remains current with regard to risks, strategies, priorities, and mitigation actions.
No. 11	Promote public understanding, support, and demand for hazard mitigation.
No. 13	Seek state and federal grants to fund mitigation activities.
No. 16	Implement elements of the Plan and monitor results.

CHAPTER 4

PREVIOUS INITIATIVES

Photo courtesy of PJ Hahn Photography

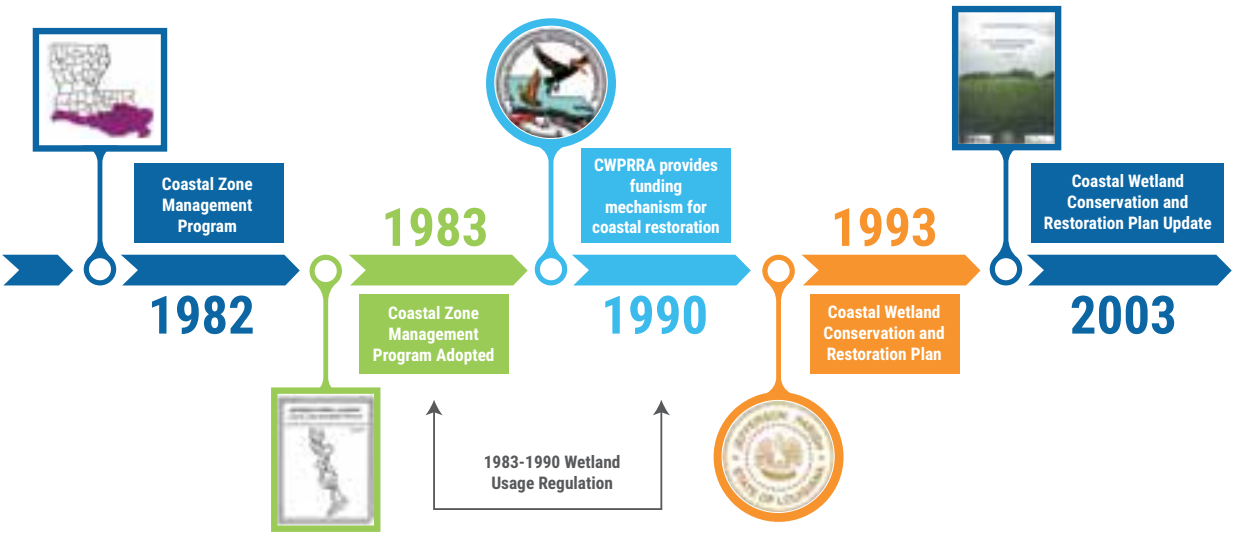
4 PREVIOUS JEFFERSON PARISH COASTAL INITIATIVES

MISSION STATEMENT

To aid in the management and restoration of Jefferson Parish's coastal resources through coordination with local, state, federal governments, and nongovernmental organization entities by reviewing proposed development, advocating for project funding, and educating stakeholders about regional ecosystem issues.

In response to the Louisiana and Local Coastal Resource Management Act of 1978 (Act 361), the first steps were initiated toward developing a coastal zone management program by identifying and studying the various issues and problems plaguing the coastline. Insight and information resulting from the Coastal Zone Management studies were used to compile a workable inventory of coastal resources, issues, problems, possible solutions and program guidelines, and an implementation plan (Jefferson Parish, 1982).

In May 1983, the Parish's first Coastal Zone Management Program was created and formally adopted (Jefferson Parish, 1982). This process identified the need for a Coastal Zone Administrator (Ordinance Nos. 15529, 15530, 15528) to lead all coastal-related efforts for the Parish. Over the next seven years, the Jefferson Parish Coastal Zone Management Program focused on wetland usage regulation through local coastal use permitting



under the Louisiana State and Local Coastal Resources Management Act of 1978 (Act 361, Louisiana Revised Statute 49:214.21 et seq). The passage of the Coastal Wetland Planning, Protection, and Restoration Act (CWPPRA), or "Breaux Act," in 1990 created a competitive source of funding for the implementation of coastal restoration projects in Louisiana, allowing the opportunity to address wetland loss within the Parish on a larger scale. Subsequently, in pursuit of aligning its coastal wetland standards with CWPPRA, the Parish developed a Jefferson Parish-wide Coastal Wetland Conservation and Restoration Plan (1993). This plan worked as a means of identifying, organizing, and prioritizing Jefferson Parish's coastal restoration goals and objectives. It was updated in 2003 and identified 26 projects focused on the creation, conservation restoration, enhancement, and management of coastal resources (Jefferson Parish, 2003).

In 2003, the Coastal Wetland Conservation and Restoration Plan was revised as the Jefferson Parish Coastal Protection and Restoration Plan (2015) to include new projects that may be eligible for funding through the Deepwater Horizon settlements, state surplus, Gulf of Mexico Energy Security Act (GOMESA) and CWPPRA (refer to Section 8.0, Funding). These projects focused on areas of greatest impacts and maximized funding opportunities for priority projects. Over the following years, the applicable requirements for the new funding sources became more clear and more defined, leading the way for an updated JP-CSAP to identify the best projects for the Parish to undertake or support, as well as applicable funding sources to utilize for implementation.

Since the 2015 plan's publication, many projects in the plan have been implemented through increased funding opportunities. Additional studies and plans have also been conducted by local communities that have been reviewed and incorporated into this document. These studies and plans are listed below:

- Town of Jean Lafitte Resiliency Plan (2012)
- Jefferson Parish Lakefront Restoration (2006)
- Louisiana's Strategic Adaptations for Future Environments (LA SAFE) Resiliency Plan (Jefferson Parish 2019)
- Bucktown Harbor Vision Book (Jefferson Parish 2018a)
- 2018 State of Jefferson Parish Coastal Protection and Restoration (2018)

CHAPTER 5

LOUISIANA COASTAL MASTER PLAN

- History
- 2017 Louisiana Coastal Master Plan
- 2023 Louisiana Coastal Master Plan and Jefferson Parish Submittals

5 LOUISIANA COASTAL MASTER PLAN

Following the impacts to coastal Louisiana caused by Hurricanes Katrina and Rita, it became important to integrate approaches to coastal restoration and hurricane protection under a new singular authority with a mission and emphasis on coordinating restoration and protection efforts to reduce storm flood risks and ensure a safe, sustainable, and working coast (CPRA, 2017a).

5.1 HISTORY

In 2005 the Louisiana Legislature passed Act 8, which created CPRA. Act 8 directed CPRA to lead efforts regarding hurricane protection and the protection, conservation, restoration, and enhancement of coastal wetlands and barrier shorelines or reefs and further defined the "coastal area" as the Louisiana Coastal Zone and contiguous areas that are subject to storm or tidal surge. It also charged CPRA with developing and implementing a Louisiana Coastal Master Plan that would be updated every 5 (now 6) years. This Louisiana Coastal Master Plan provides a long-term vision for coastal Louisiana and is the vehicle for coordinating Louisiana's local, state, and federal level responses to land loss and potential threats from hurricanes and storm surge events. It provides a 50-year horizon list of projects that build/maintain land and reduce risk to our communities by seeking to improve flood protection, harness the natural processes that built Louisiana's coastal landscape, sustain our unique cultural heritage, and ensure that our coast continues to be both a Sportsman's Paradise and a hub for commerce and industry (CPRA, 2017a).

The first Louisiana Coastal Master Plan, the 2007 "Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast," was unanimously passed by the Louisiana Legislature. The 2007 and subsequent 2012 Louisiana Coastal Master Plans established the foundation of the Louisiana's overarching principles and objectives, serving as the policy and implementation guide to focus Louisiana restoration and protection efforts (CPRA, 2007, 2012). The 2012 version provided for a 50-year, $50 billion vision, which CPRA would concentrate on implementing, that would identify specific structural, non-structural, and restoration projects that had the greatest potential to reduce storm-induced flood risk (CPRA 2012). The JP-CSAP seeks to serve as a guide for Parish actions that will be consistent with the objectives of the Louisiana Coastal Master Plan, understanding the relationship and common goals and objectives to maximize funding opportunities for projects identified in the JP-CSAP.

5.2 2017 LOUISIANA COASTAL MASTER PLAN

The 2017 Louisiana Coastal Master Plan, Louisiana's Comprehensive Master Plan for a Sustainable Coast, includes 124 projects that build or maintain more than 800 square miles of land and projects to reduce expected damages by $8.3 billion annually by year 50, totaling more than $150 billion over the plan's 50-year horizon. Six of the 124 projects are included wholly or partially in Jefferson Parish, which include structural and non-structural risk reduction as well as restoration initiatives (Table 1 and Figure 3).

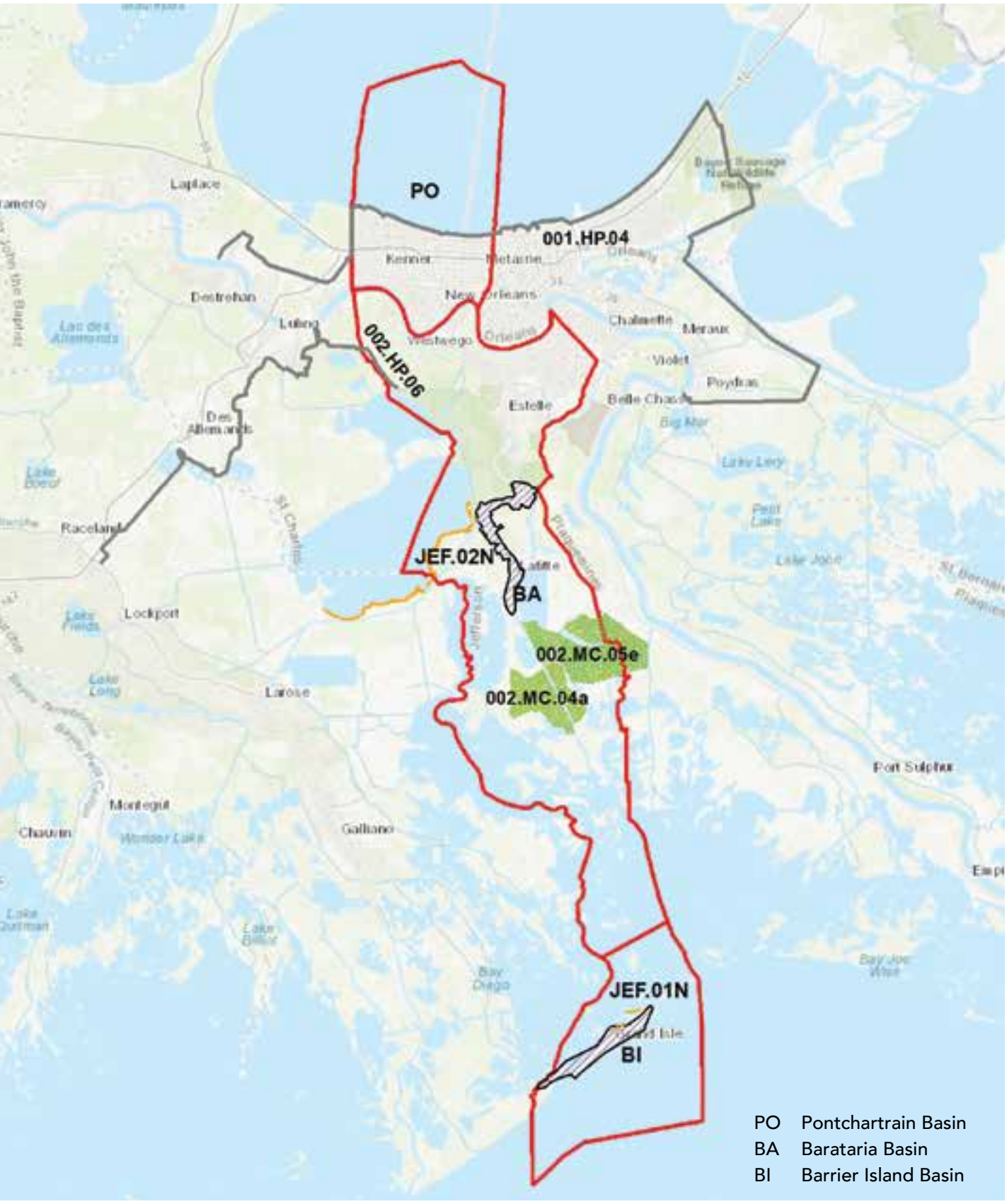
80,601 Acres of Land Loss in Jefferson Parish without the 2017 Louisiana Coastal Master Plan

Jefferson Parish 2017 Louisiana Coastal Master Plan Projects

Project Type: CPRA Project ID	Project Name	Description	Implementation Period	Cost
Structural Risk Reduction: 002.HP.06	Upper Barataria Risk Reduction	Construction of a levee to an elevation between 12.5 and 15 feet along Highway 90 be-tween the West Bank and Larose. Project includes earthen levees, T-wall, sluice gates, barge gate, swing gates, and pump stations.	Years 1-30	$940.9M
Non-structural Risk Reduction: JEF.01N	Grand Isle Non-structural Risk Reduction	Project includes floodproofing non-residential properties, elevating residential properties, and acquiring residential properties.	Years 1-30	$98.2M
Non-structural Risk Reduction: JEF.02N	Lafitte/Barataria Non-structural Risk Reduction	Project includes floodproofing non-residential properties, elevating residential properties, and acquiring residential properties.	Years 1-30	$200.8M
Structural Risk Reduction: 001.HP.04	Greater New Orleans High Level	Improvements of existing Hurricane and Storm Damage Risk Reduction System levees surrounding the East Bank of Greater New Orleans to elevations between 19 and 35 feet. Project features include earthen levee and T-wall.	Years 31-50	$2,222.7M
Marsh Creation: 002.MC.05e	Large-Scale Barataria Marsh Creation - Component E	Creation of approximately 12,900 acres of marsh in the Barataria Basin south of the Pen to the Barataria Landbridge to create new wetland habitat and restore degraded marsh.	Years 11-30	$674.5M
Marsh Creation: 002.MC.04a	Lower Barataria Marsh Creation	Creation of approximately 7,400 acres of marsh in Jefferson Parish on the east shore of Little Lake and Turtle Bay to create new wetland habitat and restore degraded marsh.	Years 31-50	$709.5M

HP Hurricane Protection.
M Million.
MC Marsh Creation.

▲ TABLE 1



▲ **FIGURE 3:** Jefferson Parish 2017 Louisiana Coastal Master Plan Projects

Photo courtesy of PJ Hahn Photography

5.3 2023 LOUISIANA COASTAL MASTER PLAN & JEFFERSON PARISH SUBMITTALS

As with preceding master plans, the 2023 Louisiana Coastal Master Plan will build upon previous efforts to ensure that projects build and/or sustain land and provide storm sure-based flood risk reduction. Future modeled environmental conditions dictate that investments must have effects at the sub-basin to regional scale to be considered for evaluation under the 2023 Louisiana Coastal Master Plan.

As a result, in March 2019 the Parish submitted their proposed projects to CPRA for evaluation and inclusion in the 2023 Louisiana Coastal Master Plan (Table 2 and Figure 4). These projects represent a potential total investment of $2.5 billion to the region and were developed in conjunction with Plaquemines and Lafourche Parishes to ensure that the projects provide basin- to regional-scale benefits.

Photo courtesy of PJ Hahn Photography

Jefferson Parish 2023 Louisiana Coastal Master Plan Project Submittals

Project Type: Project ID	Project Name	Description	Cost
Marsh Creation/ Ridge Restoration: MP23-1	Barataria Bay Headland and Marsh Creation	The objective of the Barataria Bay Headland and Marsh Creation project is to create a system of ridges and marsh at the Barataria Bay Headland to protect Lafourche, Jefferson, and Plaquemines Parishes. The marsh and ridges connect Bayou L'Ours in Lafourche Parish to Grand Bayou and Bayou Grand Chenier in Plaquemines Parish. The project entails the sequenced construction of 15,160 acres of marsh and 134 acres of ridge (72,967 feet) to protect Lafourche, Jefferson, and Plaquemines Parishes.	$1,149M
Marsh Creation/ Ridge Restoration: MP23-2	Bayou Barataria Ridge and Marsh Creation	The objective of the Bayou Barataria Ridge and Marsh Creation project is to restore a portion of the historical ridge and marshes that occurred along Bayou Barataria. The project calls for the construction of 13,960 acres of marsh and 77 acres of ridge (41,889 feet).	$1,043M
Marsh Creation: MP23-3	Caminada Bay Marsh Creation	The objective of the Caminada Bay Marsh Creation project is to protect the Barrier Islands, including Grand Isle and Caminada Headland, through the construction of 1,585 acres of bayside marsh.	$120M
Marsh Creation/ Ridge Restoration: MP23-4	Fifi Island Ridge and Marsh Creation	The objective of the Fifi Island Ridge and Marsh Creation project is to protect the Barrier Islands, particularly Grand Isle, through the construction of 638 acres of marsh and 26 acres of ridge (14,491 feet).	$53M
Marsh Creation: MP23-5	Lake Pontchartrain Marsh Protection	The objective of the Lake Pontchartrain Marsh Protection project is to create 491 acres of marsh with breakwaters to reduce storm induced wave conditions on the Hurricane and Storm Damage Risk Reduction System, Lake Pontchartrain and Vicinity hurricane protection project and its protected communities	$135M

M Million.
MP23 2023 Louisiana Coastal Master Plan.

▲ TABLE 2

▲ **FIGURE 4:** Jefferson Parish 2023 Louisiana Coastal Master Plan Project Submittals

CHAPTER 6

JEFFERSON PARISH EXISTING CONDITIONS

- Environment
- Coastal and Jefferson Parish Basins
- Geology
- Subsidence and Sea Level Rise
- Land Loss Rates

6.1 | ENVIRONMENT

Jefferson Parish is a diverse community extending from the southern shore of Lake Pontchartrain 55 miles south to the beaches along the Gulf of Mexico. The Parish lies in southeastern Louisiana and is also bordered by Orleans and Plaquemines Parishes to the east and Lafourche and St. Charles Parishes to the west (Figure 5).

The northern areas of the Parish are highly populated and surrounded by the HSDRRS. This area of the Parish is mostly urbanized and is part of the New Orleans Metropolitan Area with a variety of established land uses including residential, commercial, industrial, institutional, transportation, and other public infrastructure uses.

The southern part of the Parish, outside the HSDRRS, is less populated and is characterized by estuarine systems that lead to the Gulf of Mexico with the major coastal incorporated communities being the Town of Lafitte and the Town of Grand Isle. The coastal marshes, wetlands, and estuaries contain numerous bodies of shallow water. These bodies of water and wetlands make up more than 85 percent of Jefferson Parish and provide 234,320 acres of beneficial natural floodplain function.

6.2 COASTAL AND JEFFERSON PARISH BASINS

The State of Louisiana is organized in nine Coastal Basins, and Jefferson Parish lies within the Barataria and Pontchartrain Coastal Basins (Figure 5). These Coastal Basins correspond to the watersheds in Jefferson Parish and are separated by the Mississippi River. The descriptions of the Coastal Basins below are taken from CWPPRA (2020).

▲ **FIGURE 5:** Louisiana Coastal Basins

PONTCHARTRAIN COASTAL BASIN

The Pontchartrain Coastal Basin in Jefferson Parish consists of the area from Lake Pontchartrain south to the Mississippi River. This Coastal Basin is an abandoned delta that extends east to Chandeleur Sound and is bounded by the Mississippi River and the Mississippi River Gulf Outlet on the south. All or portions of 10 parishes lie within the Pontchartrain Coastal Basin: Ascension, Jefferson, Livingston, Orleans, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany, and Tangipahoa.

The Mississippi River and Tributaries Levee System significantly restricts the input of fresh water, sediment, and nutrients input into the Pontchartrain Coastal Basin. This reduction in fresh water input plays a part in one of the major critical problems related to erosion in the Pontchartrain Coastal Basin, increasing salinity and subsidence.

BARATARIA COASTAL BASIN

The Barataria Coastal Basin in Jefferson Parish consists of those areas south of the Mississippi River. It is bounded on the north and east by the Mississippi River, to the south by the Gulf of Mexico, and on the west by Bayou Lafourche. The Barataria Coastal Basin is bounded on each side by a distributary ridge formed by present and former channels of the Mississippi River. A chain of barrier islands including Grand Isle separates the Barataria Coastal Basin from the Gulf of Mexico. Portions of nine parishes occur in the Barataria Coastal Basin: Assumption, Ascension, St. James, Lafourche, St. John the Baptist, St. Charles, Jefferson, Plaquemines, and Orleans.

Fresh water and sediment input to the Barataria Coastal Basin was almost eliminated by the construction of the Mississippi River and Tributaries Levee System and the closure of Bayou Lafourche at Donaldsonville, which haves contributed to erosion and subsidence within the basin. On the north side of the basin, fresh water from the Mississippi River is introduced at the Davis Pond Diversion in St. Charles Parish, with a discharge capacity of 10,650 cubic feet per second (Mississippiriverdelta.org, 2020a), and on the east side in Plaquemines Parish through the Naomi and West Point a la Hache siphons, each with a capacity of 1,500 cubic feet per second. CPRA is currently in the permitting process for construction of the Mid-Barataria Sediment Diversion near Myrtle Grove, Louisiana, in Plaquemines Parish, which is expected to provide a flow up to 75,000 cubic feet per second.

JEFFERSON PARISH BASINS

The JP-CSAP generally follows the CPRA and CWPPRA delineations of the Coastal Basins (see Figure 5). For this Plan, the Barataria Coastal Basin is further divided into two distinct basins as shown in Figure 6, creating three basins in Jefferson Parish: the Pontchartrain Basin, Barataria Basin and Barrier Islands Basin. The Barataria Basin is further delineated based on the unique challenges, needs, and projects associated with the different geological makeup of the Barataria and Barrier Island (Basins. Figure 7 shows the JP-CSAP Basins overlaid with the Jefferson Parish Council Districts.

▲ **FIGURE 6:** Pontchartrain and Barataria Coastal Basins and JP-CSAP Basins

▲ **FIGURE 7:** Jefferson Parish Basins and Council Districts

Photo courtesy of PJ Hahn Photography

PONTCHARTRAIN BASIN MAJOR INITIATIVES

The Pontchartrain Basin, from Lake Pontchartrain south to the Mississippi River and from the St. Charles Parish line to the Orleans Parish line, includes portions of Council Districts 2 and 3 north of the Mississippi River as well as Council Districts 4 and 5 (see Figure 7). This basin includes the incorporated areas of Kenner and Harahan and the unincorporated areas of Kenner, Jefferson, Metairie, and River Ridge.

Within Jefferson Parish, the Pontchartrain Basin is unique because the vast majority of the basin is encapsulated by the HSDRRS and drainage is almost completely controlled mechanically by pumping stations. The area within the HSDRRS is experiencing subsidence that will be addressed through the 2020 Hazard Mitigation Plan and other smaller restoration projects.

Major initiatives outside the HSDRRS are focused on the Lake Pontchartrain Lakefront for the purpose of shoreline protection, recreation, and economic development. With the success of the Bucktown Boardwalk Marsh Creation and Living Shoreline, the objective is to continue to evaluate implementation of this strategy west to the St. Charles Parish boundary.

BARATARIA BASIN MAJOR INITIATIVES

The Barataria Basin spans from the Mississippi River to a point in Barataria Bay just north of Mendicant Island. This includes the portion of Council District 2 south of the Mississippi River, Council District 3, and Council District 1, including the incorporated areas of Westwego, Gretna, and Town of Lafitte and the unincorporated areas of Avondale, Marrero, and Harvey (see Figure 7).

Outside the HSDRRS, the Barataria Basin is experiencing the greatest loss of wetlands as a result of subsidence, surficial erosion, and saltwater intrusion due to reduced river input and increased natural and man-made channelization, which are the greatest factors associated with the loss of wetlands. Unmitigated wetland loss in this basin will increase the storm surge flood risk for the areas of Lafitte and in the southern area of Jefferson Parish.

Major initiatives outside the HSDRRS are focused on marsh creation, recreation, economic development, and structural protection for the Town of Lafitte. The major areas of focus for restoration projects are the completion of the Barataria Landbridge and Barataria Bay Rim. The Barataria Basin serves in the Multiple Lines of Defense Strategy to protect the Pontchartrain Basin and the HSDRRS to the north.

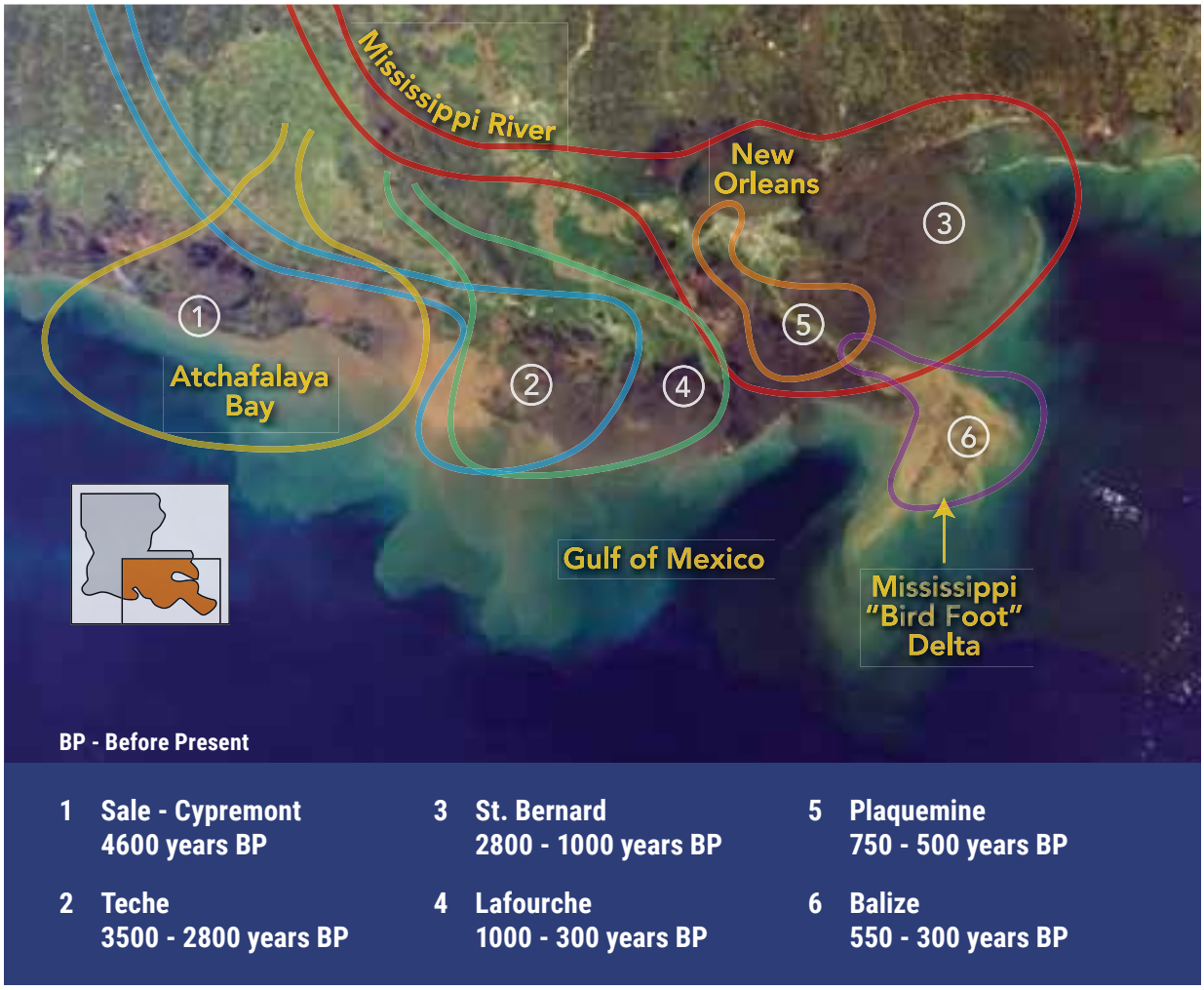
BARRIER ISLANDS BASIN MAJOR INITIATIVES

The Barrier Islands Basin, from just north of Mendicant Island to the Gulf of Mexico, includes Council District 1. District 1 includes the incorporated municipality of the Town of Grand Isle, Louisiana's only inhabited barrier island (see Figure 7).

The greatest factor for wetlands loss within this basin is subsidence, surficial erosion, and storm-related high surge and wave events. Major initiatives include marsh creation, barrier island restoration, shoreline protection, economic development, recreation, and structural protection for the Town of Grand Isle. The Barrier Islands Basin serves as the first line in the Multiple Lines of Defense Strategy to protect populated areas to the north.

6.3 GEOLOGY

The geologic development of the Louisiana coast was the result of an active delta cycle, a process by which a river naturally changes course, depositing material as part of the natural delta building process. In this process, the river continues to build a section of land called a "delta lobe." As each delta lobe is created, the natural land mass begins to restrict river flows, causing the river to change course by abandoning the older lobe for a shorter route to the Gulf of Mexico (Mississippiriverdelta.org, 2020b). The formation of the Barataria Basin in Jefferson Parish was part of the Lafourche Delta, which was active 1,000 to 300 years Before Present (Figure 8).

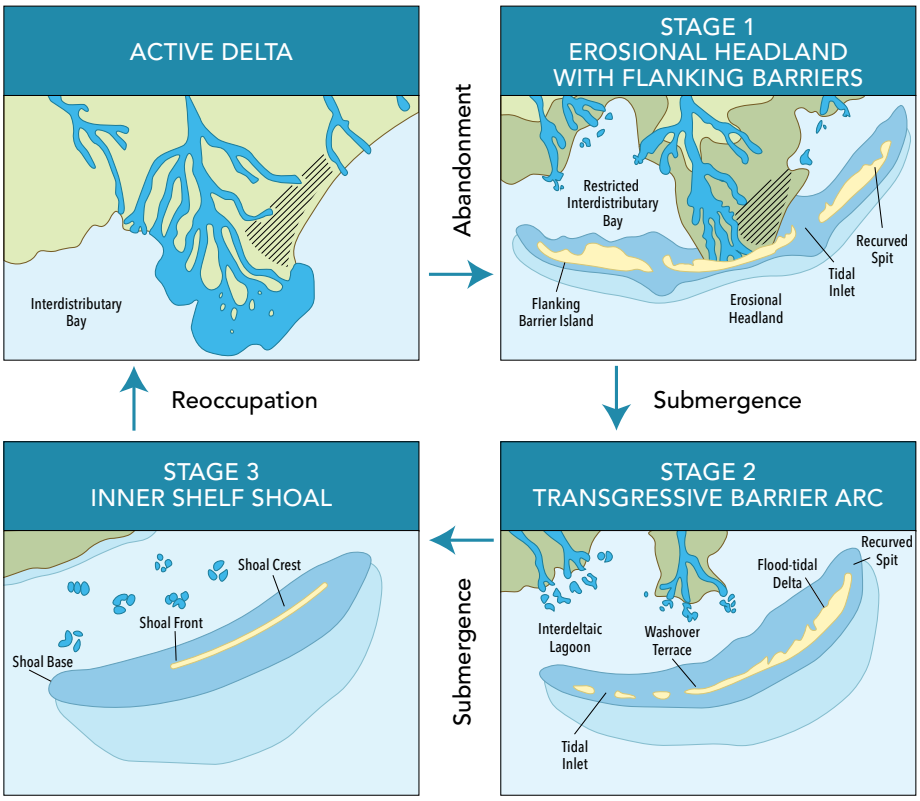


▲ **FIGURE 8:** Historic Mississippi River Delta Lobes (courtesy mississippiriverdelta.org)
Source: (Mississippiriverdelta.org, 2020b)

Extensive research and studies have been done on the evolution of the and the Barataria Basin as well as barrier island formation (Roberts, 1997) (Coleman, 1998) (Fitzgerald, 2004) (Penland and Boyd, 1981) (Penland et al., 1988).

As shown in Figure 9, the abandoned delta stages contribute to land loss within the basin.

Stage 1	Once the natural river delta land building is abandoned, and in the case of the Barataria Basin, which was artificially restricted with the construction of the Mississippi River and Tributaries Levee System, the "delta retreat" phase begins. During this phase, waves and tides continue to pull sediment out of the system, while the new geologic feature continues to settle and slowly submerge over time (subsidence) (Louisiana Department of Natural Resources, 2007). As part of the Lafourche Delta, the Barataria Basin (including Grand Isle) is in the Erosional Headland with Flanking Barriers phase of the Transgressive Mississippi Delta Barrier Model.
Stage 2	With the new interface of fresh water and saltwater, these subsiding abandoned deltas become highly productive estuaries. The geologic process after the natural delta of the river is abandoned is known as the Transgressive Mississippi Delta Barrier Model and has been detailed extensively by Penland and Boyd (1981) and Penland et al., (1988) and is shown in Figure 9. As part of the Lafourche Delta, the Barataria Basin in Jefferson Parish (including Grand Isle) is in the Erosional Headland with Flanking Barriers Stage.
Stage 3	The Inner Shelf Shoal Stage occurs when The Transgressive Barrier Arc (Stage 2) retreats landward and is being submerged due to sea level rise and, coupled with the retreating mainland shoreline, results in submergence of the land.



▶ **FIGURE 9:** Transgressive Mississippi Delta Barrier Model and the Evolution of the Abandoned Mississippi River Delta (from Penland et al., 1988).

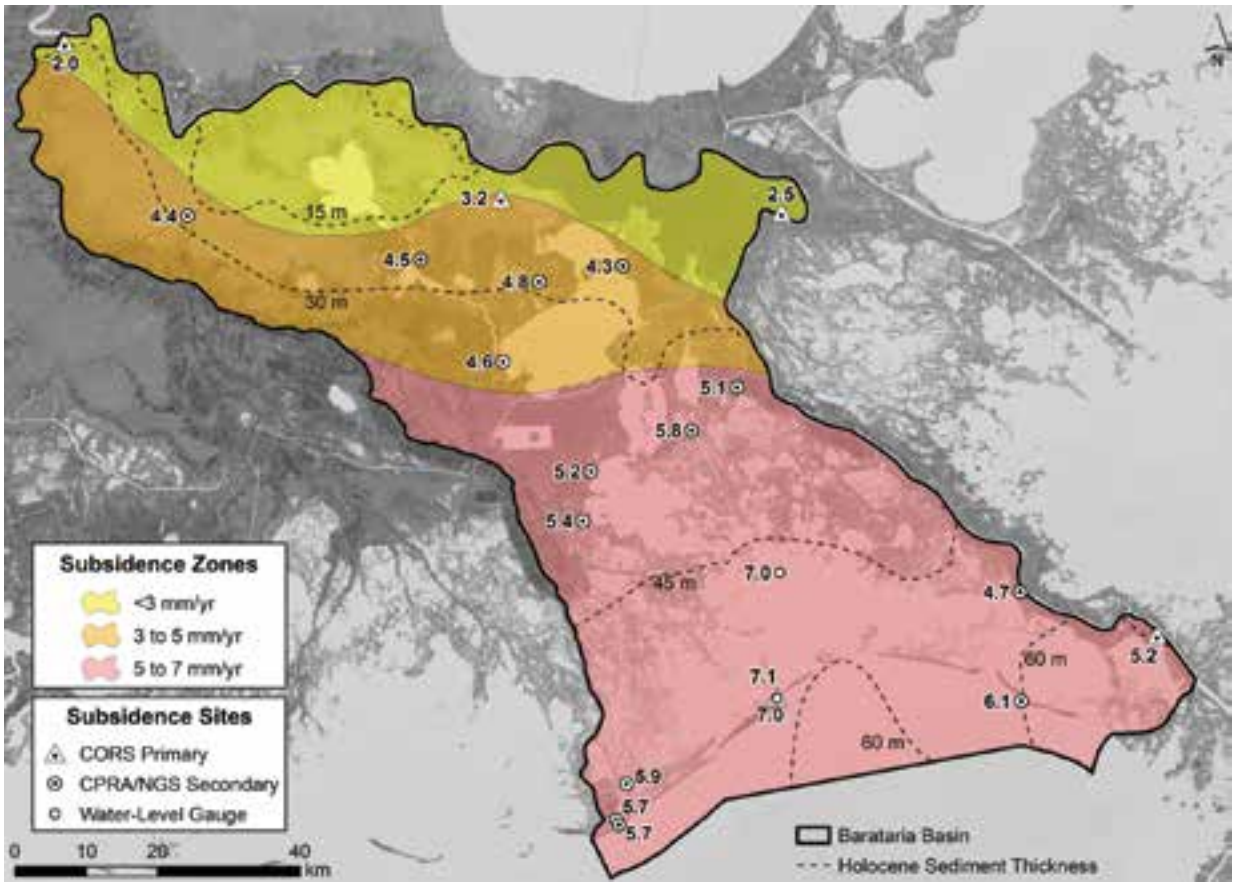
6.4 SUBSIDENCE & SEA LEVEL RISE

Subsidence and Sea Level Rise are summarized below to provide a better understanding of their importance in coastal restoration.

SUBSIDENCE

Regional subsidence is attributed to the abandoned delta geologic process. During this process, the new land formation created by the delta lobe continues to settle over time in the absence of new material being deposited by the river into the system. Localized subsidence can be accelerated by the removal of groundwater or gases and fluids from oil and gas activity. Land loss associated with subsidence occurs when the water level threshold for native intertidal plant species is exceeded, causing a collapse of the intertidal vegetation and the conversion of marsh to open water.

Land loss from subsidence occurs when the water level threshold for native intertidal plant species is exceeded, causing a collapse of the vegetation and conversion of marsh to open water.



▲ **FIGURE 10:** Recent Subsidence Rates for Barataria Basin (Byrnes, 2019).

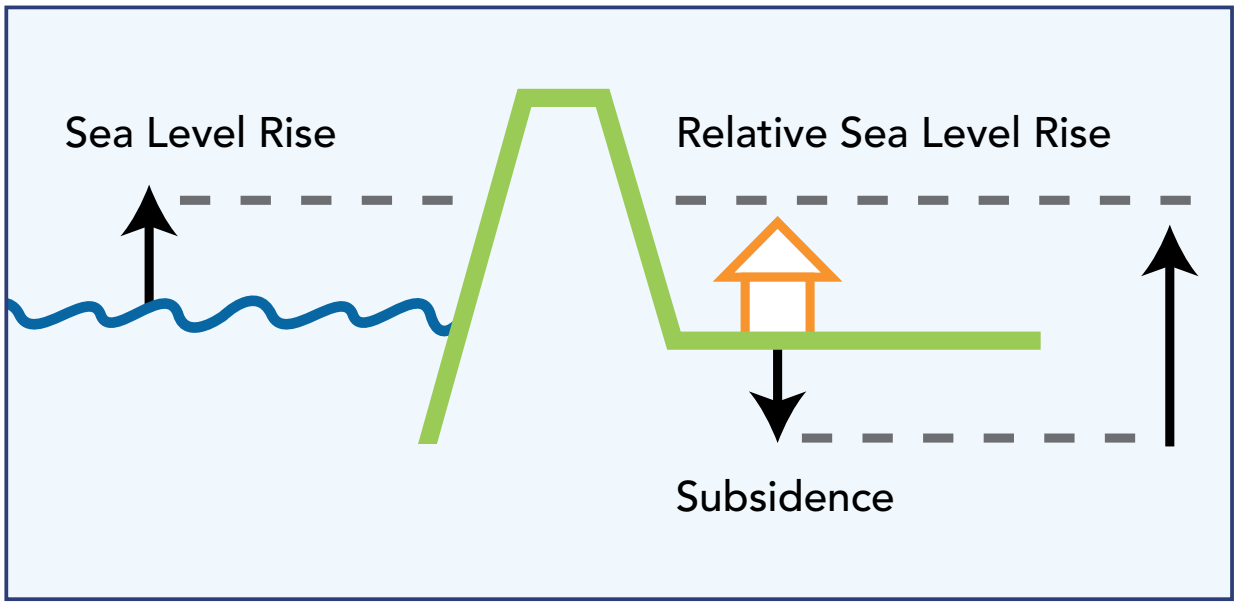
The 2017 Louisiana Coastal Master Plan estimated that the rate of subsidence ranges from 0 to 35 millimeters (0 to 1.4 inches) per year. Recent studies to assess the rate of subsidence in the Barataria Coastal Basin includes a study that measured subsidence rates at 21 locations throughout the basin (Byrnes, 2019). Resulting subsidence rates throughout the basin ranged from 2 to 7 millimeters (0.08 to 0.28 inch) per year, with the subsidence rates highest in the southern portion of the Barataria Coastal Basin near the area identified in this Plan as the Barrier Island Basin. Figure 10 shows the regional subsidence rates measured across the basin.

SEA LEVEL RISE

Sea level rise is caused by the warming of the ocean, causing sea water to expand in volume and the melting of continental ice shelves increasing the amount of water in the oceans. Eustatic sea level changes are global sea level changes related either to changes in the volume of glacial ice on land or to changes in the shape of the sea floor caused by plate tectonic processes.

Sea levels have been increasing around the world over the past century, and in recent decades the rate of rise has also increased. According to the National Oceanic and Atmospheric Administration (NOAA), the 2014 global sea level was 2.6 inches above the 1993 average, and sea levels are continuing to rise at a rate of about one-eighth inch per year (NOAA, 2020). For the purposes of the JP-CSAP, the 2017 Louisiana Coastal Master Plan estimates that, under the Medium Environmental Scenario, eustatic sea level rise would be 2.07 feet (0.63 meter) over the next 50 years (from 2015 to 2065) (CPRA, 2017b).

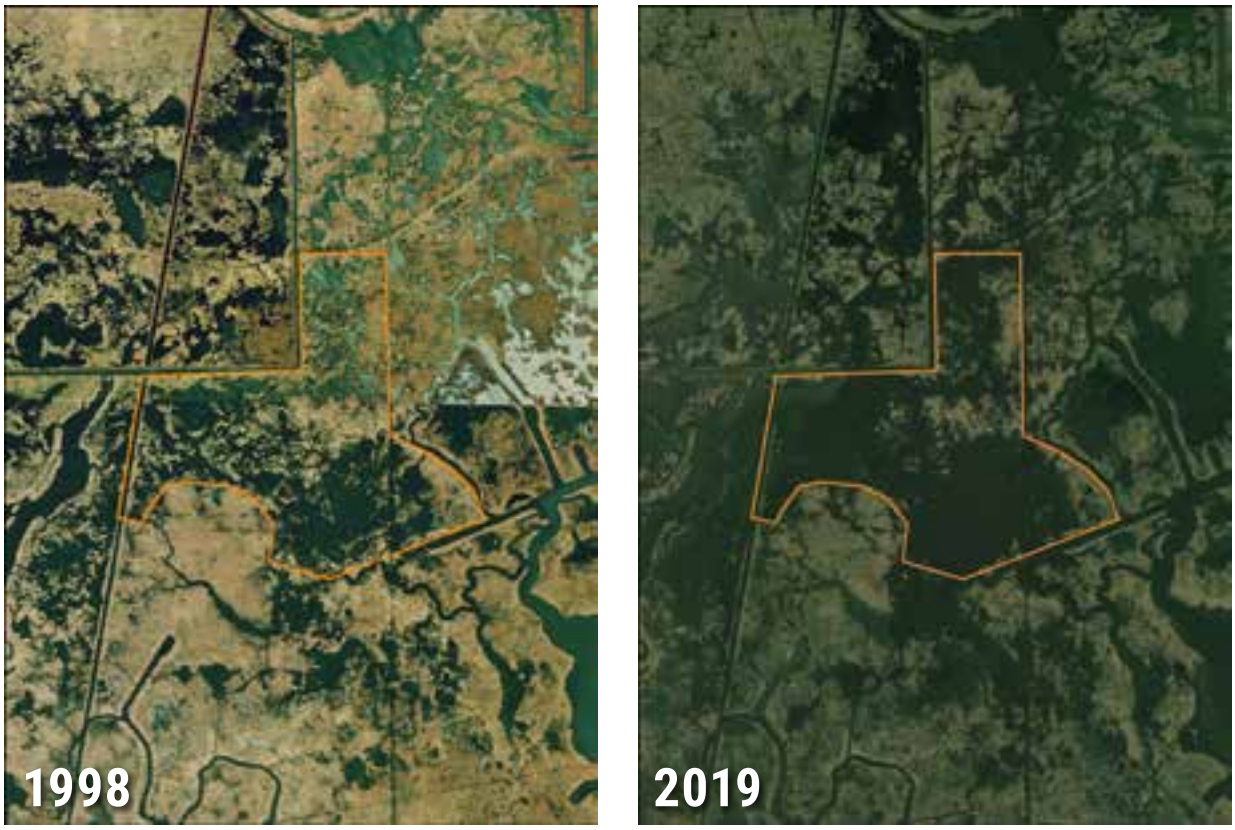
Relative sea level rise is the combination of sea level rise and subsidence. Relative sea level rise contributes to the loss of coastal wetlands, which provide protective buffers from flood events, beach erosion, impacts on population and property in low-lying areas, and disruption of coastal habitats and species. Further, flooding and hurricane events are more severe and affect a greater area.



6.5 LAND LOSS RATES

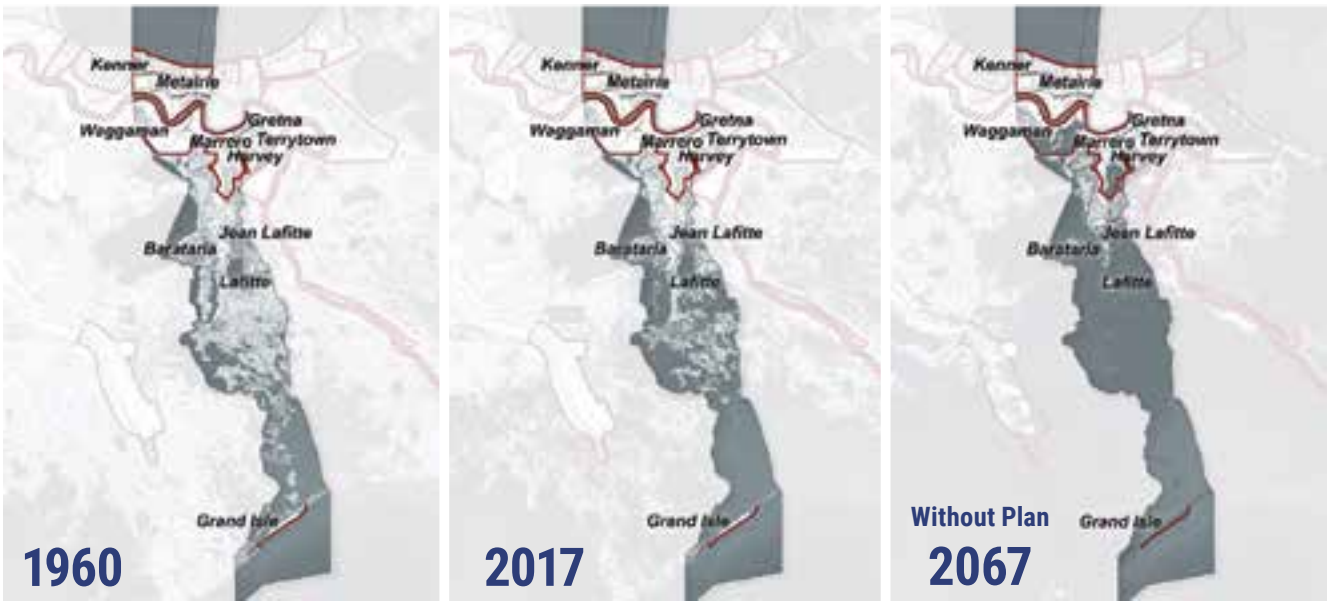
According to summary data from Louisiana's Comprehensive Master Plan For a Sustainable Coast (CPRA, 2017a), Louisiana's coast lost more than 1,800 square miles of land between 1932 and 2010 (USGS, 2011). From 2004 through 2008, more than 300 square miles of marshland were lost to Hurricanes Katrina, Rita, Gustav, and Ike. The major causes of this land loss include the effects of sea level rise, subsidence, hurricanes, storm surges, disconnection of the Mississippi River from coastal marshes, oil and gas activity, and other human impacts.

Jefferson Parish faces significantly increased wetland loss in the southern areas outside the HSDRRS over the next 50 years. With no further coastal protection or restoration actions, an additional 112 square miles, or 42 percent of the land area, could be lost in the next 50 years (Figure 11) (CPRA, 2018; Jefferson Parish, 2018). Likewise, with no further action, there is a severely increased future storm surge-based flood risk in areas outside the HSDRRS.



Land loss in the area around BA-04 Northeast Turtle Bay Extension between 1998 and 2019

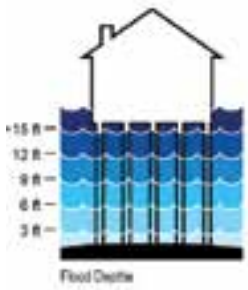
LAND LOSS

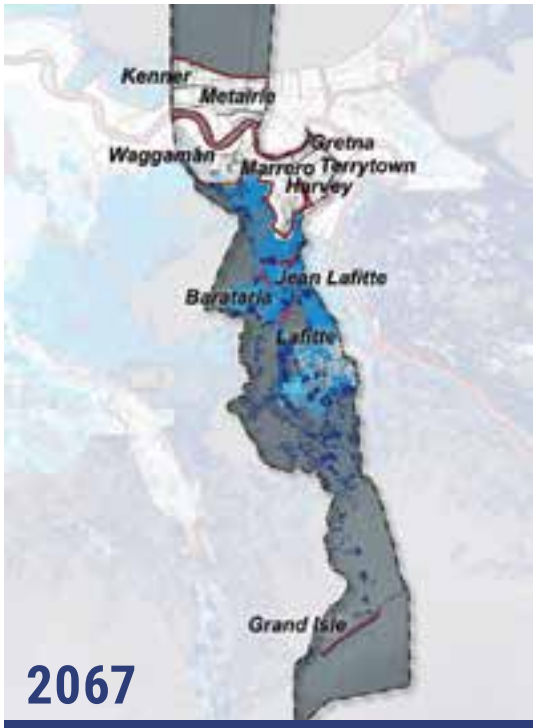


▲ **FIGURE 11:** Jefferson Parish Land Loss 1960 to 2067. Source: (CPRA, 2018; Jefferson Parish, 2018)

FLOOD RISK

Flood depth for 100-year storm for initial conditions.





Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with the Coastal Master Plan.

CHAPTER 7
PROJECT SELECTION

- History of Engagement
- Methodology and Project Screening
- Project Types
- Prioritized Project Lists
- Projects For Future Consideration

7.1 HISTORY OF ENGAGEMENT

The development of the JP-CSAP was initiated in January 2019 and involved a collection of existing project information, including all previous plans and studies. In February 2019, the project team held meetings to engage leadership within the incorporated municipalities of the Town of Grand Isle and the Jean Lafitte to identify previous project concepts and new potential projects. Meetings with these community leaders led to the development of a comprehensive list of projects to be evaluated in and near these communities. Once the lists of projects were developed and initially screened, Parish Council briefings occurred in February and March 2020 to present a list of projects for prioritization by Parish leadership. Additional meetings were scheduled with the leaders of the Town of Grand Isle and the Town of Jean Lafitte in April 2020; however, due to the COVID-19 pandemic, briefings were held virtually and feedback received by email.

7.2 METHODOLOGY AND PROJECT SCREENING

Sources for project ideas evaluated for consideration in the JP-CSAP included, but were not limited to, the following:

2023 Louisiana Coastal Master Plan New Project Development Submittal

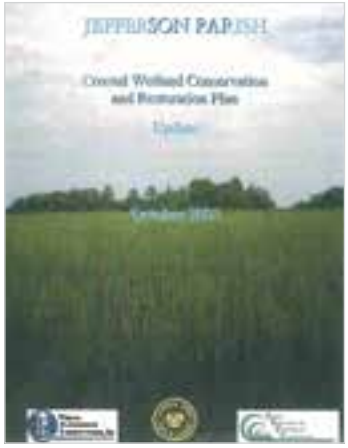
Louisiana's Comprehensive Master Plan for a Sustainable Coast (CPRA, 2017a)

Jefferson Parish Coastal Protection and Restoration Plan (2015)

Louisiana's Comprehensive Master Plan for a Sustainable Coast (CPRA, 2012)

Louisiana's 2007 Comprehensive Master Plan for a Sustainable Coast (CPRA, 2007)

Jefferson Parish Coastal Wetland Conservation and Restoration Plan (2003)



Additional Sources:

Coastal Wetlands Planning, Protection and Restoration Act projects

Coast 2050: Toward a Sustainable Coastal Louisiana (Louisiana Department of Natural Resources, 1998)

The Louisiana Coastal Area (LCA) Ecosystem Restoration Study (USACE, 2004)

The initial project evaluation process identified projects from previous plans that would not be further analyzed including

1. Projects that were not completely located within the Parish boundaries. Although these regional projects have recognized environmental benefits, they were considered beyond the scope of the JP-CSAP with a low likelihood of being funded by Jefferson Parish. The Parish maintains a list of these projects and will continue to advocate for implementation of these projects at the state and federal level and in support of neighboring parishes.
2. Previously constructed projects as well as projects at a conceptual level without sufficient details (location, cost, material type) were also removed from further consideration in this Plan. The Parish is maintaining a list of these projects identified as "Projects For Future Consideration" (see Section 7.5).
3. Active projects in construction were also removed from this Plan. The Parish Department of Ecosystem and Coastal Management maintains a list of active projects that are fully funded and are under construction or will be under construction in the near future.

METHODOLOGY

Approximately 50 new projects were developed and a standard data set determined for each project including:

Strategy	Type Location Scope and Size
Estimated Cost	Previous Cost Estimates - Inflated to November 2019 using Consumer Price Index Inflation Calculator (US Inflation Calculator 2019) When Costs were not available - rough costs were developed based on similar completed projects
Progress to Date	Most current state of the project
Project Origin	Original developer of the project
Project Category	Projects were identified as Large-Scale, Regional, Local, or Non-traditional projects
Project Lead	Who is or would be the most likely party responsible for fostering the project to the next phase of work
Funding Source	What is the most likely avenue for funding the potential project
GIS Files	Mapped in a Geographic Information System (GIS) database

PROJECT SCREENING

A project screening process was developed to evaluate the projects. Projects were screened based on the following:

Viable	Is the project acceptable to permitting and reviewing agencies
Jurisdiction	Is the project located entirely within Jefferson Parish
Status	Is the project already constructed

In order to assist in reviewing the project list, the projects were categorized into separate lists including active projects, reviewed projects, constructed projects, projects for future consideration, Louisiana Coastal Master Plan projects, and structural protection projects. Those projects not separated into one of the lists above were included on the Project Priority List provided to Jefferson Parish Leadership for consideration in the JP-CSAP. In all, more than 109 projects were developed, evaluated, and screened with the remaining Project Priority List of projects submitted to Parish leadership for prioritaization as described in Section 7.4.

7.3 PROJECT TYPES

For the purposes of the JP-CSAP, projects were separated into two project categories: Restoration and Structural Protection Projects. Restoration and Structural Protection Projects were broken down further as described below.

RESTORATION PROJECTS

Restoration projects are those projects whose features restore degraded components of the Parish's coastal ecosystem by re-establishing natural processes or protecting existing natural features. Restoration projects are grouped into the following general categories:

MARSH CREATION – Restoration of wetlands in open water or areas of degraded marsh through placement of dredged material to restore marsh and provide additional storm-surge reduction. Marsh creation projects also include terracing projects and vegetative plantings. Common limitations of marsh creation projects are availability of sediment sources, water depths, and natural containment among other factors. Marsh creation projects usually have a 20-year life cycle due to long-term settlement and subsidence and require future maintenance to restore marsh elevations. Marsh creation projects offer increased longevity when not subjected to wind and wave erosional forces, such as those adjacent to large open bodies of water. Marsh creation projects are commonly built in open shallow water areas with naturally occurring containment.

RIDGE RESTORATION – Re-establishment of historical ridges through sediment placement and vegetative plantings to restore maritime forested habitat. Forested ridges provide additional storm-surge reduction and are a key part of the Multiple Lines of Defense Strategy. Ridges are most commonly built on the footprint of historical ridges because they often have suitable soils to support ridge construction. Like marsh creation projects, a common limitation of ridge restoration projects is the availability of sediment sources because they often require large volumes of suitable sediment. Ridge restoration projects are often paired with a marsh component in order to capture sediment that over washes the ridge during storm events.

SHORELINE PROTECTION – Hardened rock shoreline protection and nearshore rock breakwaters to reduce wave energies on shorelines in open bays, lakes, and natural and navigation channels. Some shoreline protection techniques, such as rock berms, are applied directly to the eroding shorelines to decrease erosion. Other techniques, such as segmented breakwaters and living shorelines, are placed in the adjacent open water in order to decrease a wave's energy before it hits the shoreline and to promote the deposition of sediment along the shoreline. Common limitations of shoreline protection are geotechnical concerns (sinking and subsiding) due to soils not supporting the weight of the rocks, cost, depth of water, construction access, and induced erosion in certain areas.

OTHER – Projects that do not fit one of the previously discussed project types including:

- Recreational and Educational – These projects include boardwalks, boat launches, nature centers, and other coastal education centers. Recreational and educational features are important to the Parish in promoting the use of coastal resources and educating the public on the importance of coastal restoration.
- Other restoration projects, new restoration concepts and ideas, including feasibility studies and vegetative plantings.

STRUCTURAL PROTECTION

Structural protection or hurricane protection projects reduce hurricane flood risk in coastal communities by acting as a physical barrier against storm surge. Although structural protection projects are not a primary focus of the JP-CSAP, they are integral to an integrated protections system and were evaluated on a limited basis. In the Parish, the HSDRRS is under the jurisdiction of the U.S. Army Corps of Engineers (USACE, the Southeast Louisiana Flood Protection Authority-West and Southeast Louisiana Flood Protection Authority-East were not evaluated in the JP-CSAP. Structural protection projects identified in the JP-CSAP are under the jurisdiction of the Grand Isle Independent Levee District (GILD) and Lafitte Area Independent Levee District (LILD). The structural protection projects evaluated include earthen levees, floodwalls, floodgates, and pumps.

7.4 PRIORITIZED PROJECT LISTS

All projects were categorized based upon type, size, priority, funding source, sponsoring agency, Parish role, and potential cost-share matching. These categories will allow Parish stakeholders to effectively prioritize funding and resources, as well as track progress. The Prioritized Project Lists were categorized as Large-Scale, Regional, Local, or Non-Traditional and are described in the subsections below. The category assigned for each project is based on all factors including type, cost, complexity, funding source, Parish role, and most likely route for implementation.

LARGE-SCALE PROJECTS

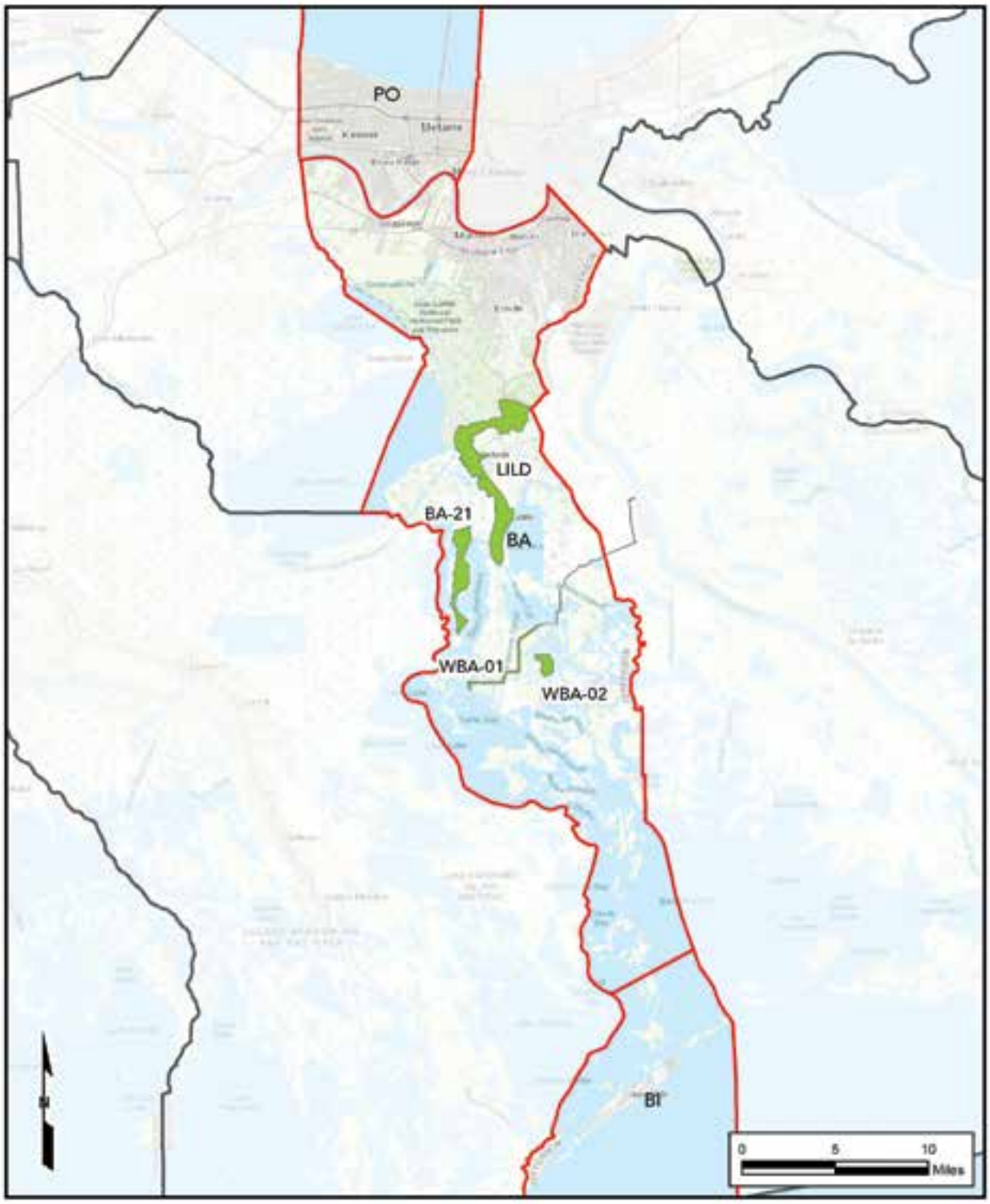
These projects are a high priority for the Parish, but due to their size, cost, complexity, or authorization, the projects would be implemented in partnership with another federal agency or CPRA and would require unified advocacy and a strategic partnership with Jefferson Parish (Table 3 and Figure 12). Detailed Project Fact Sheets describing these projects are presented in Appendix A-1.

Jefferson Parish Large-Scale Projects

Basin	Project Type: Project ID	Project Name	Description
BA	Marsh Creation: WBA-01	West Barataria Marsh Creation Corridor Project	Proposed project is part of the Barataria Landbridge, along the original Long Distance Sediment Pipeline corridor. The project will extend the existing corridor an additional 12.6 miles, stretching from the Barataria Waterway west towards Lafourche Parish. The purpose of the project is to obtain renewable sediment resources, establish an adequate access corridor that supports equipment mobilization for long distance sediment conveyance, and allow for marsh restoration projects. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore approximately 465 acres of marsh with Mississippi River borrow material for an estimated project cost between $90M and $95M.
BA	Marsh Creation: WBA-02	West Barataria Waterway Marsh Restoration	Proposed project is part of the Barataria Landbridge, located to the west and adjacent to the Barataria Waterway and south of the Pen. This project would restore approximately 481 acres of marsh with Mississippi River borrow material for an estimated project cost between $45M and $50M.
BA	Marsh Creation: BA-21	Bayou Perot and Bayou Rigolettes Peninsula Restoration	Proposed project is located approximately 2 miles west of Lower Lafitte between Bayou Perot and Bayou Rigolettes. The project would restore approximately 2,000 acres of wetlands and 22,000 feet of shoreline to reconnect remaining landmasses of the historical peninsula for an estimated cost between $140M and $200M.
BA	Hurricane Protection: LILD	Lafitte Levees	Proposed project surrounds Barataria, Crown Point, Lower Lafitte, and the Town of Lafitte. This project would construct a levee system around the Town of Lafitte for an estimated project cost between $100M and $150M. Fischer School and Goose Bayou Basin construction is complete. Rosethorn, Lower Lafitte, Pailet, Crown Point, Lower Barataria, Upper LA 45, Lower LA 45, and Jones Point Basins are in the design phase.

▲ TABLE 3

BA Barataria Basin.
LILD Lafitte Area Independent Levee District.
M Million.



▲ **FIGURE 12:** Large-Scale Projects Overview Map

REGIONAL PROJECTS

These projects are large-scale, high-priority projects that, due to their size, cost, complexity, or authorization, would be implemented through partnerships with other entities such as the USACE or CPRA but would require Parish funding to initiate the project or for cost-share matching through direct funding or work-in-kind credits (Table 4 and Figure 13). Detailed Project Fact Sheets describing these projects are presented in Appendix A-2.

Jefferson Parish Regional Projects

Basin	Project Type: Project ID	Project Name	Description
BA	Marsh Creation: BA-195	Barataria Bay Rim Marsh Creation	Proposed project is part of the Barataria Bay Rim, located on the north shore of Barataria Bay and east and adjacent to the Barataria Waterway. This project would restore approximately 251 acres and nourish an additional 266 acres of marsh for an estimated project cost between $25M and $30M.
BA	Marsh Creation: JP-15	Bay Dosgris Marsh Creation	Proposed project is part of the Barataria Bay Rim, located on the south shore of Turtle Bay and west of the Barataria Waterway. This project would restore approximately 213 acres and nourish an additional 441 acres of marsh for an estimated project cost between $40M and $45M.
BA	Marsh Creation: JP-07	Bayou Dupont Sediment Delivery #4	Proposed project is part of the Barataria Landbridge, located south of the Cheniere Traverse Bayou and northeast of Bayou Dupont along the Long Distance Sediment Pipeline corridor. This project would restore and nourish approximately 300 acres of marsh for an estimated project cost between $25M and $30M.
BA	Shoreline Protection: BA-15	Goose Bayou Ridge Creation and Shoreline Protection	Project is located east of the Town of Lafitte, along the northwestern shore of the Pen, at the outlet of Goose Bayou and northward to its intersection with Cypress Bayou. This project would construct approximately 8,000 linear feet of rock shoreline protection and create approximately 50 acres of wooded ridge habitat along the western shoreline of Goose Bayou for an estimated cost of $15M.
BA	Marsh Creation: BA-04	Northeast Turtle Bay Extension	Proposed project is part of the Barataria Landbridge, located to the west and adjacent to the Barataria Waterway and south of the Pen. This project would restore approximately 610 acres of marsh for an estimated project cost between $25M and $30M.
BA	Marsh Creation: JP-14	South Cheniere Traverse Bayou Marsh Creation	Proposed project is part of the Barataria Landbridge, located south of the Cheniere Traverse Bayou and northeast of Bayou Dupont along the Long Distance Sediment Pipeline corridor. This project would restore approximately 342 acres of marsh for an estimated project cost between $25M and $30M.

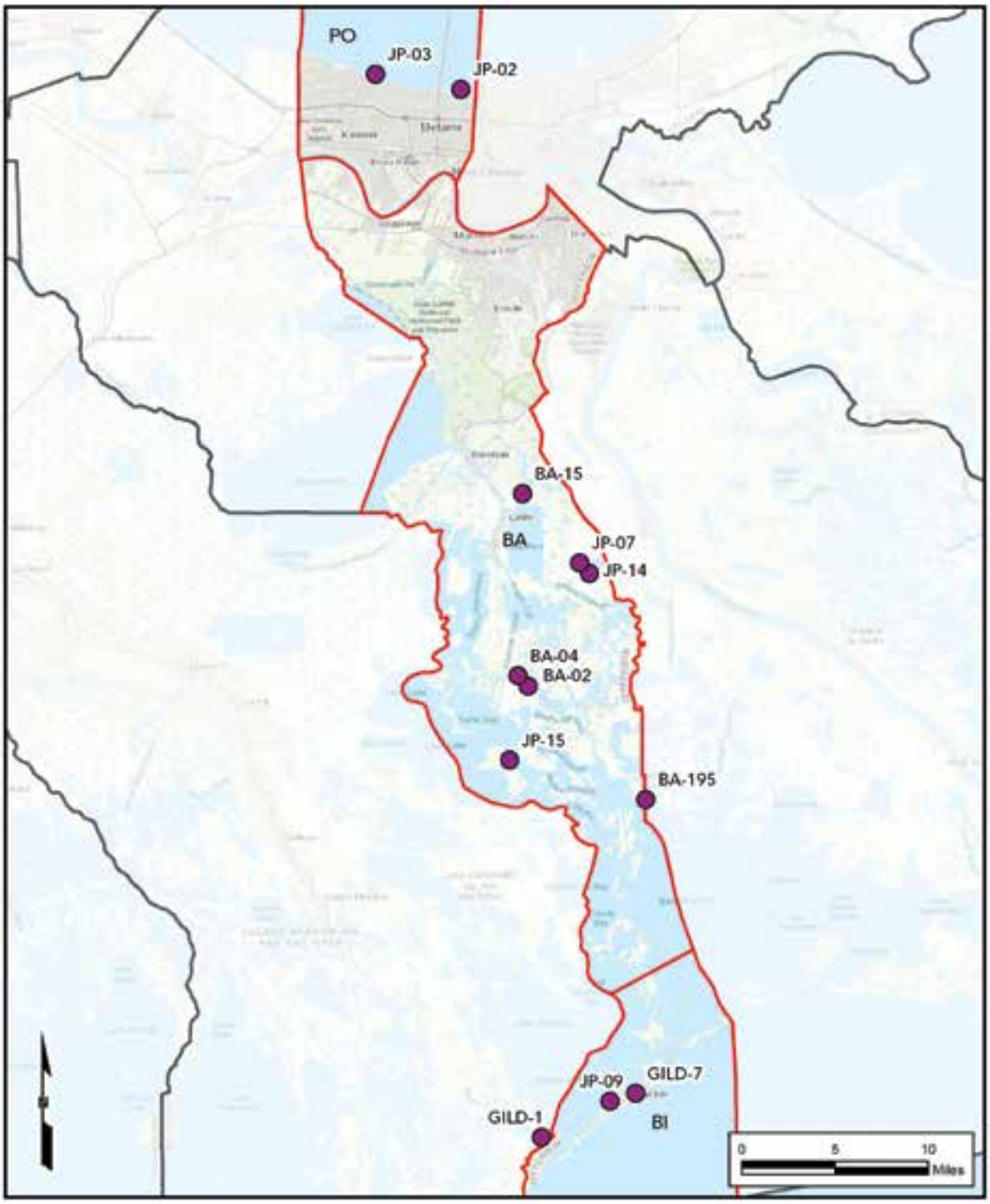
▲ TABLE 4

Jefferson Parish Regional Projects - continued

Basin	Project Type: Project ID	Project Name	Description
BA	Marsh Creation: BA-02	Three Bayou Bay Marsh Creation	Proposed project is part of the Barataria Landbridge, located adjacent to and west of the Barataria Waterway and south of the Pen. This project would restore approximately 638 acres of marsh for an estimated project cost between $25M and $30M.
BI	Shoreline Protection: GILD-1	Chenier Caminada Breakwaters	Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The project would construct 2.5 miles of breakwaters along Caminada extending west from the existing breakwaters for an estimated cost between $21M and $25M.
BI	Hurricane Protection: GILD-7	Grand Isle Back Levee	The project will construct levees on Grand Isle in two phases. Phase I is the repair and lifting of 2.7 miles of levee between Cherry Lane and Walnut Street Pump Station to an elevation of 5.0' NAVD88 for an estimated cost between $6M and $8M. Phase 2A is the installation of 1.5 miles of levee to an elevation of 5.0' NAVD88 between Walnut Street Pump Station and Humble Road for an estimated cost between $4M and $6M.
BI	Marsh Creation: JP-09	Grand Isle Bayside Marsh Creation	Proposed project is on the norths side of Grand Isle. The project is the proposed restoration of 196 acres of bayside marsh to protect the eroding narrow western end of Grand Isle for an estimated cost between $15M and $20M.
PO	Marsh Creation: JP-02	Bucktown Marsh Restoration and Living Shoreline	Proposed project is on the south shore of Lake Pontchartrain between the Bonnabel Park and Boat Launch to the west and the Bucktown Boat Harbor along the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System (HSDRRS). The project would create approximately 39 acres of living shoreline for a 1-mile stretch for an estimated project cost between $8M and $12M.
PO	Other: JP-03	Lake Pontchartrain Marsh Protection Feasibility Study West	Proposed project is on the south shore of Lake Pontchartrain west of the Bonnabel Park and Boat Launch and along the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System (HSDRRS). The project would create living shoreline for a 2-mile stretch. The Feasibility Study is estimated to cost between $1M and $2M.

▲ TABLE 4 - CONTINUED

BA Barataria Basin.
BI Barrier Islands Basin.
GILD Grand Isle Independent Levee District.
HSDRRS Hurricane and Storm Damage Risk Reduction System.
NAVD88 North American Vertical Datum of 1988.
PO Pontchartrain Basin.



▲ **FIGURE 13:** Regional Projects Overview Map

LOCAL PROJECTS

These projects are smaller scale, localized traditional restoration and structural protection projects authorized and implemented by/led at the local level (Table 5 and Figure 14). Detailed Project Fact Sheets describing these projects are presented in Appendix A-3.

Jefferson Parish Local Projects

Basin	Project Type: Project ID	Project Name	Description
BA	Other: JP-42	Bayou Villars Channel Management	Proposed project is located on the eastern shore of Lake Salvador near the intersection of the Gulf Intracoastal Waterway (GIWW) and the Barataria Waterway. This channel has increased in size due to wave energy across Lake Salvador and in the GIWW. Estimated cost has not yet been determined.
BA	Other: JP-41	Lake Salvador / Bayou Perot Channel Management	Proposed project is located at the natural channel intersection joining Bayou Perot and Lake Salvador. This natural channel has increased in size due to bank erosion from tidal exchange between two large bodies of water. Estimated cost has not yet been determined.
BA	Marsh Creation: JP-16	Northeast Lake Cataouatche Marsh Creation	Proposed project is adjacent to the West Bank and Vicinity (WBV) Hurricane and Storm Damage Risk Reduction System (HSDRRS) located approximately 3 miles south of Bayou Segnette State Park with Marcello Canal to the north, Lake Cataouatche to the southwest, Yankee Pond to the southeast, and Labranche Canal to the west. The project would create a terrace field within an open water area for an estimated project cost between $15M and $20M.
BA	Marsh Creation: JP-23	Upper Barataria Terracing Project	Proposed project is part of the Barataria Landbridge, located east of the Barataria Waterway and south of The Pen. The project would create a terrace field with in-situ borrow within an open water area for an estimated project cost between $1M and $2M.
BI	Shoreline Protection: GILD-2	Bayou Thunder Rock Dike Project	Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The proposed breakwaters along Bayou Thunder would be approximately 0.9 mile long and be located along the northern bank of the bayou. The project will include the dredging of Bayou Thunder and nourishment of 50 acres of marsh for an estimated cost between $13M and $16M.
BI	Marsh Creation: GILD-3	Cheniere Caminada Marsh Restoration	Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The project will include the restoration of approximately 250 acres of marsh for an estimated cost between $9M and $11M.

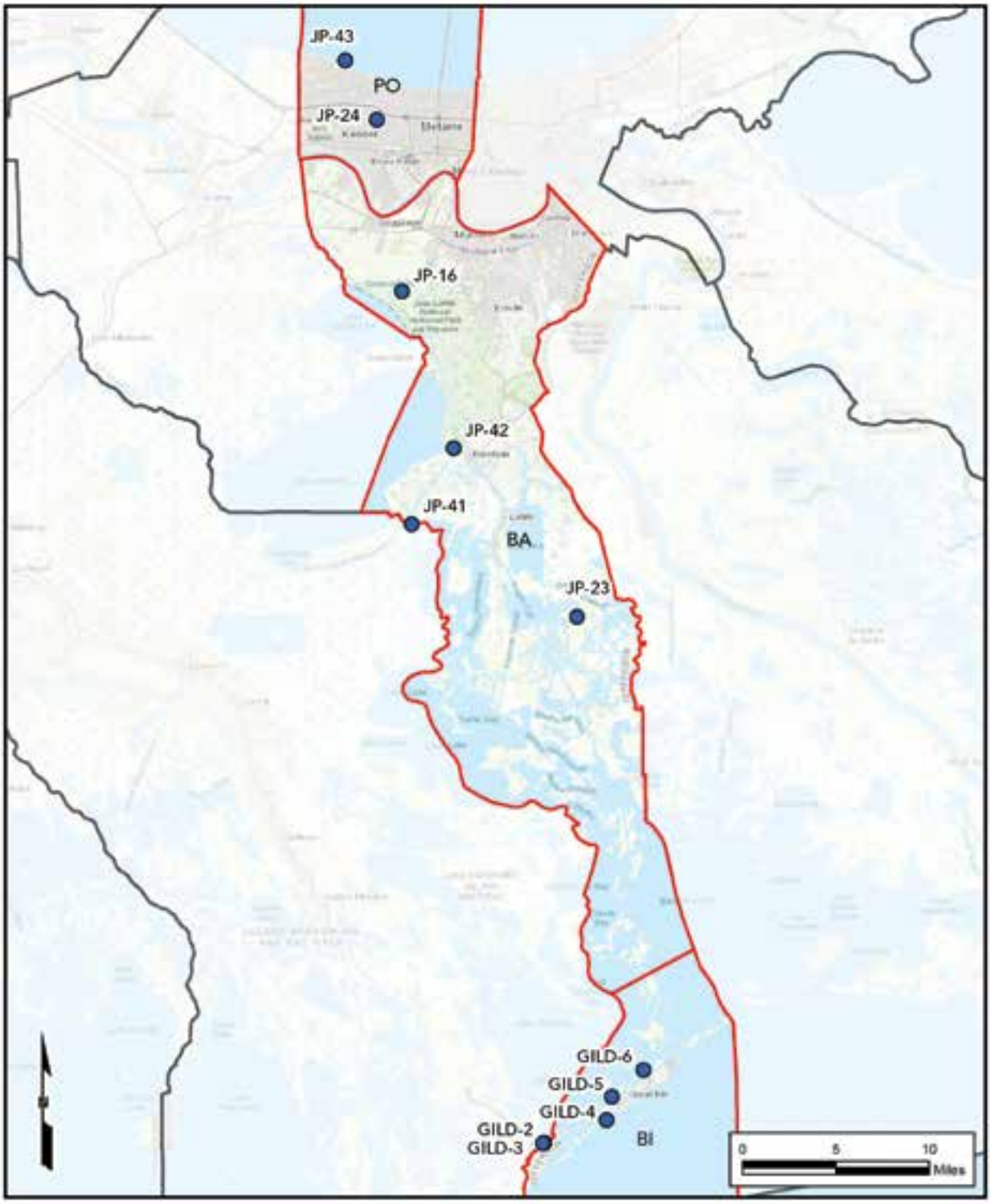
▲ TABLE 5

Jefferson Parish Local Projects - continued

Basin	Project Type: Project ID	Project Name	Description
BI	Marsh Creation: GILD-6	Fifi Island Restoration	Proposed project is located on Fifi Island adjacent to the north side of Grand Isle. The project will include construction of 2,100 feet of rock dike and restoration of 325 acres of marsh for an estimated cost between $25M and $30M.
BI	Shoreline Protection: GILD-5	Grand Isle Bayside Segmented Breakwaters Completion	Proposed project is located on the bayside of Grand Isle. The proposed breakwaters would reduce erosion on the bayside of Grand Isle by construction of two approximately 350-foot breakwaters on the bayside of Grand Isle. The proposed project will connect existing breakwaters to the east and west and create a continuous line of protection on the bayside of Grand Isle for an estimated cost between $1M and $2M.
BI	Shoreline Protection: GILD-4	Grand Isle Gulfside Segmented Breakwaters	Proposed project is located on the Gulf side of Grand Isle. The proposed breakwaters would reduce erosion on the Gulfside of Grand Isle by construction of approximately 45 breakwaters just off the beach. The proposed project will connect existing breakwaters to the east and west and create a continuous line of protection on the bayside of Grand Isle for an estimated cost between $28M and $30M.
PO	Marsh Creation: JP-24	Lafreniere Marsh Restoration	Proposed project is within Lafreniere Park in Metairie. The marsh island within the lagoon of Lafreniere Park has experienced land loss due to settlement and shoreline erosion. This project would restore the island to its original shape with borrow from the lagoon for an approximate cost between $1M and $2M.
PO	Marsh Creation: JP-43	Laketown Breakwaters / Living Shoreline	Proposed project is located at Laketown in Kenner on the south shore of Lake Pontchartrain. The project includes dredging of the harbor and beneficial use of the material to restore approximately 3.5 acres of marsh and the addition of recreational features. This project would construct a rock breakwater system totaling approximately 2,000 feet for an estimated cost between $5M and $10M.

▲ TABLE 5 - CONTINUED

BA Barataria Basin.
BI Barrier Islands Basin.
GILD Grand Isle Independent Levee District.
GIWW Gulf Intracoastal Waterway.
HSDRRS Hurricane and Storm Damage Risk Reduction System.
PO Pontchartrain Basin.
WBV West Bank and Vicinity.



▲ **FIGURE 14:** Local Projects Overview Map

NON-TRADITIONAL PROJECTS

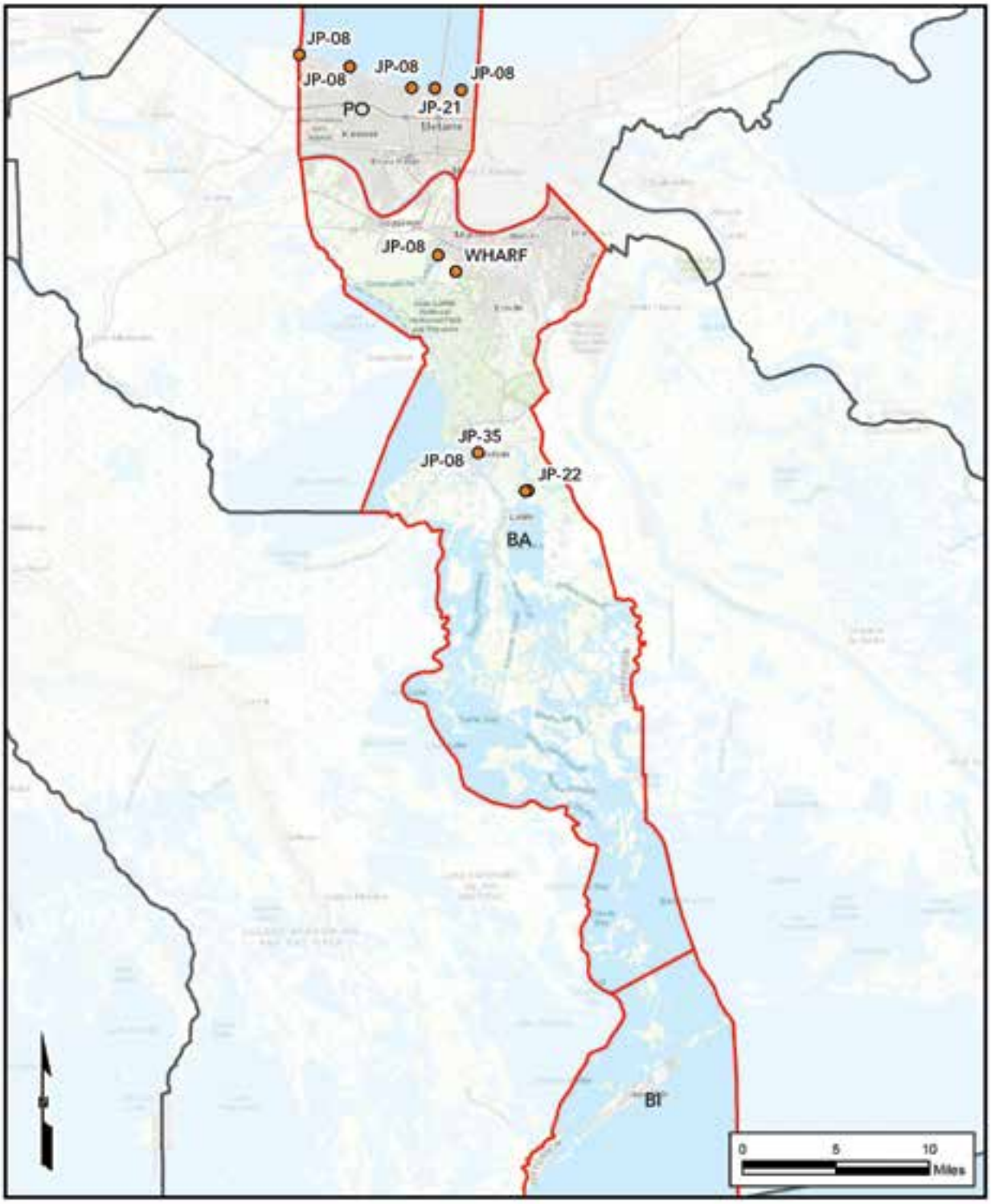
These projects include non-structural and non-traditional programs and projects that focus on important socioeconomic drivers such as fisheries, fish and bird habitats, workforce development, recreation, and community resilience (Table 6 and Figure 15). These projects will also take advantage of private partnerships that arise periodically and require local support. Detailed Project Fact Sheets describing these projects are presented in Appendix A-4.

Jefferson Parish Non-traditional Projects

Basin	Project Type: Project ID	Project Name	Description
BA	Shoreline Protection: JP-22	Northeast Pen Shoreline Protection	Proposed project is on the eastern shore of Goose Bayou and north of the Pen. The project would add shoreline protection to the shoreline of Goose Bayou. Cost not yet determined.
BA	Other: JP-35	The Wetlands Center	The Louisiana Wetland Education Center is a public services/education project located in the southern area of the Parish in the Town of Lafitte. Total cost for all phases is estimated between $12M and $15M.
BA	Other: WHARF	Wetland Harbor Activities Recreational Facility	Proposed project is located within the City of Westwego, south of Lapalco Boulevard, just outside the Hurricane and Storm Damage Risk Reduction System (HSDRRS). The proposed project would develop the property into a multi-use wetlands park with handicap access for an estimated cost between $2M and $3M.
BA, BI, PO	Other: JP-08	Jefferson Tree Planting	Annual education and outreach program that utilizes volunteers to grow and plant trees in areas conducive to their growth throughout the Parish. The planting of native tree species improves water quality as well as reduces shoreline erosion and provide storm protection. Current year funded through a USEPA Gulf of Mexico Grant.
PO	Other: JP-21	Severn Lakefront Restoration	New project idea under development to evaluate shoreline restoration near the intersection of Severn Avenue and Lake Pontchartrain. This project is currently in the conceptual level with potential cost and funding sources being identified.

▲ TABLE 6

BA Barataria Basin.
BI Barrier Islands Basin.
HSDRRS Hurricane and Storm Damage Risk Reduction System.
PO Pontchartrain Basin.
USEPA U.S. Environmental Protection Agency.



▲ **FIGURE 15:** Non-traditional Projects Overview Map

7.5 PROJECTS FOR FUTURE CONSIDERATION

PROJECTS NEAR PROPOSED MID-BARATARIA DIVERSION

Continued engagement with CPRA and the USACE's Environmental Impact Statement being prepared to disclose and analyze all significant environmental impacts of the proposed Mid-Barataria Diversion is needed. As a stakeholder in the process, it is important to understand the mitigation of impacts to natural resources, socioeconomics, and other impacts. When constructed, the diversion will be a valuable source of fresh water and sediment in the Barataria Basin to aid with erosion and subsidence. Synergistic projects could be evaluated to work with the proposed diversion in creating and improving habitat.

NEW RECREATIONAL OPPORTUNITIES

Additional recreational opportunities and projects that are applicable to receive future funding should be identified. Examples of recreational opportunities to be identified include boardwalks, fishing piers, boat ramps, and associated facilities. Examples of funding include U.S. Fish and Wildlife Service's Wallup Breaux grant award for fishing piers, ramps, and other amenities to provide access to the water and recreational opportunities for residents.

BIRD HABITAT RESTORATION

Identification of future projects that are applicable for upcoming North American Wetlands Conservation Act grant opportunities is needed. These grants increase bird populations and wetland habitat, while supporting local economies through recreation activities such as hunting, fishing, bird watching, and other activities. Wetlands protected by this Act provide valuable benefits such as controlling floods, reducing coastal erosion, improving water and air quality, and recharging ground water.

HYDROLOGIC MODELING TO EVALUATE PROJECTS

Engagement in a feasibility-level hydrologic study to conduct modeling and environmental analysis to determine benefits and locations where channel restrictions, the closure of oil and gas canals, weirs, diversions, hydrologic structures, and other measures would be beneficial. Many of these projects were eliminated from further consideration at this time because the impacts and benefits of such projects are unclear. Some of the projects to be evaluated could include:

- Barataria Bay Waterway Channel Restrictions
- Bayou Dupont, Bayou Perot, and Harvey Cut Channel Management
- Lower Barataria Sediment Diversion
- Hero Canal Diversion

Photo courtesy of Restore the Mississippi River Delta

OYSTER HABITAT RESTORATION

Continuing to identify opportunities for Barataria Basin oyster habitat restoration projects is needed. Oyster reefs help improve water quality, create fishing habitat, protect shorelines from incoming wave action, and provide an economic commodity for the seafood industry.

In conjunction with Louisiana Department of Wildlife and Fisheries (LDWF) and its Oyster Task Force, there is a need to investigate contributing to the following initiatives presented by LDWF/Oyster Task Forces' Oyster Management and Rehabilitation Strategic Plan, which includes the following:

- Cultch mapping and planting, whether traditionally set or remotely set, in historical or forecasted oyster seeding grounds.
- Water-bottom mapping on hard-bottom substrates in areas with salinity conducive to oysters.
- Identification and conflict resolution with other coastal zone user group interests.
- Identification and development of new public oyster areas where conditions better suit a healthy oyster population.

As the Oyster Management and Rehabilitation Strategic Plan is further developed, there is a need to support the effort and identify and evaluate the applicability and its contribution to these programs.

OYSTER LEASE MANAGEMENT

The LDWF is charged with the management of oyster leases on approximately 400,000 acres of state-owned, public water bottoms throughout coastal Louisiana. Implementation of coastal restoration and protection projects can pose a conflict with some of those located directly in or in the near vicinity of a project area, as well as inhibit the maintenance dredging of the Barataria Bay Waterway between the Towns of Lafitte and Grand Isle with oyster leases directly located within the federally authorized channel.

LDWF requires a water bottom assessment for all projects occurring on or near oyster leases to determine area productivity, potential impacts, and estimated value. Resolution can then be achieved by:

- Compensation of productive leases.
- Modification of lease boundaries to avoid future disputes with planned maintenance dredging or restoration activities.
- Extinguishment of conflicting or non-productive leases.

For each of the above, the Parish may consider taking the lead or collaborating with CPRA to perform those assessments, compensating oyster leaseholders for impacts to productive areas, and/or working with LDWF on their extinguishment or modification.

SEAFOOD INDUSTRY ADAPTATION PROGRAM

Land loss, hurricanes, oil spills, foreign import-driven commodity pricing, and coastal restoration/protection projects have all impacted the Louisiana seafood industry. These conditions have mandated that the industry must adapt to ensure a positive outlook for a livelihood that is the heart of Louisiana's coastal economy and cultural identity. Initiatives such as the Louisiana Seafood Future have highlighted adaptation strategies created by the fishermen, dockworkers, and processors themselves, focusing on increasing fisheries production, equipment upgrades, marketing, country of origin labeling, and direct boat-to-table activities.

Supporting efforts are needed to assist with these fisheries adaptation efforts, whether by marketing support for locally caught seafood or Gulf-to-plate direct market activities, general outreach and communications, or advocating for or contributing to improvements for safe harbors.

DEVELOPING A PROGRAM TO FILL ABANDONED OIL AND GAS CANALS

Throughout the Parish, marshes have been adversely impacted by oil and gas production wells and access canals. Canals have turned marsh to open water and the resulting spoil banks have drastically altered the flow of water through the marsh. The altered hydrology promotes tidally induced erosion and saltwater intrusion to the interior wetlands. Evaluating the feasibility of plugging and backfilling abandoned oil and gas canals may be an opportunity for cooperation with oil and gas companies to identify, fund, and start evaluating the most critical canals restoring habitat, reducing erosion, and reducing saltwater intrusion.

CHAPTER 8
FUNDING

- RESTORE Act
- Gulf of Mexico Energy Security Act
- Coastal Wetlands Planning, Protection and Restoration Act
- Louisiana Coastal Area
- National Fish and Wildlife Foundation (NFWF)
- Water Resource Development Act
- Additional Funding Sources

As previously stated, programs and funding sources have significantly increased since the initial coastal plan was developed, allowing local governments to initiate and actively participate in coastal restoration and protection initiatives. Projects included in the JP-CSAP should be continually evaluated and advocated for funding sources and programs focusing on coastal restoration and protection. In addition to the funding sources identified in this section, additional disaster response funding and potential stimulus funds should be evaluated because funding sources often become available in a short period of time and often require "shovel ready" projects that can quickly proceed to construction. Below is a summary of potential sources of funding that the Parish may utilize and leverage to execute on many of its coastal goals and objectives.

8.1 RESTORE ACT

The Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act) dedicates 80 percent of the administrative and civil penalties paid by responsible parties as a result of the Deepwater Horizon oil spill. The RESTORE Act contains five different funding components or "buckets." One of these, the Direct Component, distributes funding directly to coastal parishes. Funds received by the Parish can be utilized for authorized purposes such as coastal restoration, coastal protection, workforce development/job creation, tourism, and promotion of consumption of locally caught seafood.

As part of the Direct Component, the Parish is eligible to receive approximately $13.4 million over the life of the 15-year payout. These funds can then be utilized to implement the Parish's priority projects and, in some cases, to leverage with other sources and programs such as the CPRA-Parish Matching Program. Each activity must be first approved in the Parish's Multiyear Implementation Plan, which requires public input prior to approval by the Department of Treasury.

8.2 GULF OF MEXICO ENERGY SECURITY ACT

GOMESA of 2006 provides revenues from Outer Continental Shelf activities to the Gulf Coast producing states of Alabama, Louisiana, Mississippi, and Texas and their coastal political subdivisions (parishes/counties). GOMESA's Phase II began in fiscal year 2017, which expanded the revenue sharing cap to $500 million per year for these entities.

Coastal Political Subdivisions, such as Jefferson Parish, can utilize funds for initiatives such as coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses. Annual distributions are based upon leasing and oil production within the Gulf of Mexico, with the Parish receiving approximately $1.5 million to $3.0 million per year. As a result, in 2019, the Parish authorized the issuance of a $23.5 million bond, secured by future GOMESA revenues.

8.3 COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

The CWPPRA (or Breaux Act) was the first federal program dedicated to providing targeted funds for planning and implementing projects that create, protect, restore, and enhance wetlands in coastal Louisiana with an average annual budget of $50 million. The CWPPRA program is managed by the federal CWPPRA Task Force comprised of five federal agencies and the State of Louisiana, represented by the Governor's Office of Coastal Activities/CPRA.

8.4 LOUISIANA COASTAL AREA

Authorized in the Water Resources Development Act of 2007 (USACE, 2020), the LCA Program is a systematic approach to coastal restoration using critical near-term ecosystem restoration projects and large-scale, long-term studies and programs to restore natural features and ecosystem processes. Several restoration techniques are studied/employed, including river diversions, marsh creation, barrier island restoration, LCA Demonstration Projects, and beneficial use of dredged material (BUDMAT). LCA BUDMAT seeks to cost effectively increase the beneficial use of material dredged from federally maintained waterways by ensuring that sediment for operations and maintenance dredging operations, which otherwise would be discarded in the least costly manner, is utilized to restore/create new habitat.

8.5 NATIONAL FISH AND WILDLIFE FOUNDATION (NFWF)

The NFWF's National Coastal Resilience Fund restores, increases, and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. It invests in conservation projects that restore or expand natural features such as coastal marshes and wetlands, oyster reefs, coastal rivers and floodplains, and barrier islands that minimize the impacts of storms and other naturally occurring events on nearby communities.

8.6 WATER RESOURCES DEVELOPMENT ACT

Water Resource Development Act bills authorize water resources studies and projects and set policies for navigation, flood control, recreation, and emergency management for the USACE. This legislation is usually passed on a biennial basis and early planning would position the Parish to potentially receive future funding for projects such as a Barataria Basin Landbridge Feasibility Study.

8.7 ADDITIONAL FUNDING SOURCES

Additional sources for potential partnership and utilization include:

- USACE's Continuing Authorities Program (CAP): a group of nine legislative authorities under which the USACE can plan, design, and implement certain types of water resources projects without additional project-specific congressional authorization. The purpose of the CAP is to plan and implement projects of limited size, cost, scope, and complexity.
- NOAA Coastal and Marine Habitat Restoration Grants: habitat protection and restoration grants that assist in achieving sustainable commercial and recreational fisheries.
- Public-Private Partnerships: the Parish should seek to continue building on public-private partnerships to leverage and increase sustainable and successful outcomes with funding coastal restoration projects.
- Mitigation Banks: these banks can address mitigation requirements associated with Parish-initiated infrastructure and/or development activities. Banks established within the Parish could provide a localized "in-basin" option for other public (primarily the federal government) and private development that are required to address/offset unavoidable environmental impacts.
- Non-Governmental Organizations (NGOs)/Non-Profits: NGOs and non-profit organizations are integral to providing a strategic link for public education and communication as well as leverage of limited resources.
- Corporate Sponsors: the business community has a vested interest in the coast's sustainability. Corporate partnerships should be sought out for protection, restoration, outreach/communication, and education initiatives.
- Disaster Relief Funding: disaster funding sources such as Community Development Block Grant (CDBG) - Disaster Recovery, CDBG National Disaster Resilience Competition, and the Federal Emergency Management Agency's Hazard Mitigation Grant Program can potentially be used for restoration, protection, and mitigation efforts.
- State Surplus Funding: when available, state surplus funds have routinely been allocated to fund a variety of coastal protection and restoration efforts led by CPRA.

CHAPTER 9

STRATEGIC ACTIONS

FOR IMPLEMENTATION OF THE JP-CSAP

- CPRA Engagement
- Annual CWPPRA Engagement
- RESTORE Act Processing
- GOMESA Funding Expansion Engagement
- Coastal Zone Advisory Board
- Local Outreach and Engagement
- Integration of Non-structural Program Into The JP-CSAP

These strategic actions provide a path forward to the Department of Ecosystem and Coastal Management, ensuring department staff efforts are in line with the strategy for the greatest opportunity to successfully implement the JP-CSAP.

9.1 CPRA ENGAGEMENT

The Parish should continue to develop relationships with CPRA at both the Executive Level (Executive Assistant to the Governor, Executive Director, and CPRA Board) and the Technical Level (Engineering, Operations, Planning and Research, and Project Management Divisions).

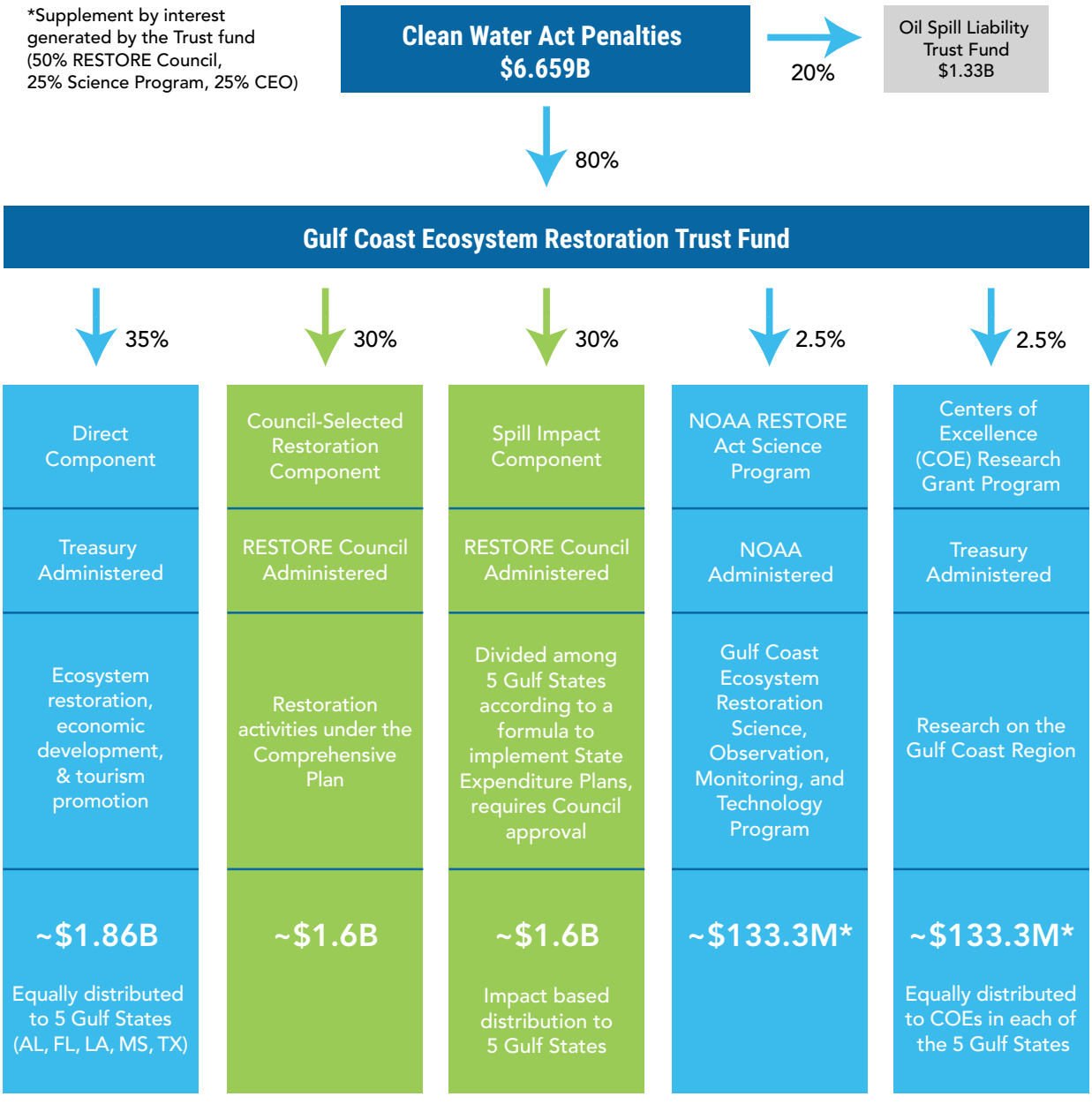
Monthly board meetings should be attended to further establish relationships with the board members, CPRA staff, and stakeholders in attendance to identify potential opportunities for project partnership and collaboration in the Parish. Active participation with the 2023 Louisiana Coastal Master Plan Regional Working Groups to promote and advocate for projects being developed in the Parish should continue.

9.2 ANNUAL CWPPRA ENGAGEMENT

Each year, the CWPPRA program solicits local input for the nomination of potential coastal restoration projects. The Parish should continue to be proactively engaged with the federal CWPPRA Task Force members, including the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, Natural Resources Conservation Service, NOAA-Fisheries, and USACE, to encourage collaboration and nomination of eligible projects in the JP-CSAP

9.3 RESTORE ACT PROCESSING

The Parish should advocate for projects and programs available through the other funding buckets such as the Council-Selected Restoration Component or Spill Impact Component, both of which require coordination, communication, and advocacy with members of the RESTORE Council. Figure 16 illustrates the RESTORE Act process.



▲ **FIGURE 16:** RESTORE Act Processing (Source: www.restorethegulf.gov)

9.4 GOMESA FUNDING EXPANSION ENGAGEMENT

Since 2019, the Parish has participated in the GOMESA Revenue Sharing Coalition (GRSC). This multi-state group is comprised of the offshore energy producing Gulf states and seeks to increase their share of Outer Continental Shelf revenues to be sent back to the states and their coastal parishes/counties, as currently authorized via the GOMESA of 2006.

The GRSC seeks to:

- Lift the $375 million collective cap currently applied to Gulf States and their Coastal Political Subdivisions (parishes/counties).
- Increase Gulf States' share of Outer Continental Shelf revenues from 37.5 to 50 percent.
- Expand the lease areas from which revenues are derived.

These increased revenues could further augment ongoing restoration and protection efforts that the Parish has initiated through its current GOMESA funding. The Parish should continue to be an active participant and advocate for increased funding through the GRSC.

9.5 COASTAL ZONE ADVISORY BOARD

Coastal Management Programs allow local coastal parishes permitting authority for coastal uses of local concern. Jefferson Parish is currently one of 12 coastal parishes that has an approved Local Coastal Management Program; however, its governance does not include utilization of a local Coastal Zone Management Advisory Board.

These advisory boards are established through the parish government and usually consist of representatives from coastal communities, elected officials, state and federal government agencies, levee districts, landowners and managers, NGOs, commercial fisheries, and others. These advisory boards can be of tremendous value to the Department of Ecosystem and Coastal Management by providing unique perspectives and expertise from different parties, thus enhancing collaboration, public input, and successful program implementation.

"Marsha" - Jefferson Parish Coastal Mascot

9.6 LOCAL OUTREACH AND ENGAGEMENT

Solicitation of new ideas from local representatives and stakeholders throughout the Parish is needed to identify new projects as well as receive updates for implemented projects. The Parish strives to expand its outreach and engagement efforts with parish residents, NGOs, and state and federal partners to accomplish the goals and objectives of this Plan.

OUTREACH PROGRAM

There are less than 5,000 residents of the Parish that are permanent residents in the coastal communities of Grand Isle, Crown Point, Barataria, and Town of Lafitte, with the remaining 99 percent of Jefferson Parish residents living behind floodwalls and the HSDRRS, yet impacts from coastal land loss affect everyone. Specific targeted outreach to coastal communities about flood risk, project identification, economic opportunities versus hardships, and long-range land use planning is critical for the longevity of these communities. Additionally, outreach to more protected communities such as Gretna, Westwego, Metairie, and Kenner is needed to ensure residents understand that today's coastal areas provide specific protection against storm surge and economic benefits for our hospitality industry. Working with local and regional partners, an outreach strategy needs to be developed to establish specific, measurable goals.

EDUCATION PROGRAM

In the spring of 2019, the Department of Ecosystem and Coastal Management, reached out to coastal educators, programs, and NGOs to gather as much information as possible to understand the current coastal education programs that exist and how the Parish could tap into these resources. Meetings were held with:

Governor's Office of Coastal Activities

Sea Grant Louisiana

LSU AgCenter

Pontchartrain Conservancy

LSU Center for River Studies

Flood Protection Authority–East
Your flood defense system

Wetland Watchers

Jefferson Parish Schools
Chief Strategist & Head of Science Curriculum

St. Angela Merici School
STEM Coordinator

Principal of the Patrick Taylor School

This Coastal Education Program is two phased and needs to continue to meet with our curriculum strategy team and develop granting ideas

Phase I - Classroom Presentations and Wetland Field Trips; and

Phase II - Coastal Curriculum Development and Grant funding.

For continued success, the Department of Ecosystem and Coastal Management needs to work with local and regional partners to create a strategy that defines the target audience for education programs and create messages that are formulated for those audiences.

PARISHES ADVOCATING FOR COASTAL ENDURANCE ADMINISTRATION (PACE)

PACE formed in 2003 with the goal of uniting and organizing Louisiana's 20 coastal parishes to assist their individual efforts and raise awareness to state and federal agencies and legislators of the important issue of coastal land loss. The Parish should continue active participation with PACE, coordinating with other coastal parishes advocating for increased funding for coastal projects.

9.7 INTEGRATION OF NON-STRUCTURAL PROGRAM INTO THE JP-CSAP

According to the Parish's newly restructured Department of Ecosystem and Management, the integration of non-structural projects into resiliency coastal protection planning is a priority. The Parish has previously partnered with CPRA to review Flood Risk and Resilience Program-related documents and the application packages as a pilot program to ensure the non-structural application process allowed and considered more detailed local feedback. The Jefferson Parish Floodplain and Hazard Mitigation Department manages the resiliency and non-structural projects. No specific non-structural projects were evaluated as part of the JP-CSAP.

CHAPTER 10

REFERENCES

Photo courtesy of PJ Hahn Photography

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NOTES

Cover and Table of Contents image provided by PJ Hahn Photography

Unless otherwise noted, all photos and drawings were produced by the JP-CSAP project team.

Additional Map Sources – These additional sources were used to create the maps throughout the JP-CSAP:

Atlas: The Louisiana Statewide GIS, https://atlas.ga.lsu.edu/ accessed 2020
(CPRA, 2017)
All Basemaps provided by Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, US Geological Survey, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance
(USGS, 2011)

CHAPTER 11

APPENDICES

- Appendix A: Project Fact Sheets
  - Appendix A-1: Large-Scale Projects
  - Appendix A-2: Regional Projects
  - Appendix A-3: Local Projects
  - Appendix A-4: Non-traditional Projects

Photo courtesy of PJ Hahn Photography

APPENDIX A

LARGE-SCALE PROJECTS

- WBA-01 West Barataria Marsh Creation Corridor Project
- WBA-02 West Barataria Waterway Marsh Restoration
- BA-21 Bayou Perot and Bayou Rigolettes Peninsula Restoration
- LILD Lafitte Levees

WEST BARATARIA MARSH CREATION CORRIDOR PROJECT

WBA-01

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, along the original Long Distance Sediment Pipeline corridor. The project will extend the existing corridor an additional 12.6 miles, stretching from the Barataria Waterway west towards Lafourche Parish. The purpose of the project is to obtain renewable sediment resources, establish an adequate access corridor that supports equipment mobilization for long-distance sediment conveyance, and allow for marsh restoration projects. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore approximately 465 acres of marsh with Mississippi River borrow material for an estimated project cost between $90M and $95M.

STRATEGY

The project establishes an initial foundation for the programmatic wetland restoration of the Barataria Basin. The project is needed to create and restore marsh in an area that is rapidly deteriorating. The project will provide a linkage between renewable sediment sources in the Mississippi River and the sediment-starved Barataria Basin. The permanent corridor component of the project is needed to reduce the cost and overall environmental impact associated with future coastal restoration projects.

PROGRESS TO DATE

The project is in the engineering & design phase and currently being evaluated by the permitting agencies. Potential funding for construction through GOMESA.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL **LARGE**

ESTIMATED COST

≤1M 50M **100M** ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

WEST BARATARIA MARSH CREATION CORRIDOR PROJECT

WBA-01

BARATARIA BASIN (BA)

Council District 1

WEST BARATARIA WATERWAY MARSH RESTORATION

WBA-02

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located to the west and adjacent to the Barataria Waterway and south of the Pen. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore approximately 481 acres of marsh with Mississippi River borrow material for an estimated project cost between $45M and $50M. Alternative locations are shown as WBA-02a and WBA-02b.

STRATEGY

Historical land loss within the Barataria Landbridge north of the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the landbridge would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project footprint is within the 2017 CPRA Coastal Master Plan project footprint for 002.MC.04a-Lower Barataria Marsh Creation and is adjacent to BA 27, BA 36, BA 48, BA 43, BA 39, BA 164 (which have been constructed), BA 125 (which is in construction), and BA 206 (which is in planning, engineering, and design).

PROGRESS TO DATE

This project would be constructed in future increments of the Mississippi River Long Distance Sediment Pipeline project.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | REGIONAL | **LARGE**

ESTIMATED COST

≤1M | **50M** | 100M | ≥150M

ACRES

1 | 100 | **500** | 1000 | ≥ 2000

PROJECT LEAD

CPRA | **JEFF PARISH** | GILD | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | **DESIGN** | CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

WEST BARATARIA WATERWAY MARSH RESTORATION

WBA-02

BARATARIA BASIN (BA)

Council District 1

BAYOU PEROT & BAYOU RIGOLETTES PENINSULA RESTORATION

BA-21

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located approximately 2 miles west of Lower Lafitte between Bayou Perot and Bayou Rigolettes. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and wave-induced shoreline erosion due to wind-driven wave energy across Bayou Perot and Bayou Rigolettes. The project would restore approximately 2,000 acres of wetlands and 22,000 feet of shoreline to reconnect remaining landmasses of the historical peninsula with borrow material from Bayou Perot and Bayou Rigolettes or the Mississippi River for an estimated cost between $140M and $200M.

STRATEGY

Historical land loss of the landbridge between Bayou Perot and Bayou Rigolettes has increased the effects of wave energy across Bayou Perot and Bayou Rigolettes. Restoration of the landbridge would decrease the effects of wave energy and reduce storm-induced surge for areas to the north.

PROGRESS TO DATE

This project was originally authorized for funding through CWPPRA PPL 3, but was deauthorized in 1998 due to concerns with construction feasibility and wetland benefits. Potential funding for construction could come through CPRA and/or the LCA BUDMAT Program.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | REGIONAL | **LARGE**

ESTIMATED COST

≤1M | 50M | 100M | **≥150M**

ACRES

1 | 100 | 500 | 1000 | **≥ 2000**

PROJECT LEAD

CPRA | JEFF PARISH | GILD | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | DESIGN | CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

BAYOU PEROT & BAYOU RIGOLETTES PENINSULA RESTORATION

BA-21

BARATARIA BASIN (BA)

Council District 1

LAFITTE LEVEES

LILD

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project surrounds Barataria, Crown Point, Lower Lafitte, and Lafitte. This area has experienced an increase of storm surge due to wetland loss north or Barataria Bay. This project would construct levees around these communities for an estimated project cost between $100M and $150M.

STRATEGY

The Lafitte Levees project would reduce the risk of flooding to the Lafitte area from tropical storms and hurricanes. This project is in the CPRA Coastal Master Plan project 002.HP.07 - Lafitte Ring Levee.

PROGRESS TO DATE

Fischer School and Goose Bayou Basin construction is complete. Rosethorn, Lower Lafitte, Pailet, Crown Point, Lower Barataria, Upper LA 45, Lower LA 45, and Jones Point Basins are in the design phase. Potential funding for construction through GOMESA and Capital Outlay.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | REGIONAL | **LARGE**

ESTIMATED COST

≤1M | 50M | 100M | **≥150M**

ACRES

1 | 100 | 500 | 1000 | **≥ 2000**

PROJECT LEAD

CPRA | JEFF PARISH | GILD | **LILD** | OTHER

STATUS

CONCEPTUAL | **PLANNING** | **DESIGN** | **CONSTRUCTION**

BARATARIA BASIN (BA)
Council District 1

LAFITTE LEVEES

LILD

BARATARIA BASIN (BA)

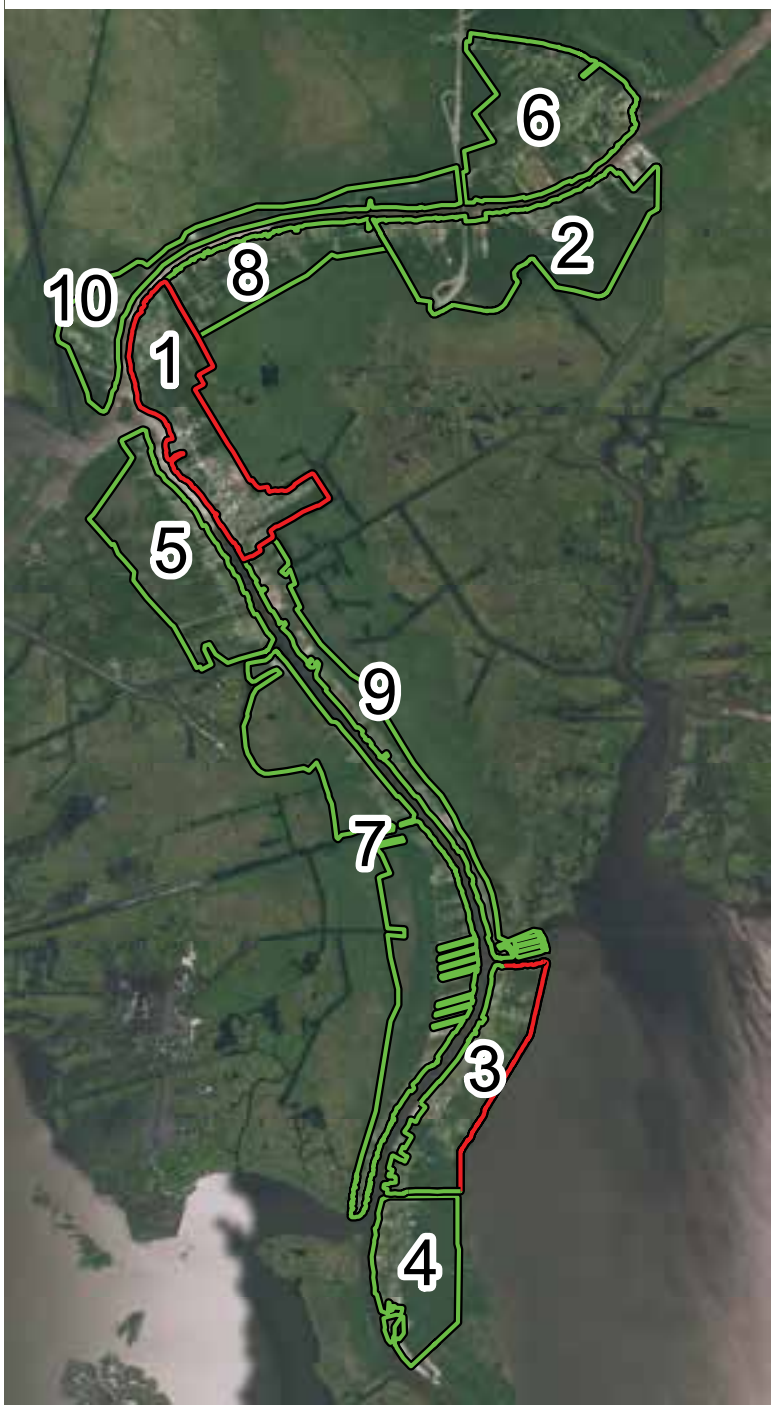
Council District 1

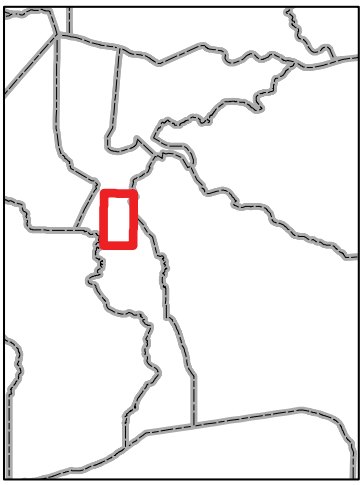
LAFITTE LEVEES

LILD

TIDAL LEVEE PROTECTION SYSTEM

For Lafitte, Lower Lafitte, Barataria, and Crown Point





Overview - Louisiana Parishes (GOHSEP 2006)

- Completed
- Construction Phase
- Design Phase
- Planning Phase

1) Fisher School Basin
2) Rosethorne Basin
3) Goose Bayou (Pen Levee) Basin
4) Lower Lafitte (Orange St.) Basin
5) Pailet Basin
6) Crown Point Basin
7) Lower Barataria Basin (LA 302 - Privateer Dr.)
8) Upper LA 45 Evacuation Route
9) Lower LA 45 Evacuation Route
10) Jones Point Basin

N
W E
S

0 12.5 25 50 Miles

REFERENCE/PROJECTION:
NAD83 State Plane Louisiana South Feet

APTIM

BARATARIA BASIN (BA)
Council District 1

APPENDIX A

REGIONAL PROJECTS

- BA-195 Barataria Bay Rim Marsh Creation
- JP-15 Bay Dosgris Marsh Creation
- JP-07 Bayou Dupont Sediment Delivery #4
- BA-15 Goose Bayou Ridge Creation and Shoreline Protection
- BA-04 Northeast Turtle Bay Extension
- JP-14 South Cheniere Traverse Bayou Marsh Creation
- BA-02 Three Bayou Bay Marsh Creation
- GILD-1 Cheniere Caminada Breakwaters
- GILD-7 Hurricane Protection Grand Isle Back Levee
- JP-09 Grand Isle Bayside Marsh Creation
- JP-02 Bucktown Marsh Restoration and Living Shoreline
- JP-03 Lake Pontchartrain Marsh Protection Feasibility Study West

BARATARIA BAY RIM MARSH CREATION

BA-195

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Bay Rim, located on the north shore of Barataria Bay and east and adjacent to the Barataria Waterway. The area has experienced shoreline erosion due to wind-driven wave energy across the Barataria Bay. This project would restore approximately 251 acres and nourish an additional 266 acres of marsh with in system borrow material from Barataria Bay for an estimated project cost between $25M and $30M.

STRATEGY

Historical land loss within the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the Barataria Bay Rim would decrease the effects and risks of storm induced-surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish.

PROGRESS TO DATE

This project was selected in the CWPPRA PPL 25 and approved for Phase I for planning, engineering, and design in January 2016. Phase II Authorization and Approval, which includes real estate acquisition, construction, operation and maintenance, and post-construction monitoring, was received in January 2019.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | **50M** | 100M | ≥150M

ACRES

1 | **100** | 500 | 1000 | ≥ 2000

PROJECT LEAD

CPRA | JEFF PARISH | GILD | LILD | **OTHER**

STATUS

CONCEPTUAL | PLANNING | **DESIGN** | CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

BARATARIA BAY RIM MARSH CREATION

BA-195

BARATARIA BASIN (BA)

Council District 1

BAY DOSGRIS MARSH CREATION

JP-15

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Bay Rim, located on the south shore of Turtle Bay and west of the Barataria Waterway. The area has experienced shoreline erosion due to wind-driven wave energy across Turtle Bay and Little Lake. This project would restore approximately 213 acres and nourish an additional 441 acres of marsh with in-system borrow material from Barataria Bay for an estimated project cost between $40M and $45M.

STRATEGY

Historical land loss within the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the Barataria Bay Rim would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project is adjacent to the Barataria Waterway LCA BUDMAT footprint, which is in engineering and design.

PROGRESS TO DATE

This project was submitted by the NRCS for consideration as a candidate project for CWPPRA PPL 23 and was not selected for further analysis.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL **REGIONAL** LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

BAY DOSGRIS MARSH CREATION

JP-15

BARATARIA BASIN (BA)

Council District 1

BAYOU DUPONT SEDIMENT DELIVERY #4

JP-07

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located south of the Cheniere Traverse Bayou and northeast of Bayou Dupont along the Long Distance Sediment Pipeline corridor. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore and nourish approximately 300 acres of marsh with Mississippi River borrow material for an estimated project cost between $25M and $30M.

STRATEGY

Historical land loss within the Barataria Landbridge north of the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the landbridge would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project footprint is within the 2017 CPRA Coastal Master Plan project footprint for 002.MC.04a-Lower Barataria Marsh Creation and would tie into the previously constructed BA-39 Bayou Dupont Sediment Delivery System.

PROGRESS TO DATE

This project was originally proposed for CWPPRA PPL 23 and was proposed again in PPL 24. Good location for future LDSP. Potential construction would be through future increments of the Mississippi River Long Distance Sediment Pipeline project.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL **REGIONAL** LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

BAYOU DUPONT SEDIMENT DELIVERY #4 JP-07

BARATARIA BASIN (BA)
Council District 1

GOOSE BAYOU RIDGE CREATION & SHORELINE PROTECTION

BA-15

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Project is located east of the Town of Lafitte, along the northwestern shore of the Pen, at the outlet of Goose Bayou and northward to its intersection with Cypress Bayou. The area has experienced shoreline erosion due to wind-driven wave energy across the Pen. This project, as proposed in the Louisiana State CIAP plan, would construct approximately 8,000 linear feet of rock shoreline protection and create approximately 50 acres of wooded ridge habitat along the western shoreline of Goose Bayou for an estimated cost of $15M.

STRATEGY

Historical land loss and channel widening/deepening have increased the effects and risks associated with storm-induced surge. Restoration and protection of the shoreline and historical ridge would stabilize the channel of Goose Bayou and reduce the risks of storm-induced surge for the Town of Lafitte.

PROGRESS TO DATE

Preliminary Design was completed in 2011 by Jefferson Parish through the CIAP plan. The geotechnical data presented concerns with soil conditions and extensive dredging would be necessary to access the site, which raised concerns about the constructability of the project. Future funding through Capital Outlay or CPRA could be used to complete the design and construction of the project.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | 50M | 100M | ≥150M

LINEAR FEET

≤1000 | 2000 | 4000 | 6000 | **≥ 8000**

PROJECT LEAD

CPRA | **JEFF PARISH** | GILD | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | DESIGN | CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

GOOSE BAYOU RIDGE CREATION & SHORELINE PROTECTION

BA-15

BARATARIA BASIN (BA)

Council District 1

NORTHEAST TURTLE BAY EXTENSION MARSH CREATION

BA-04

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located to the west and adjacent to the Barataria Waterway and south of the Pen. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore approximately 610 acres of marsh with in-system borrow material from Little Lake for an estimated project cost between $25M and $30M.

STRATEGY

Historical land loss within the Barataria Landbridge north of the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the landbridge would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project footprint is within the 2017 CPRA Coastal Master Plan project footprint for 002.MC.04a-Lower Barataria Marsh Creation and is adjacent to BA-27, BA-36, BA-48, BA-43, BA-39, BA-164 (which have been constructed), BA-125 (which is in construction), and BA-206 (which is in planning, engineering, and design).

PROGRESS TO DATE

This project was submitted by the U.S. Environmental Protection Agency for consideration as a candidate project for CWPPRA PPL 30 and has advanced to the 2nd phase of the CWPPRA Evaluation Process.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL **REGIONAL** LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH GILD LILD **OTHER**

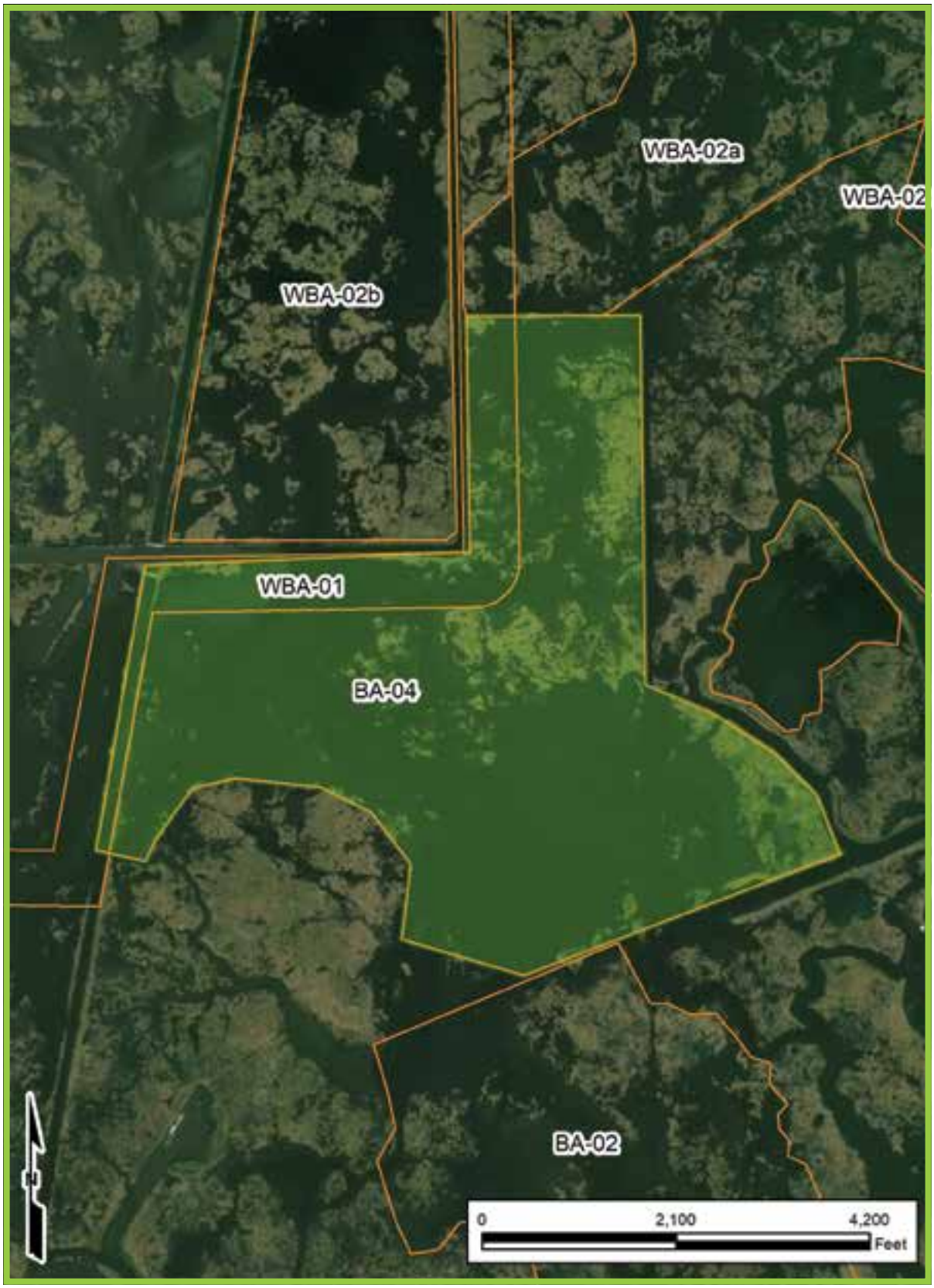
STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

NORTHEAST TURTLE BAY EXTENSION MARSH CREATION

BA-04



BARATARIA BASIN (BA)

Council District 1

SOUTH CHENIERE TRAVERSE BAYOU MARSH CREATION

JP-14

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located south of the Cheniere Traverse Bayou and northeast of Bayou Dupont along the Long Distance Sediment Pipeline corridor. The area has experienced significant wetland loss due to oil and gas activity-induced subsidence and surficial erosion. This project would restore approximately 342 acres of marsh with Mississippi River borrow material for an estimated project cost between $25M and $30M.

STRATEGY

Historical land loss within the Barataria Landbridge north of the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the landbridge would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project footprint is within the 2017 CPRA Coastal Master Plan project footprint for 002.MC.04a - Lower Barataria Marsh Creation.

PROGRESS TO DATE

Potential construction would be through future increments of the Mississippi River Long Distance Sediment Pipeline project.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL **REGIONAL** LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

SOUTH CHENIERE TRAVERSE BAYOU MARSH CREATION

JP-14

BARATARIA BASIN (BA)

Council District 1

THREE BAYOU BAY MARSH CREATION

BA-02

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located adjacent to and west of the Barataria Waterway and south of the Pen. The area has experienced significant wetland loss due to oil and gas activity induced subsidence and surficial erosion. This project would restore approximately 638 acres of marsh with in-system borrow material from Little Lake for an estimated project cost between $25M and $30M.

STRATEGY

Historical land loss within the Barataria Landbridge north of the Barataria Bay Rim has increased the effects and risks associated with storm-induced surge. Restoration of marsh in the landbridge would decrease the effects and risks of storm-induced surge for the Town of Lafitte and unprotected areas in the southern portion of Jefferson Parish. The project footprint is within the 2017 CPRA Coastal Master Plan project footprint for 002.MC.04a - Lower Barataria Marsh Creation and is adjacent to BA-27, BA-36, BA-48, BA-43, BA-39, BA-164 (which have been constructed), BA-125 (which is in construction), and BA-206 (which is in planning, engineering, and design).

PROGRESS TO DATE

This project was submitted by the U.S. Environmental Protection Agency for consideration as a candidate project for CWPPRA PPL 30 but did not advance to the 2nd phase of the CWPPRA Evaluation Process. The project may be resubmitted for future consideration under CWPPRA.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | **50M** | 100M | ≥150M

ACRES

1 | 100 | **500** | 1000 | ≥ 2000

PROJECT LEAD

CPRA | JEFF PARISH | GILD | LILD | **OTHER**

STATUS

CONCEPTUAL | PLANNING | DESIGN | CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

THREE BAYOU BAY MARSH CREATION

BA-02

BARATARIA BASIN (BA)

Council District 1

CHENIER CAMINADA BREAKWATERS

GILD-1

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The project would construct 2.5 miles of breakwaters along Caminada extending west from the existing breakwaters for an estimated cost between $21M and $25M.

STRATEGY

The Caminada Headland has experienced significant shoreline erosion and land loss as a result of storms overtopping and breaching, wave-erosion, sea level rise, and subsidence. The Grand Isle Independent Levee District proposes to continue rock breakwaters along Caminada Bay in an effort to reduce land loss along the north side of Louisiana Highway 1 on Cheniere Caminada caused by heavy wave action from north winds in Caminada Bay.

PROGRESS TO DATE

The project is in the engineering & design phase and currently being evaluated by the permitting agencies.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | 50M | 100M | ≥150M

MILES

≤1 | **2** | 4 | 6 | 8 | ≥ 10

PROJECT LEAD

CPRA | JEFF PARISH | **GILD** | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | **DESIGN** | CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

CHENIER CAMINADA BREAKWATERS

GILD-1

BARRIER ISLAND (BI)

Council District 1

GRAND ISLE BACK LEVEES GILD-7

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

The project will construct levees on Grand Isle in two phases.

Phase I is the repair and lifting of 2.7 miles of levee between Cherry Lane and Walnut Street Pump Station to an elevation of 5.0' NAVD88 for an estimated cost between $6M and $8M.

Phase 2A is the installation of 1.5 miles of levee to an elevation of 5.0' NAVD88 between Walnut Street Pump Station and Humble Road for an estimated cost between $4M and $6M.

STRATEGY

The Grand Isle Independent Levee District proposes to construct back levees to mitigate the potential flood hazards caused by severe thunderstorms, tropical storms, and hurricanes. Recent hurricanes and tropical storms have caused storm surge and waves to inundate Grand Isle resulting in flooding and substantial damage. Phase I would protect approximately 413 acres of Grand Isle and Phase 2A would protect approximately 205 acres.

PROGRESS TO DATE

The Grand Isle Independent Levee District is currently in the design stage for Phase I and the planning stage for Phase 2A.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

1M | 50M | 100M | ≥150M

ACRES

1 | 100 | **500** | 1000 | ≥ 2000

PROJECT LEAD

CPRA | JEFF PARISH | **GILD** | LILD | OTHER

STATUS

CONCEPTUAL | **PLANNING** | **DESIGN** | CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BACK LEVEES GILD-7

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BACK LEVEES GILD-7

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BACK LEVEES GILD-7

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BAYSIDE MARSH CREATION

JP-09

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is on the north side of Grand Isle. The project is the proposed restoration of 196 acres of bayside marsh to protect the eroding narrow western end of Grand Isle. The project would use sediment from the dredging of Bayou Rigaud, Barataria Bay Waterway Bar Channel, or an offshore borrow site. Estimated cost is between $15M and $20M.

STRATEGY

The bayside marsh will function as a barrier to reduce the impacts on Louisiana's only accessible and inhabited barrier island from storm-induced surge and capture sediment overwashed from the beach during storm events. Sediment will be placed between the rock breakwaters and the existing marsh for a length of approximately 7,600 linear feet.

PROGRESS TO DATE

Potential CWPPRA candidate project for consideration. A CWPPRA agency sponsor would have to be identified.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | 50M | 100M | ≥150M

ACRES

1 | **100** | 500 | 1000 | ≥ 2000

PROJECT LEAD

CPRA | **JEFF PARISH** | GILD | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | DESIGN | CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BAYSIDE MARSH CREATION

JP-09

BARATARIA BASIN (BA)

Council District 1

BUCKTOWN MARSH RESTORATION & LIVING SHORELINE

JP-02

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is on the south shore of Lake Pontchartrain between the Bonnabel Park and Boat Launch to the west and the Bucktown Boat Harbor along the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System (HSDDRS). The project would create approximately 39 acres of living shoreline for a 1-mile stretch for an estimated project cost between $8M and $12M.

STRATEGY

Living shorelines add multiple project benefits including fish and wildlife habitat, recreational benefits, and protection to the Lake Pontchartrain HSDRRS.

PROGRESS TO DATE

This project is currently in the planning, engineering, and design phase with funding for the first phase coming from NFWF and the Coastal Resilience Fund. Construction funding will be $2.4M from NFWF and matched with $2.6M from Jefferson Parish.

PROJECT MAGNITUDE

NON-TRADITIONAL | LOCAL | **REGIONAL** | LARGE

ESTIMATED COST

≤1M | 50M | 100M | ≥150M

ACRES

1 | 100 | 500 | 1000 | ≥ 2000

PROJECT LEAD

CPRA | **JEFF PARISH** | GILD | LILD | OTHER

STATUS

CONCEPTUAL | PLANNING | **DESIGN** | CONSTRUCTION

PONTCHARTRAIN BASIN (PO)
Council District 5

BUCKTOWN MARSH RESTORATION & LIVING SHORELINE JP-02

PONTCHARTRAIN BASIN (PO)
Council District 5

BUCKTOWN MARSH RESTORATION & LIVING SHORELINE JP-02

MASTER PLAN - CONCEPT 2 - ALTERNATIVE B

BUCKTOWN LIVING SHORELINE

JEFFERSON PARISH, LOUISIANA

moffatt & nichol | 08.12.2019 | MASTER PLAN - CONCEPT 2 - ALTERNATIVE A - MAXIMUM MARSH ACREAGE

PONTCHARTRAIN BASIN (PO)

Council District 5

LAKE PONTCHARTRAIN MARSH PROTECTION FEASIBILITY STUDY WEST JP-03

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is on the south shore of Lake Pontchartrain west of the Bonnabel Park and Boat Launch and along the Lake Pontchartrain and Vicinity Hurricane and Storm Damage Risk Reduction System (HSDRRS). The project would create living shoreline for a 2-mile stretch. The Feasibility Study is estimated to cost between $1M and $2M.

STRATEGY

Living shorelines add multiple project benefits including fish and wildlife habitat, recreational benefits, and protection to the Lake Pontchartrain HSDRRS.

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding through GOMESA.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL **REGIONAL** LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

MILES

≤1 **2** 4 6 8 ≥ 10

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

PONTCHARTRAIN BASIN (PO)
Council District 4

LAKE PONTCHARTRAIN MARSH PROTECTION FEASIBILITY STUDY WEST JP-03

PONTCHARTRAIN BASIN (PO)
Council District 4

APPENDIX A

LOCAL PROJECTS

- JP-42 Bayou Villars Channel Management
- JP-41 Lake Salvador / Bayou Perot Channel Management
- JP-16 Northeast Lake Cataouatche Marsh Creation
- JP-23 Upper Barataria Terracing Project
- GILD-2 Bayou Thunder Rock Dike Project
- GILD-3 Cheniere Caminada Marsh Restoration
- GILD-6 Fifi Island Restoration
- GILD-5 Grand Isle Bayside Segmented Breakwaters Completion
- GILD-4 Grand Isle Gulfside Segmented Breakwaters
- JP-24 Lafreniere Marsh Restoration
- JP-43 Laketown Breakwaters / Living Shoreline

BAYOU VILLARS CHANNEL MANAGEMENT

JP-42

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on the eastern shore of Lake Salvador near the intersection of the Gulf Intracoastal Waterway (GIWW) and the Barataria Waterway. This channel has increased in size due to wave energy across Lake Salvador and in the GIWW. Estimated cost has not yet been determined.

STRATEGY

Historical land loss on the banks of the channel has caused the channel to increase in size with the potential to further open Lake Salvador to the GIWW. This project would evaluate potential alternatives to stabilize the channel between the GIWW and Lake Salvador.

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding sources being identified.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

BAYOU VILLARS
CHANNEL MANAGEMENT

JP-42

BARATARIA BASIN (BA)
Council District 1

LAKE SALVADOR / BAYOU PEROT CHANNEL MANAGEMENT

JP-41

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located at the natural channel intersection joining Bayou Perot and Lake Salvador. This natural channel has increased in size due to bank erosion from tidal exchange between two large bodies of water. Estimated cost has not yet been determined.

STRATEGY

Historical land loss on the banks of the channel has caused the channel to increase in size with the potential to lose the land bridge separating the two bodies of water, adversely affecting the natural salinities of Lake Salvador and Lake Cataouatche. This project would evaluate potential alternatives to stabilize the channel between Bayou Perot and Lake Salvador.

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding sources being identified.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

LAKE SALVADOR / BAYOU PEROT CHANNEL MANAGEMENT

JP-41

BARATARIA BASIN (BA)

Council District 1

NORTHEAST LAKE CATAOUATCHE MARSH CREATION

JP-16

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is adjacent to the West Bank and Vicinity (WBV) Hurricane and Storm Damage Risk Reduction System (HSDRRS) located approximately 3 miles south of Bayou Segnette State Park with Marcello Canal to the north, Lake Cataouatche to the southwest, Yankee Pond to the southeast, and Labranche Canal to the west. The project would create a terrace field with in-situ borrow within an open water area for an estimated project cost between $15M and $20M.

STRATEGY

Terraces are a cost-effective option to create wetland habitat while reducing shoreline and interior marsh erosion due to wind-driven waves against the HSDRRS.

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding sources being identified.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 **100** 500 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

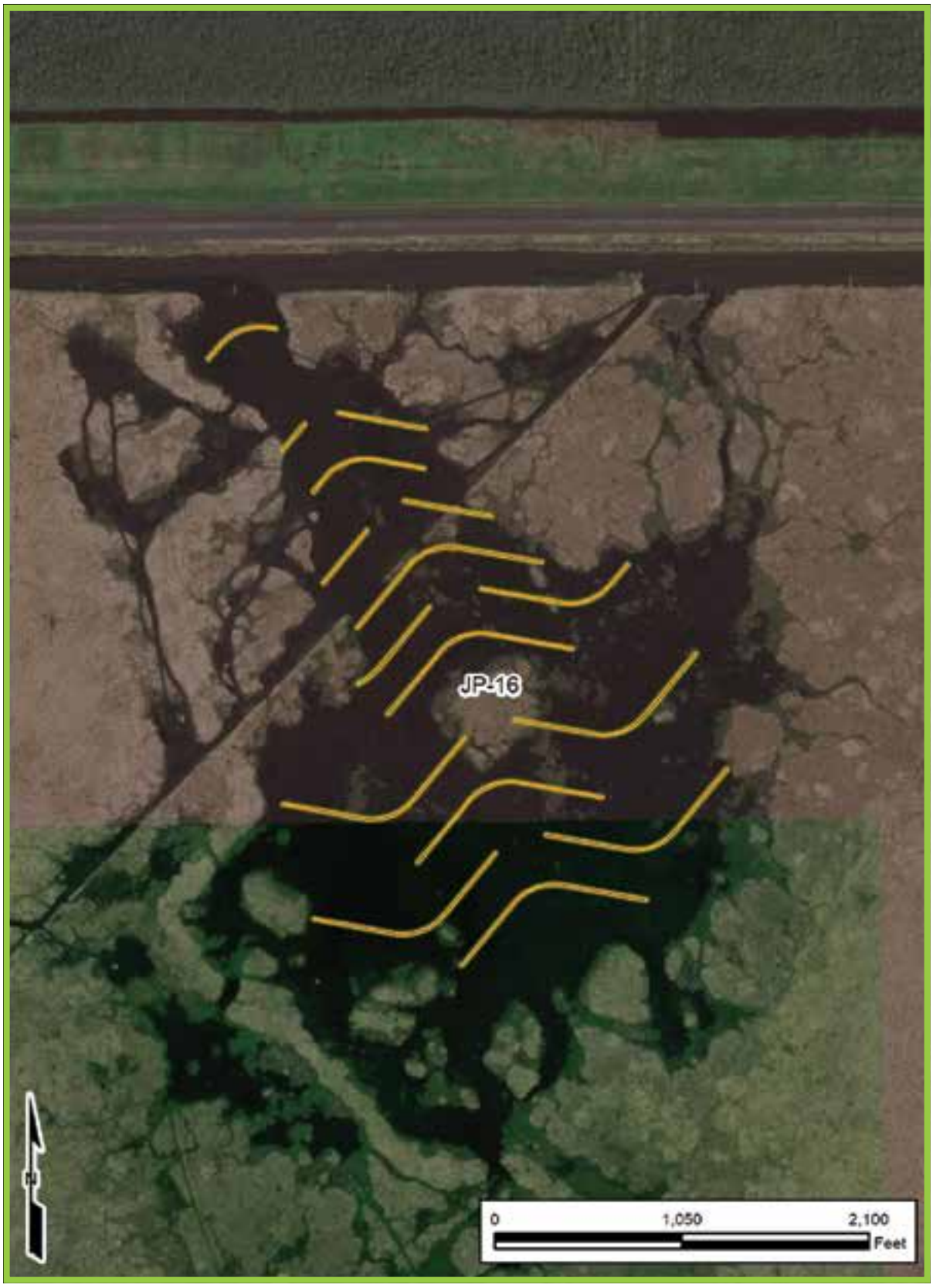
STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 3

NORTHEAST LAKE CATAOUATCHE MARSH CREATION

JP-16



BARATARIA BASIN (BA)

Council District 3

UPPER BARATARIA TERRACING PROJECT

JP-23

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is part of the Barataria Landbridge, located east of the Barataria Waterway and south of The Pen. The project would create a terrace field with in-situ borrow within an open water area for an estimated project cost between $1M and $2M.

STRATEGY

Terraces are a cost-effective option to create wetland habitat while reducing shoreline and interior marsh erosion due to wind-driven waves against the hurricane protection system.

PROGRESS TO DATE

This project is currently in the planning phase. Jefferson Parish has applied for a North American Wetlands Conservation Act Grant.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH GILD LILD **OTHER**

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

UPPER BARATARIA TERRACING PROJECT

JP-23

BARATARIA BASIN (BA)

Council District 1

BAYOU THUNDER ROCK DIKE

GILD-2

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The proposed breakwaters along Bayou Thunder would be approximately 0.9 mile long and be located along the northern bank of the bayou. The project will include the dredging of Bayou Thunder and nourishment of 50 acres of marsh for an estimated cost between $13M and $16M.

STRATEGY

The Grand Isle Independent Levee District proposes to continue rock breakwaters along Bayou Thunder in an effort to reduce land loss along the north side of Louisiana Highway 1 on Cheniere Caminada caused by heavy wave action from north winds in Caminada Bay.

PROGRESS TO DATE

The project is in the engineering & design phase and currently being evaluated by the permitting agencies.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

MILES

≤1 2 4 6 8 ≥ 10

PROJECT LEAD

CPRA JEFF PARISH **GILD** LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

BAYOU THUNDER ROCK DIKE

GILD-2

BARRIER ISLAND (BI)

Council District 1

CHENIERE CAMINADA MARSH RESTORATION

GILD-3

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on the Caminada Headland approximately 9 miles northeast of Port Fourchon and 2 miles southwest of Grand Isle along the north side of Cheniere Caminada. The project will include the restoration of approximately 250 acres of marsh for an estimated cost between $9M and $11M.

STRATEGY

The Grand Isle Independent Levee District proposes to restore marsh between the proposed rock breakwaters along Bayou Thunder and proposed breakwaters along Caminada Bay in an effort to reduce land loss along the north side of Louisiana Highway 1 on Cheniere Caminada caused by heavy wave action from north winds in Caminada Bay.

PROGRESS TO DATE

The project is in the engineering & design phase and currently being evaluated by the permitting agencies.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 **100** 500 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH **GILD** LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

CHENIERE CAMINADA MARSH RESTORATION

GILD-3

BARRIER ISLAND (BI)

Council District 1

GRAND ISLE BAYSIDE SEGMENTED BREAKWATERS COMPLETION

GILD-5

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on the bayside of Grand Isle. The proposed breakwaters would reduce erosion on the bayside of Grand Isle by construction of two approximately 350-foot breakwaters on the bayside of Grand Isle for an estimated cost between $1M and $2M.

STRATEGY

The proposed project will connect existing breakwaters to the east and west and create a continuous line of protection on the bayside of Grand Isle. Proposed project is located on the bayside of Grand Isle where storms cause wave-induced erosion. The Grand Isle Independent Levee District proposes to complete the rock breakwaters in an effort to provide hurricane protection.

PROGRESS TO DATE

The remaining two breakwaters are designed and permitted and ready for construction.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH **GILD** LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE BAYSIDE SEGMENTED BREAKWATERS COMPLETION

GILD-5

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE GULFSIDE SEGMENTED BREAKWATERS

GILD-4

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

The proposed breakwaters would reduce erosion on the Gulfside of Grand Isle by construction of approximately 45 breakwaters just off the beach. The proposed project will connect existing breakwaters to the east and west and create a continuous line of protection on the Gulfside of Grand Isle for an estimated cost between $28M and $30M.

STRATEGY

Proposed project is located on the Gulfside of Grand Isle where significant shoreline erosion and land loss resulted from storm overtopping and breaching, wave-induced erosion, and sea level rise. The Grand Isle Independent Levee District proposes to continue rock breakwaters along the Gulf in an effort to reduce land loss and provide hurricane protection. Breakwaters exist both to the east and west and this project would complete the Gulfside breakwaters.

PROGRESS TO DATE

The project is currently in the engineering & design phase.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

MILES

1 50 100 150 ≥ 200

PROJECT LEAD

CPRA JEFF PARISH **GILD** LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

GRAND ISLE GULFSIDE SEGMENTED BREAKWATERS GILD-4

BARRIER ISLAND (BI)
Council District 1

LAFRIENIERE MARSH RESTORATION

JP-24

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is within Lafreniere Park in Metairie. The marsh island within the lagoon of Lafreniere Park has experienced land loss due to settlement and shoreline erosion. This project would restore the island to its original shape with borrow from the lagoon for an approximate cost between $1M and $2M.

STRATEGY

Historical land loss of the island has decreased the habitat of wildlife species using the island. Restoring the island would increase habitat for wildlife, and the addition of aeration equipment would increase the water quality in the lagoon.

PROGRESS TO DATE

A preliminary design report on restoring the island and enhancing the water quality of the lagoon was completed in 2012. Jefferson Parish is in the process of identifying grant opportunities to construct the project.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

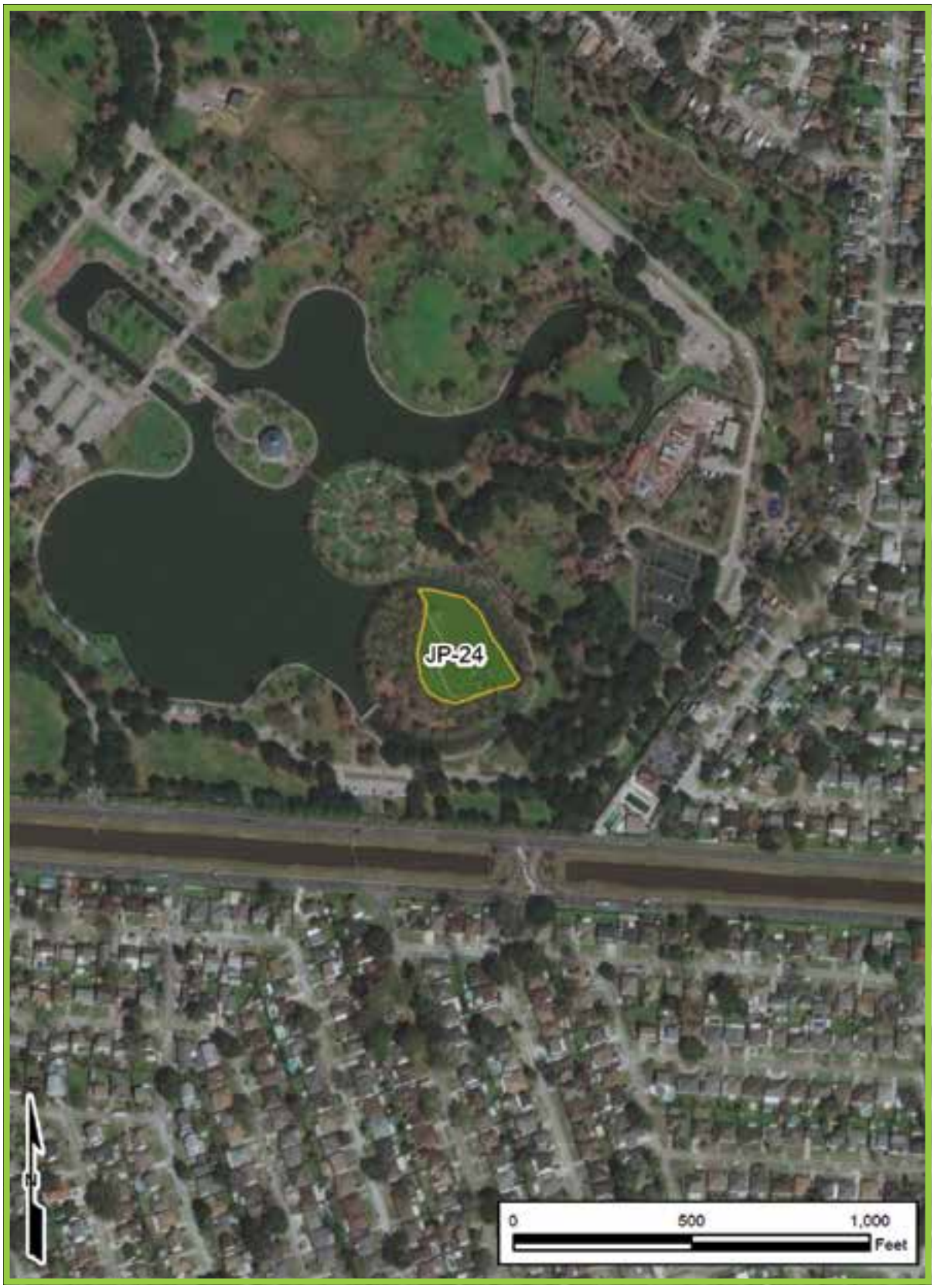
CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL **PLANNING** DESIGN CONSTRUCTION

PONTCHARTRAIN BASIN (PO)
Council District 4

LAFRIENIERE MARSH RESTORATION JP-24



PONTCHARTRAIN BASIN (PO)
Council District 4

LAKETOWN BREAKWATERS / LIVING SHORELINE

JP-43

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located at Laketown in Kenner on the south shore of Lake Pontchartrain. The Laketown Boat Harbor experiences significant effects of wave energy from strong north winds across the lake. The project includes dredging of the harbor and beneficial use of the material to restore approximately 3.5 acres of marsh and the addition of recreational features. This project would construct a breakwater system totaling approximately 2,000 feet for an estimated cost between $5M and $10M.

STRATEGY

This project is in cooperation between Jefferson Parish and the City of Kenner. High wave energy for strong north winds make the harbor unsafe for boats using the harbor. The rock breakwaters would reduce wind-driven waves entering the boat harbor, reducing the risk of damage to the harbor and boats using the harbor.

PROGRESS TO DATE

This project is in the preliminary planning phase with funding for the project requested from CPRA for GOMESA funding.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL **PLANNING** DESIGN CONSTRUCTION

PONTCHARTRAIN BASIN (PO)
Council District 4

LAKETOWN BREAKWATERS / LIVING SHORELINE JP-43

PONTCHARTRAIN BASIN (PO)
Council District 4

FIFI ISLAND RESTORATION

GILD-6

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located on Fifi Island adjacent to the north side of Grand Isle. The project will include construction of 2,100 feet of rock dike and restoration of 325 acres of marsh for an estimated cost between $25M and $30M.

STRATEGY

The proposed project will complete the rock dike around Fifi Island. Proposed project is located on the bayside of Grand Isle where storms cause wave-induced erosion. The Grand Isle Independent Levee District proposes to complete the rock dike and restore the marsh in an effort to provide hurricane protection to Grand Isle.

PROGRESS TO DATE

The project is currently in the engineering & design phase.

PROJECT MAGNITUDE

NON-TRADITIONAL **LOCAL** REGIONAL LARGE

ESTIMATED COST

≤1M **50M** 100M ≥150M

ACRES

1 100 **500** 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH **GILD** LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARRIER ISLAND (BI)
Council District 1

FIFI ISLAND RESTORATION

GILD-6

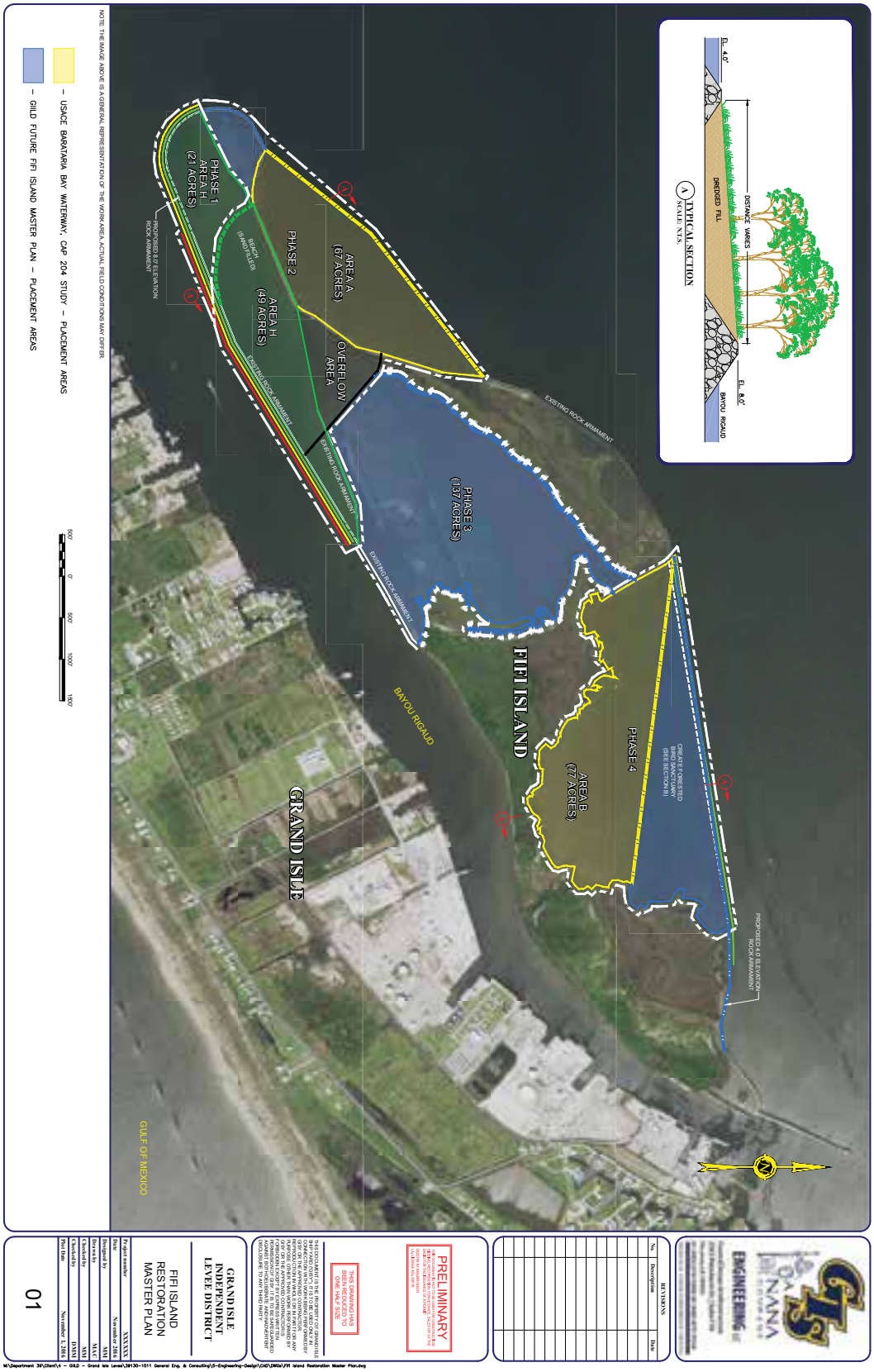
BARRIER ISLAND (BI)

Council District 1

FIFI ISLAND RESTORATION

GILD-6

BARRIER ISLAND (BI)
Council District 1



APPENDIX A

NON-TRADITIONAL PROJECTS

- JP-22 Northeast Pen Shoreline Protection
- JP-35 The Wetlands Center
- WHARF Wetland Harbor Activities Recreational Facility
- JP-08 Jefferson Tree Planting
- JP-21 Severn Lakefront Restoration

NORTHEAST PEN SHORELINE PROTECTION

JP-22

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is on the eastern shore of Goose Bayou and north of the Pen. The project would add rock shoreline protection to the shoreline of Goose Bayou. Cost not yet determined.

STRATEGY

Historical land loss and channel widening/deepening have increased the effects and risks associated with storm-induced surge. Restoration and protection of the shoreline would stabilize the channel of Goose Bayou and reduce the risks of storm-induced surge for the Town of Lafitte.

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding through Capital Outlay.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL LARGE

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

NORTHEAST PEN SHORELINE PROTECTION

JP-22

BARATARIA BASIN (BA)

Council District 1

THE WETLANDS CENTER JP-35

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

The Louisiana Wetland Education Center is a public services/education project located in the southern area of the Parish in the Town of Lafitte. Total cost for all phases is estimated between $12M and $15M.

STRATEGY

The Louisiana Wetlands Education Center will be an educational asset serving students and families in the region, with programming for all ages, including a research outpost and meeting location for agencies and institutions. The Center will promote preservation, conservation, and adaptation related to wetland ecosystems, using its location in the Jean Lafitte area as an outdoor classroom. Future phases would include an expanded fishing village to teach visitors about coastal community traditions, a treetop ropes course, water taxis to Grand Isle, kayak and canoe rental, and overnight cabins. The Center is complementary to the existing Jean Lafitte Fisheries Market and adjacent to the Auditorium, Nature Trail, and Multi-Purpose Facility and Museum.

PROGRESS TO DATE

$2M has been awarded through NRDA for recreation projects . Phase I creation of the Multipurpose Resource Facility is complete. LA SAFE has estimated their investment of up to $6.5M for the Wetland Center with the remainder of potential funding sources to be identified.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA JEFF PARISH GILD **LILD** OTHER

STATUS

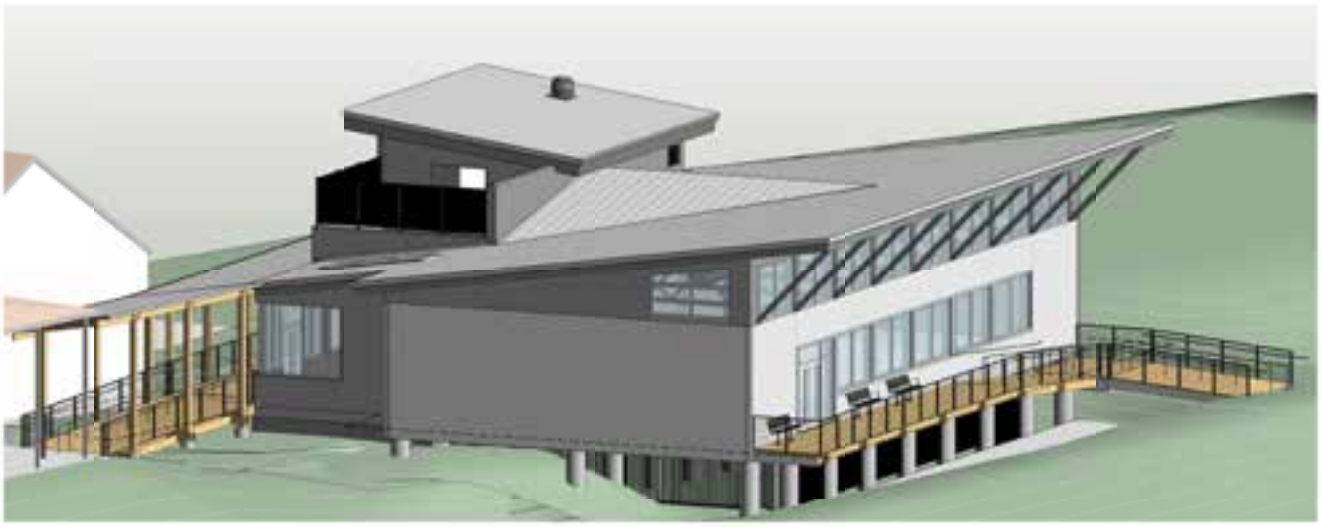
CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARATARIA BASIN (BA)
Council District 1

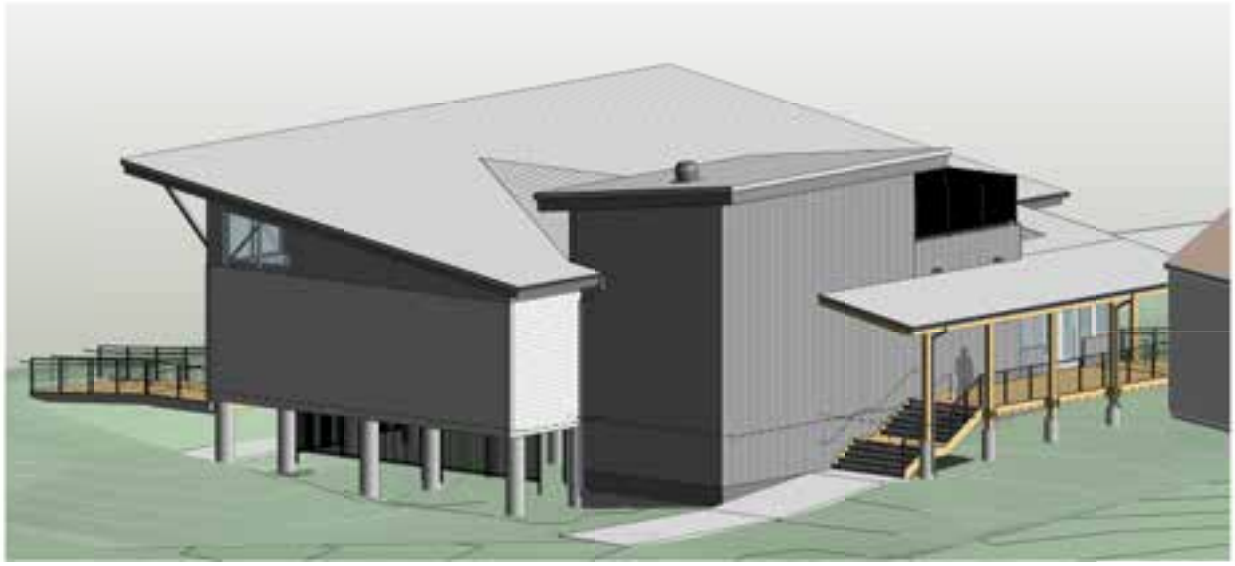
THE WETLANDS CENTER JP-35

BARATARIA BASIN (BA)
Council District 1

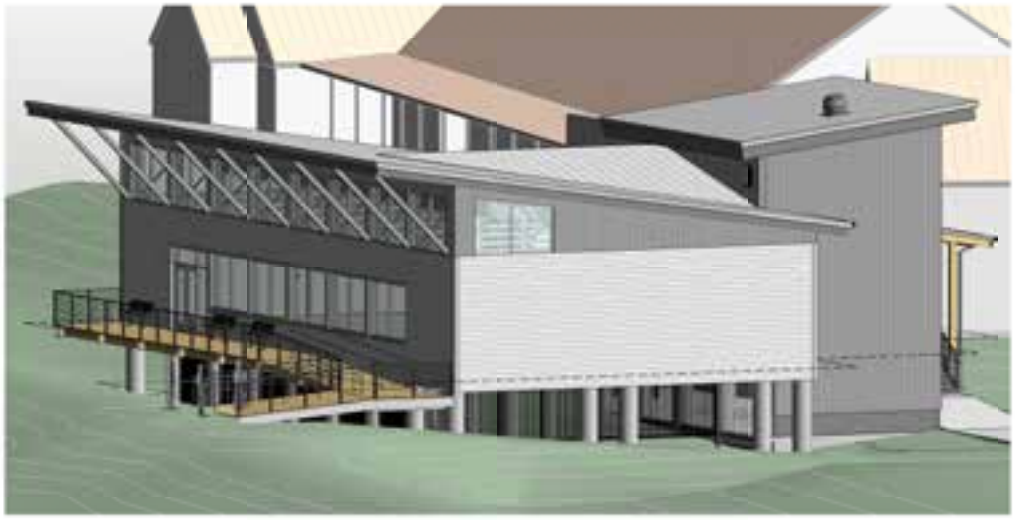
THE WETLANDS CENTER



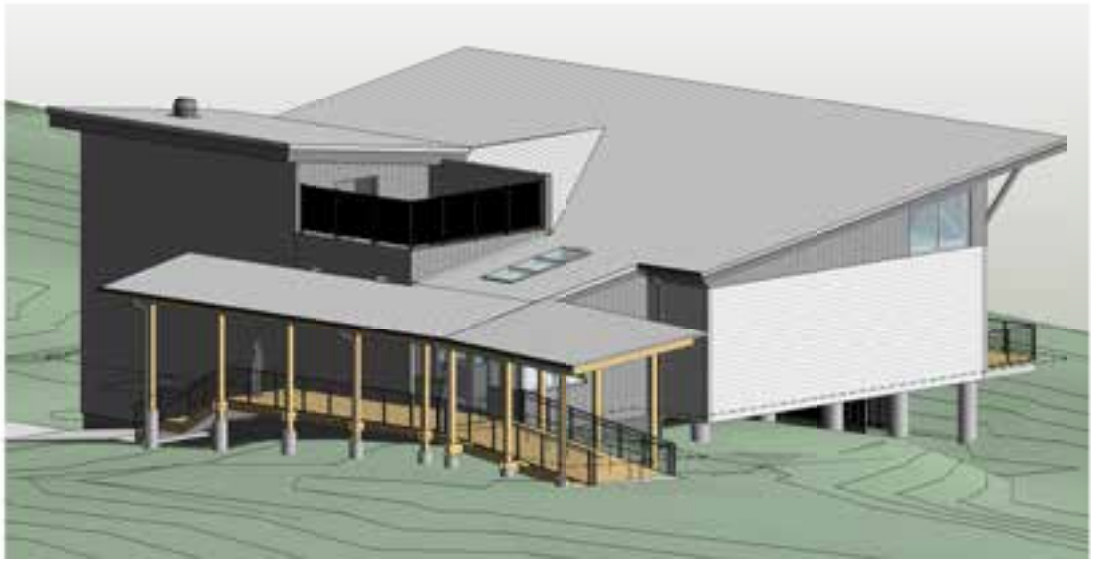
1 WEST AXONOMETRIC
SCALE:



3 EAST AXONOMETRIC
SCALE:



2 NORTH AXONOMETRIC
SCALE:



4 SOUTH AXONOMETRIC
SCALE:

WHLC ARCHITECTURE

CITY OF JEAN LAFITTE

LOUISIANA WETLAND EDUCATION CENTER

4917 City Park Dr.
JEAN LAFITTE, 70067

MICHAEL HILL Reg No 28511 STATE OF LOUISIANA REGISTERED ARCHITECT

washer hill lipscomb cabaniss architecture, llc
1744 oakdale dr baton rouge, la
t. 225.767.1530 f. 225.767.0018
www.whlcarchitecture.com

CONSTRUCTION DOCUMENTS
03/20/20
WHLC 18-090

ISOMETRIC VIEWS

A0.1

BARATARIA BASIN (BA)
Council District 1

WETLAND HARBOR ACTIVITIES RECREATIONAL FACILITY

WHARF

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Proposed project is located within the City of Westwego, south of Lapalco Boulevard, just outside the HSDRRS. The proposed project would develop the property into a multi-use wetlands park with handicap access for an estimated cost between $2M and $3M.

STRATEGY

The first phase of the project would include construction of a concession pavilion with restrooms, an access road, paved parking area, and 1,200 linear feet of wooden boardwalks and fishing piers. Future phases would add additional fishing piers, provide boat and canoe/kayak launches, cabins, and campsites.

PROGRESS TO DATE

This project is in the planning, engineering, and design phase with $2M in funding through CPRA; the property was purchased using a NOAA Grant. Additional potential funding for construction through USFWS/LDWF Sportfish Restoration Fund, CPRA, and NRDA.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL LARGE

ESTIMATED COST

≤1M 50M 100M ≥150M

ACRES

1 100 500 1000 ≥ 2000

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** CONSTRUCTION

BARATARIA BASIN (BA)
Council District 3

WETLAND HARBOR ACTIVITIES RECREATIONAL FACILITY

WHARF

BARATARIA BASIN (BA)

Council District 3

JEFFERSON
TREE PLANTING

JP-08

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

Annual education and outreach program that utilizes volunteers to grow and plant trees in areas conducive to their growth throughout the Parish. The planting of native tree species improves water quality and habitat as well as reduces shoreline erosion and provides storm protection.

STRATEGY

Previous tree planting opportunities have been successful in engaging the pubic. Trees and other materials were provided at a minimal cost to Jefferson Parish. The Parish should continue to explore the next phase of this project. Locations where plantings may occur have been identified in all five Council Districts.

PROGRESS TO DATE

Current year funded through a $17,790 USEPA Gulf of Mexico Grant that will be used to improve the grow-out pens and install an irrigation system and plant a 250-acre site near the Town of Lafitte.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL LARGE

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING **DESIGN** **CONSTRUCTION**

BARATARIA BASIN (BA) - PONTCHARTRAIN BASIN (PO) - BARATARIA BASIN (BA)

Council District 1, 2, 3, 4, 5

JEFFERSON
TREE PLANTING JP-08

BARATARIA BASIN (BA) - PONTCHARTRAIN BASIN (PO) - BARATARIA BASIN (BA)

Council District 1, 2, 3, 4, 5

SEVERN LAKEFRONT RESTORATION JP-21

Department of Ecosystem & Coastal Management
Jefferson Parish Government
(504) 736-6719
JPCoastalZone@jeffparish.net

OVERVIEW

New project idea under development to evaluate shoreline restoration near the intersection of Severn Avenue and Lake Pontchartrain. Cost not yet determined.

STRATEGY

Living shorelines add multiple project benefits including fish and wildlife habitat, recreational opportunities, and protection to the Lake Pontchartrain Hurricane and Storm Damage Risk Reduction System (HSDRRS).

PROGRESS TO DATE

This project is currently in the conceptual phase with potential funding sources being identified.

PROJECT MAGNITUDE

NON-TRADITIONAL LOCAL REGIONAL LARGE

PROJECT LEAD

CPRA **JEFF PARISH** GILD LILD OTHER

STATUS

CONCEPTUAL PLANNING DESIGN CONSTRUCTION

PONTCHARTRAIN BASIN (PO)
Council District 5

SEVERN LAKEFRONT RESTORATION JP-21

PONTCHARTRAIN BASIN (PO)
Council District 5

Department of Ecosystem & Coastal Management

Jefferson Parish Government

(504) 736-6719

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