



2023 COASTAL MASTER PLAN

REGIONAL FACT SHEETS

ATTACHMENT F4

REPORT: VERSION 03
DATE: JANUARY 2023



COASTAL PROTECTION AND
RESTORATION AUTHORITY
150 TERRACE AVENUE
BATON ROUGE, LA 70802
WWW.COASTAL.LA.GOV

COASTAL PROTECTION AND RESTORATION AUTHORITY

This document was developed in support of the 2023 Coastal Master Plan being prepared by the Coastal Protection and Restoration Authority (CPRA). CPRA was established by the Louisiana Legislature in response to Hurricanes Katrina and Rita through Act 8 of the First Extraordinary Session of 2005. Act 8 of the First Extraordinary Session of 2005 expanded the membership, duties, and responsibilities of CPRA and charged the new authority to develop and implement a comprehensive coastal protection plan, consisting of a master plan (revised every six years) and annual plans. CPRA's mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration master plan.

CITATION

Coastal Protection and Restoration Authority. (2023). 2023 Coastal Master Plan: Attachment F4: Regional Fact Sheets. Version 3. (pp. 1-13). Baton Rouge, Louisiana: Coastal Protection and Restoration Authority.

LIST OF REGIONAL FACT SHEETS

BARATARIA	4
CENTRAL COAST	6
CHENIER PLAIN	8
PONTCHARTRAIN/BRETON	10
TERREBONNE	12

BARATARIA



PLAN BY THE NUMBERS



ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED

Due to Structural Risk Reduction and Restoration projects only.



ESTIMATED ANNUAL DAMAGE \$ PREVENTED

Due to Structural Risk Reduction and Restoration projects only.



AVOIDED LAND LOSS

1.1K

LOWER SCENARIO

1.1K

HIGHER SCENARIO

**TOTAL
STRUCTURE
EQUIVALENTS**

1.4B

LOWER SCENARIO

1.3 B

HIGHER SCENARIO

DOLLARS (\$)

84

LOWER SCENARIO

48

HIGHER SCENARIO

SQUARE MILES

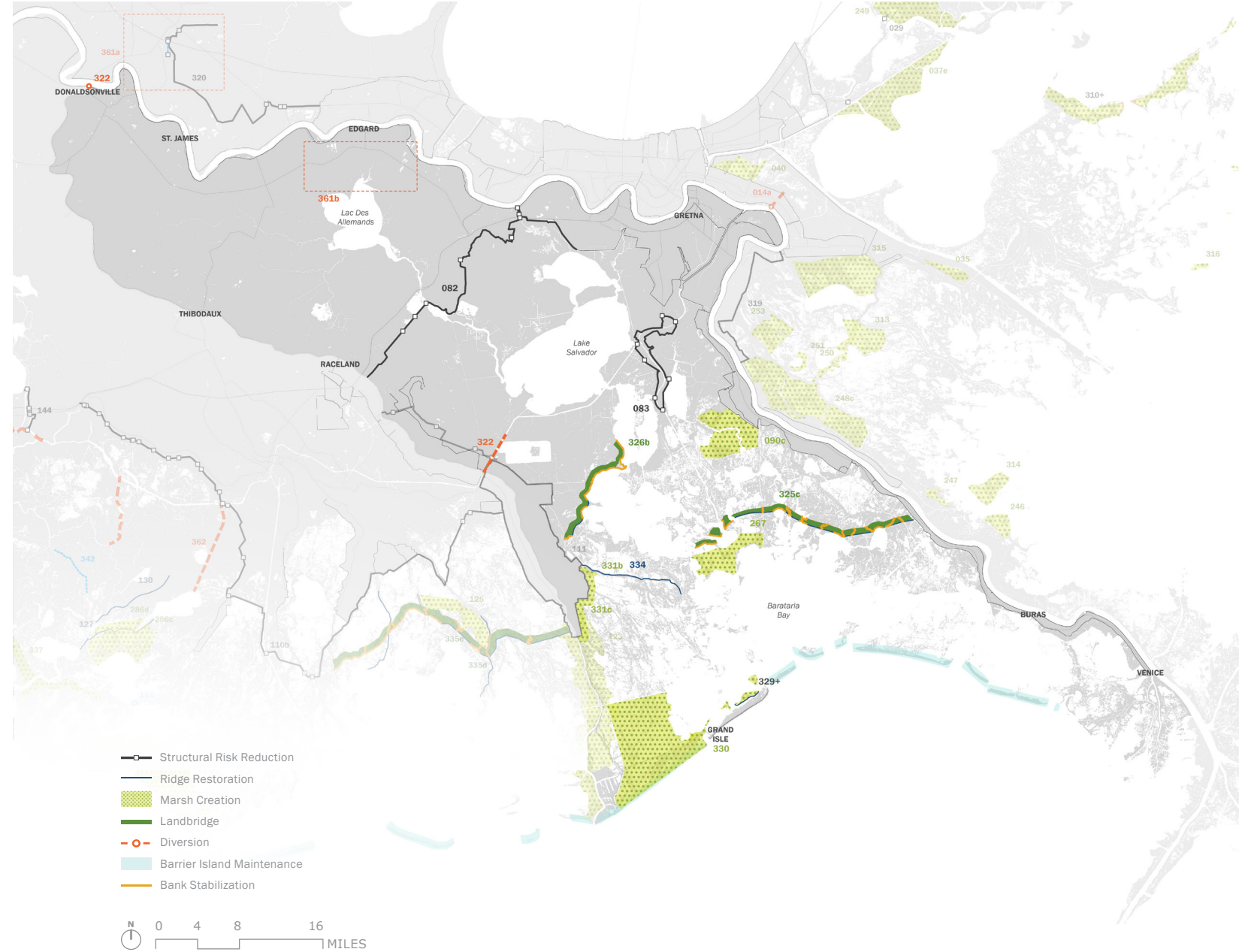
REGIONAL STRATEGY HIGHLIGHT

Natural Processes

Restoration projects can promote a sustainable coastal ecosystem by harnessing the natural processes of the system. Benefits such as land building and hydrologic improvements can be accomplished by implementing projects that leverage rivers, bayous, and other landscape features.

Diversion

Diversions convey freshwater and sediment from rivers into adjacent wetland basins. These projects restore historic deltaic processes, build new land, nourish existing wetlands, and prevent saltwater incursion into the estuary. See the **Upper Basin Diversion Program - Barataria (361b)** for more information.



BARATARIA

ABOUT THE REGION

Barataria lies on the west bank of the Mississippi River, reaching to Port Fourchon and includes the west bank of New Orleans and popular fishing destinations of Lafitte and Venice. Barataria Basin is separated from the Gulf by a string of barrier islands that includes Grand Isle. Known for its fishing communities, the region includes a variety of waterways including the Jean Lafitte National Historical Park and Preserve and the Salvador/Timken Wildlife Management Area.

ABOUT THE PROJECTS

For the 2023 Coastal Master Plan, 12 projects were selected in the Barataria region. This includes several marsh creation projects as well as landbridge and ridge restoration projects that are expected to build and maintain land. Structural risk reduction projects in the upper basin reduce the impact of storm surge-based flooding for coastal communities in this area.




2023 DRAFT COASTAL MASTER PLAN


Visit our website:
coastal.la.gov






CENTRAL COAST


Structural Risk Reduction


Marsh Creation



PLAN BY THE NUMBERS



ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

920

LOWER SCENARIO

1.5K

HIGHER SCENARIO

TOTAL STRUCTURE EQUIVALENTS



ESTIMATED ANNUAL DAMAGE \$ PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

1.0B

LOWER SCENARIO

1.6B

HIGHER SCENARIO

DOLLARS (\$)



AVOIDED LAND LOSS

46

LOWER SCENARIO

2.2

HIGHER SCENARIO

SQUARE MILES

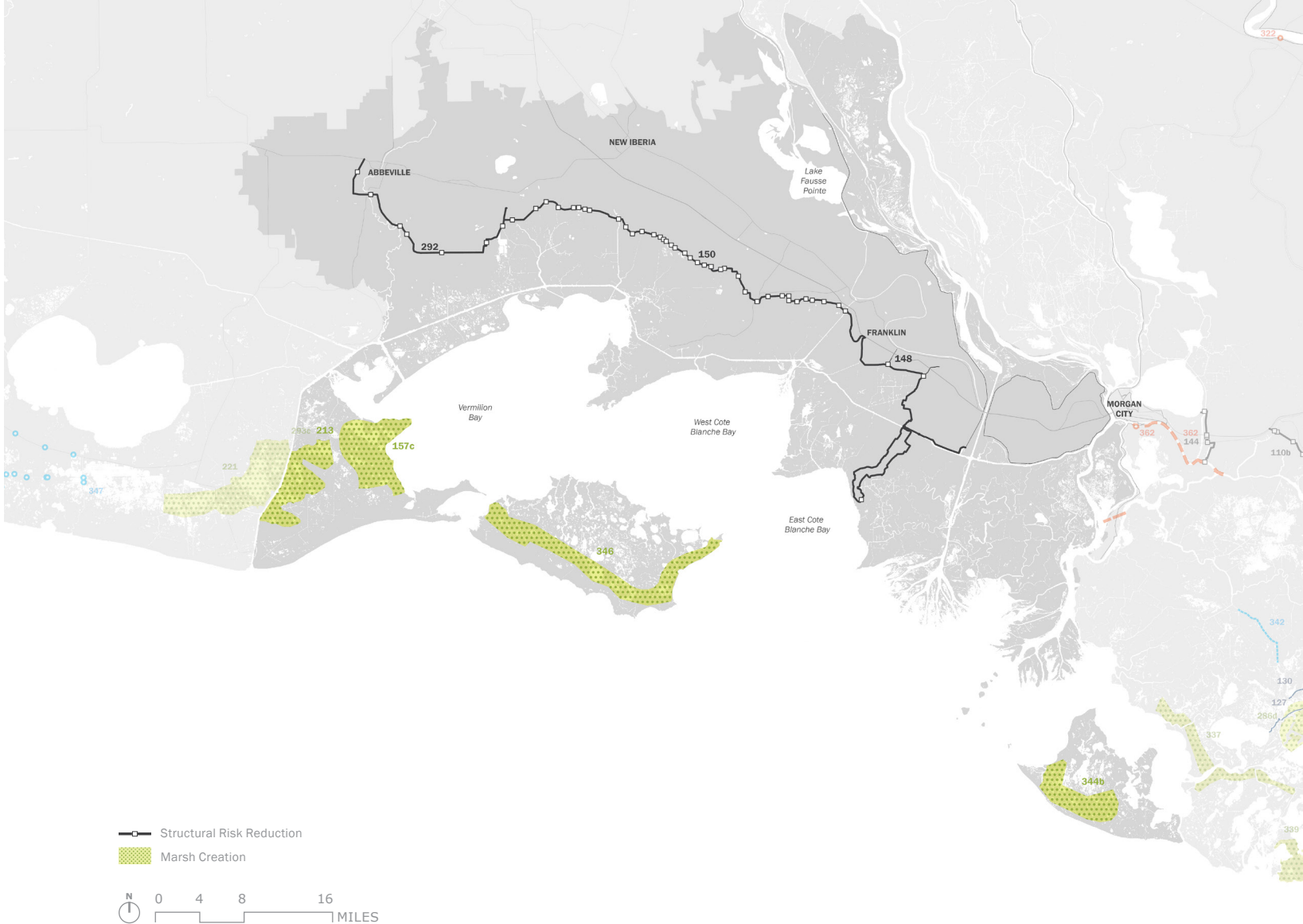
REGIONAL STRATEGY HIGHLIGHT

Supporting Habitats

Coastal Louisiana wetlands support a variety of fish and wildlife species by providing important habitat. Marsh creation and other restoration projects selected for the master plan reduce land loss and maintain key landscape features.

Marsh Creation

Marsh creation projects restore landscape and ecosystem processes, enhance habitat, and provide additional storm surge attenuation. Wetlands are created through placement of dredged material and plantings in shallow open water or areas with deteriorated marsh. See **Marsh Island Barrier Marsh Creation (346)** for more information.



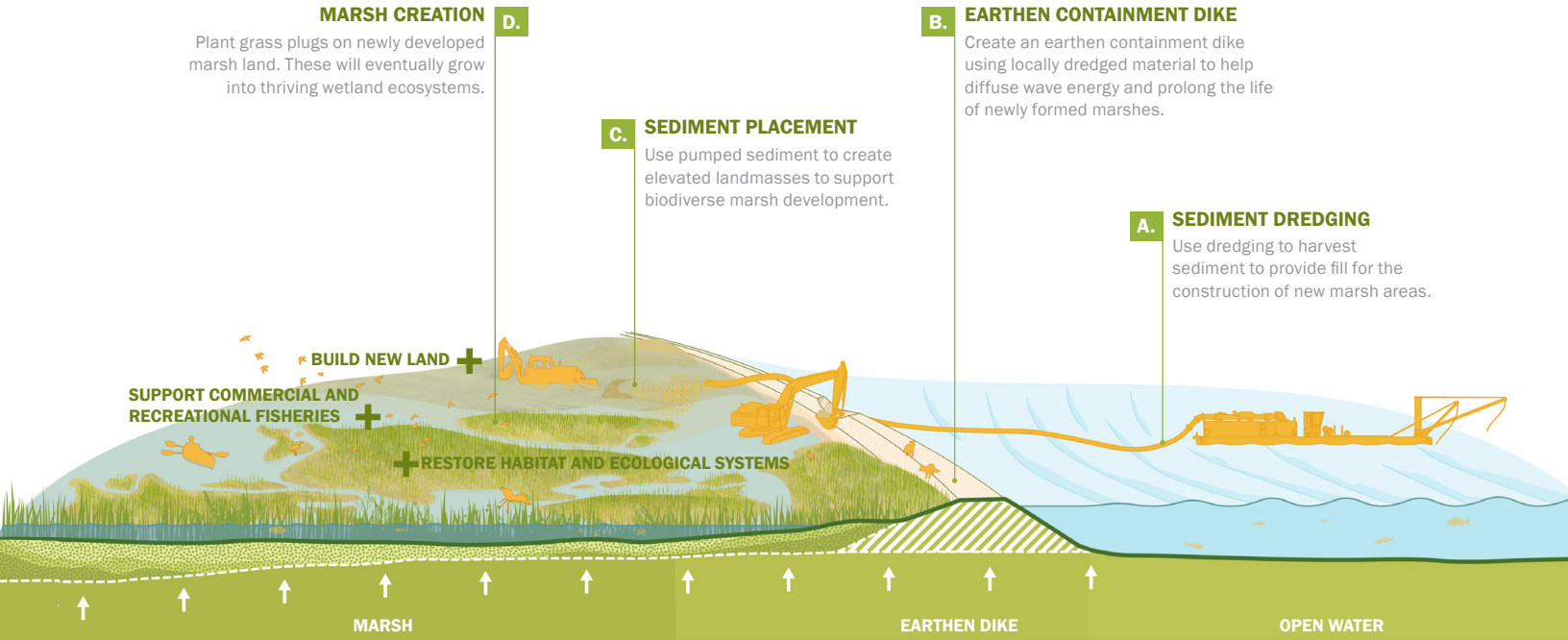
CENTRAL COAST

ABOUT THE REGION

The Central Coast includes the areas around the Atchafalaya River Delta, spanning from Freshwater Bayou to the eastern banks of the Atchafalaya River, including Abbeville and salt domes like Avery and Weeks Island. The region features a series of connected bays that lead to the Gulf. Notable features include Marsh Island and the Atchafalaya River and Wax Lake deltas. Hunting and fishing are popular in the area due to the productive marsh ecosystem.

ABOUT THE PROJECTS

For the 2023 Coastal Master Plan, 7 projects were selected for the Central Coast region. These projects include several large-scale marsh creation projects from West Rainey Marsh and across Marsh Island to Point Au Fer. With the help of our Central Coast Regional Workgroup, several originally submitted project concepts were revised to avoid overlap and to focus on regional priorities, such as maintaining regionally important landforms. Structural risk reduction projects were also selected for the region that, in conjunction with nonstructural risk reduction measures, would reduce risk and damages from storm surge-based flooding in communities across the Central Coast.



CHENIER PLAIN



PLAN BY THE NUMBERS



ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

69

LOWER SCENARIO

92

HIGHER SCENARIO

TOTAL
STRUCTURE
EQUIVALENTS



ESTIMATED ANNUAL DAMAGE \$ PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

72M

LOWER SCENARIO

110M

HIGHER SCENARIO

DOLLARS (\$)



AVOIDED LAND LOSS

36

LOWER SCENARIO

55

HIGHER SCENARIO

SQUARE MILES

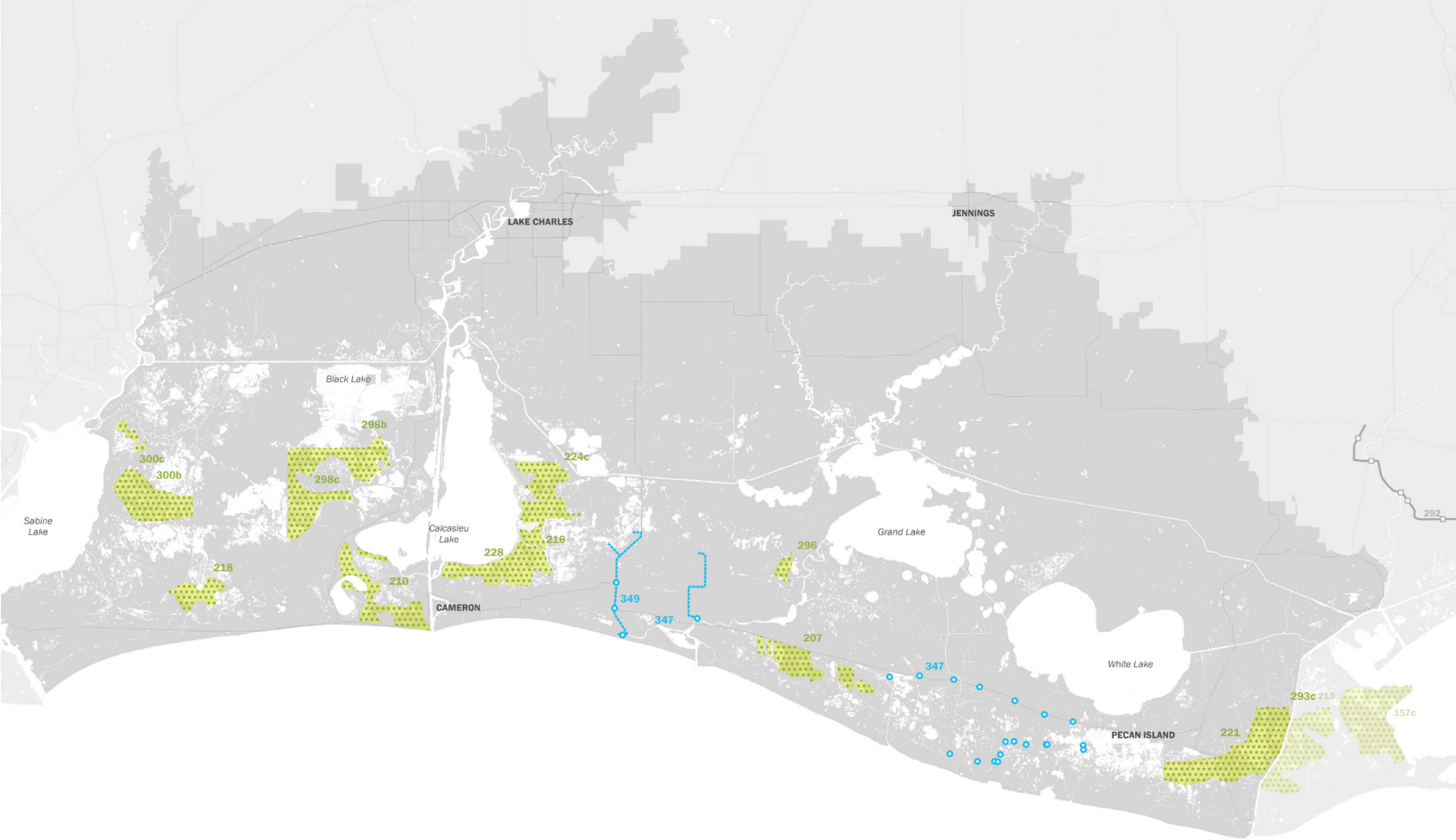
REGIONAL STRATEGY HIGHLIGHT

Working With Water

Hydrologic restoration projects selected for the master plan can support communities and the working coast by moving water through the system. Hydrologic improvements can be accomplished by implementing projects that leverage channel, bayous, culverts, and other landscape features.

Hydrological Restoration

Hydrologic Restoration projects evaluated for the plan seek to improve hydrology at the basin and sub-basin scale. Small-scale hydrologic restoration focusing on restoring more localized hydrologic patterns are considered programmatically consistent with the master plan. See **Mermentau Basin Hydrologic Restoration (347)** for more information.



Marsh Creation
Hydrologic Restoration

0 4 8 16
MILES

CHENIER PLAIN



ABOUT THE REGION

The Chenier Plain spans from the Texas border to Pecan Island, Louisiana. The region includes the City of Lake Charles, White Lake Wetlands Conservation Area, and Rockefeller Wildlife Refuge. “Chêne” is French for “oak.” The Chenier Plain is named for wooded ridges that parallel the coastline. Rich in wildlife and interspersed with a series of lakes, it is popular with hunters and fishers. The region is known for being an energy, industrial, and transportation hub.

ABOUT THE PROJECTS

For the 2023 Coastal Master Plan, 15 projects were selected in the Chenier Plain region, including several marsh creation projects spread across the region. Through the help of the Chenier Plain Regional Workgroup, the locations of these marsh creation projects were chosen to address current and future land loss concerns, such as strengthening the shoreline of Calcasieu Lake and other important regional water bodies. Large-scale hydrologic restoration projects were also selected for the region. These projects were designed, with input from our advisory groups, to provide improved drainage in both the upper Mermentau Basin and the Cameron-Creole Watershed.








2023 DRAFT COASTAL MASTER PLAN

Visit our website:
coastal.la.gov





PONTCHARTRAIN / BRETON



Structural Risk Reduction

Ridge Restoration

Marsh Creation

Diversion

+ DENOTES AN INTEGRATED PROJECT

PLAN BY THE NUMBERS

ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

1.5K

LOWER SCENARIO

2.5K

HIGHER SCENARIO

TOTAL STRUCTURE EQUIVALENTS

ESTIMATED ANNUAL DAMAGE \$ PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

1.6B

LOWER SCENARIO

2.7B

HIGHER SCENARIO

DOLLARS (\$)

AVOIDED LAND LOSS

58

LOWER SCENARIO

100

HIGHER SCENARIO

SQUARE MILES

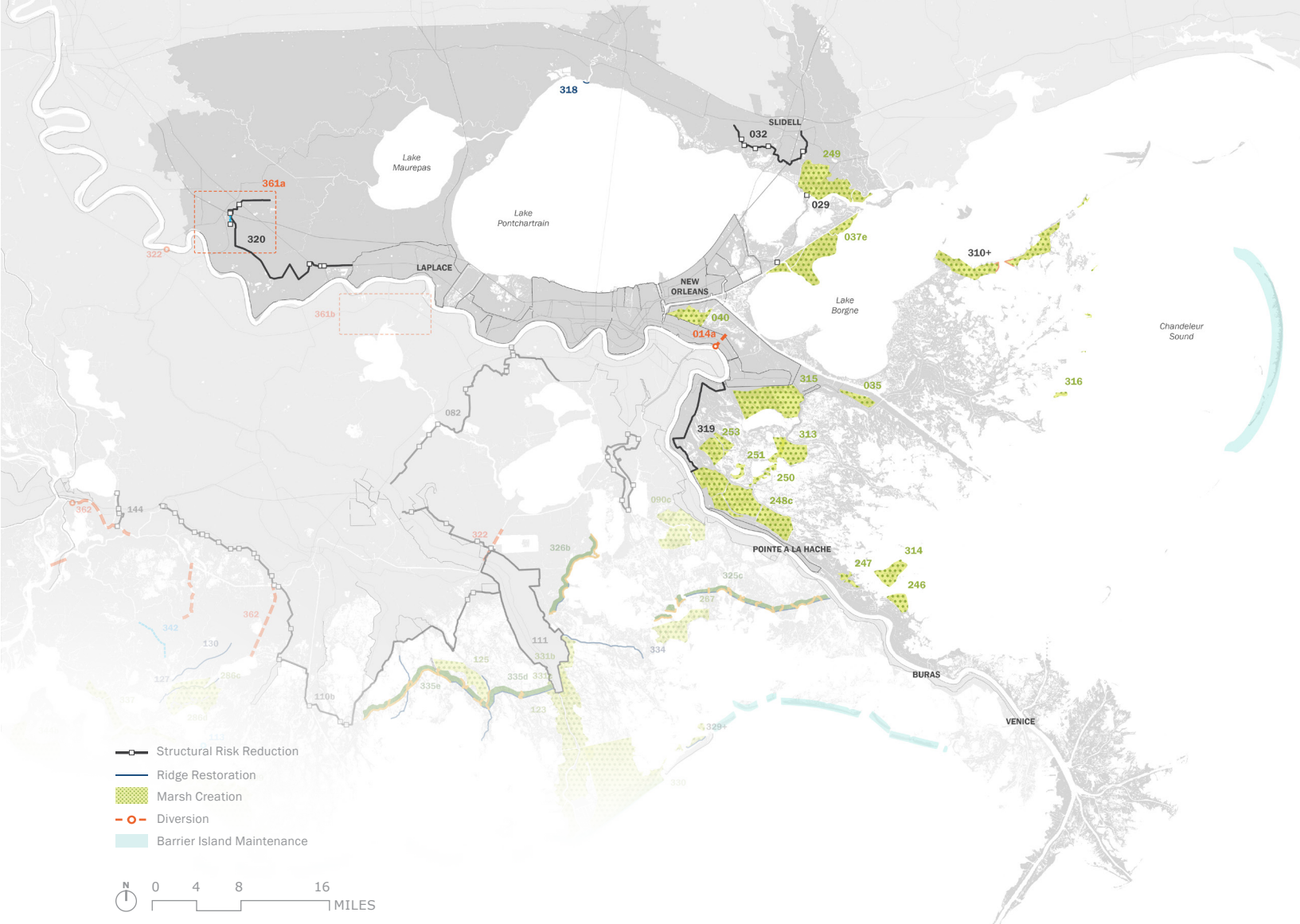
REGIONAL STRATEGY HIGHLIGHT

Flood Protection

A key objective of the master plan is to reduce economic and structural damages from storm surge-based flooding to residential, public, industrial, and commercial assets. Risk reduction projects benefit individuals and communities across the coast.

Structural Risk Reduction

Structural Risk Reduction projects protect people and property with earthen levees, concrete T-walls, floodgates, and other structural components. They reduce the risk of storm surge flooding and damage within the protected area. See **Slidell Ring Levee (032)** for more information.



PONTCHARTRAIN / BRETON



ABOUT THE REGION

The Pontchartrain/Breton region reaches from the east bank of the Mississippi River to the Mississippi border and includes New Orleans, Mandeville, and Slidell. The region also includes Lakes Pontchartrain and Borgne as well as the Bird’s Foot Delta of the Mississippi River. The region is surrounded by the Breton and Chandeleur sounds, which are separated from the Gulf by a string of barrier islands, including the Chandeleur Islands, part of the Breton National Wildlife Refuge.


ABOUT THE PROJECTS


For the 2023 Coastal Master Plan, 22 projects were selected for the region. These projects include several marsh creation projects and other project types intended to maintain important landscape features and functions, such as a broad estuarine gradient. Structural risk reduction projects were selected that benefit several communities on the east bank of the Mississippi River as well as communities on the North Shore, which are expected to face significantly increased storm surge flood risk into the future.








TERREBONNE



Structural Risk Reduction



Ridge Restoration


Marsh Creation


Landbridge


Diversion


Hydrologic Restoration



PLAN BY THE NUMBERS



ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

3.5K

LOWER SCENARIO

4.5K

HIGHER SCENARIO

TOTAL
STRUCTURE
EQUIVALENTS



ESTIMATED ANNUAL DAMAGE \$ PREVENTED

Due to Structural Risk Reduction and Restoration projects only.

3.6B

LOWER SCENARIO

5.0B

HIGHER SCENARIO

DOLLARS (\$)



AVOIDED LAND LOSS

91

LOWER SCENARIO

27

HIGHER SCENARIO

SQUARE MILES

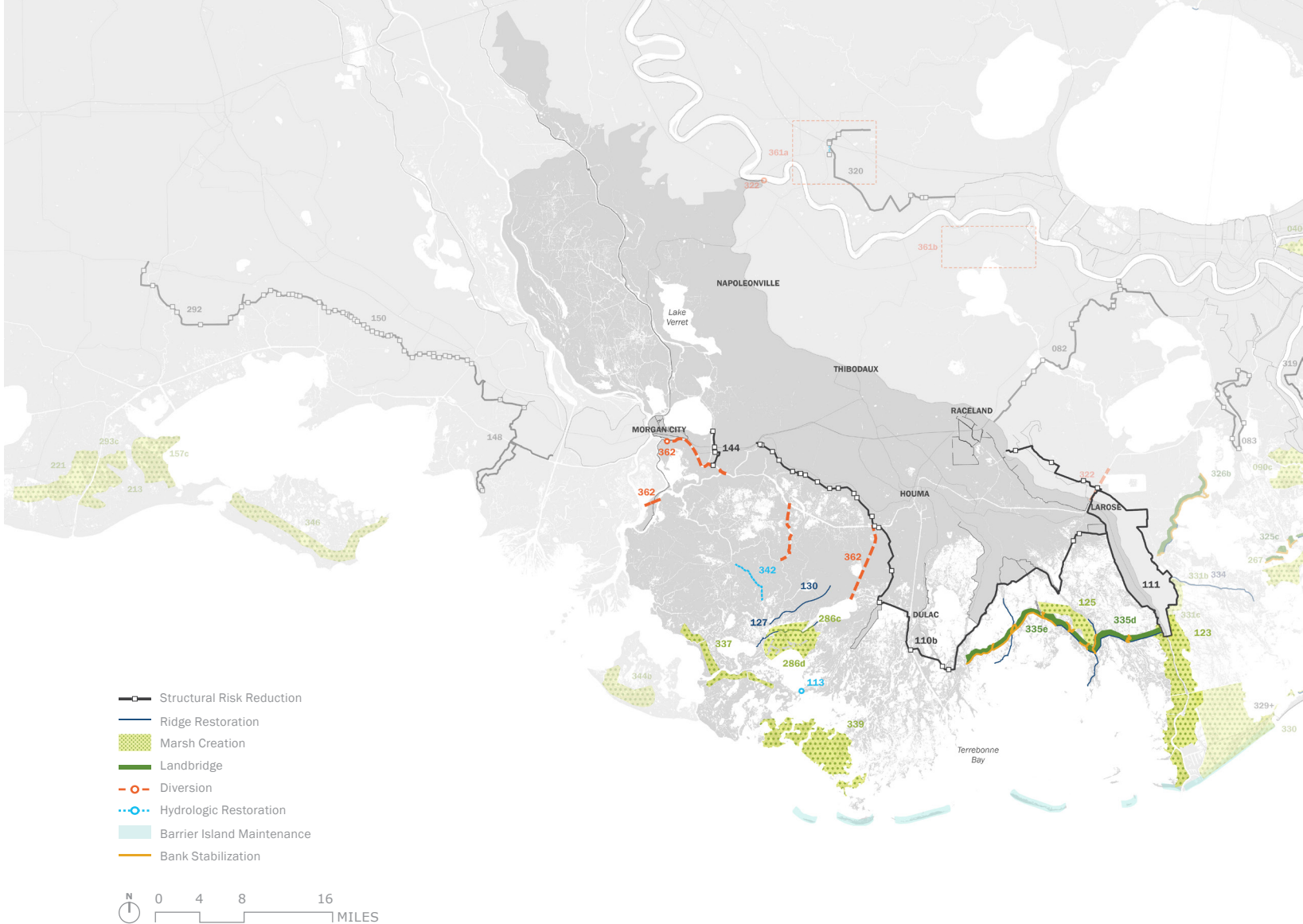
REGIONAL STRATEGY HIGHLIGHT

Ecosystem Function

Restoration projects in the master plan support the function of coastal ecosystems by a variety of different means. Benefits such as maintaining estuarine gradients and providing habitat can be achieved through implementation of the master plan.

Landbridge

Landbridges are linear tracts of constructed marshes oriented across coastal basins. They create habitat, attenuate waves, control the dispersal of sediment, and mitigate saltwater intrusion. They include reinforced channels to allow continued water exchange and navigation. See **Eastern Terrebonne Landbridge Projects (335d-e)** for more information.



TERREBONNE

ABOUT THE REGION

The Terrebonne region spans from Morgan City to Highway 1, including the communities of Houma and Dulac. The name derives from the French words “terre” and “bonne,” which together mean “good earth.”

The region is filled with an interconnected web of bayous after which many of its small towns are named. The region has a series of barrier islands across the Terrebonne and Timbalier bays, including Timbalier Island and the Isles Dernieres Barrier Islands Refuge.

ABOUT THE PROJECTS

For the 2023 Coastal Master Plan, 16 projects were selected for the Terrebonne region. These projects include a variety of restoration measures, such as marsh creation, riverine diversions, ridge restoration, and the cross-basin Eastern Terrebonne Landbridge project. The Central Terrebonne Hydrologic Restoration project was selected to prevent saltwater intrusion from Caillou Lake into Lake Mechant and support the ecosystems and habitat in the area. Nonstructural risk reduction measures and the several structural risk reduction projects selected will reduce the impact of storm surge-based flooding to coastal communities across the region.

