



Lafourche Parish Coastal Projects

PROJECTS IN CONSTRUCTION

Levee Improvements for Gheens Community (NLLD)

GOMESA- Total Cost \$1,000,000

This project will protect the community of Gheens from future hurricane storm surge flooding.

Little Bayou L’Bleu Structure (SLLD)

GOMESA – Total Cost \$1,300,000

Construction of a water control structure on Little Bayou L’Bleu along the Reach L alignment of the Morganza to the Gulf hurricane protection system.

Caminada Headland Beach and Dune Restoration (BA-0045)

Surplus - Total Cost \$86,840

Surplus funds include post-construction monitoring.

HSDRRS Mitigation - WBV (BA-0109)

HSDRRS - Estimated Cost \$126,000,000

This suite of projects provides mitigation for USACE impacts during construction of the West Bank and Vicinity (WBV) Hurricane Storm Damage Risk Reduction System (HSDRRS), and involves the restoration of approximately 1,540 acres of Bottomland Hardwood, Marsh, and Swamp in the Barataria Basin.

Morganza to the Gulf (TE-0064)

STATE and Surplus - Estimated Cost \$177,003,835

This project is designed to provide 100-year protection levels along the federally authorized Morganza to the Gulf alignment in Terrebonne and parts of Lafourche parishes. The project consists of the construction of earthen levees and t-walls, navigation structures, water control structures, and floodgates.

Cut-Off/Pointe Aux Chene Levee (TE-0078)

CDBG - Estimated Cost \$9,714,158

This project consists of elevating approximately 8.5 miles of levee along two sections of earthen levee along the Morganza to the Gulf alignment (Reaches K and L) between Cut Off and Pointe- Aux-Chenes in Lafourche Parish.

SLLD E-North & E-South Levee Lift

Surplus – Estimated Cost \$500,000

Projects involves Levee improvements for reaches E-North and E-South of the Larose to Golden Meadow alignment to an elevation of +15 ft to improve protection in South Lafourche Parish.

Larose to Golden Meadow

Surplus – Estimated Cost \$5,143,400

This project will be used to fund additional improvements within the Larose to Golden Meadow alignment.

PROJECTS IN ENGINEERING AND DESIGN

Caminada Headlands Back Barrier Marsh Creation (BA-0171)

CWPPRA - Estimated Cost \$32,284,094

This project will create and nourish 385 acres of back barrier intertidal marsh behind 3.5 miles of Caminada Headland in Lafourche Parish using material dredged from the Gulf of Mexico. This project will work synergistically with existing Caminada Headland dune and back barrier marsh projects (BA-0045 and BA-0143), expanding the restored back barrier marsh platform and improving the longevity of the barrier shoreline.

East Leeville Marsh Creation and Nourishment (BA-0194)

CWPPRA - Estimated Cost \$35,066,972

The project goal is to create approximately 358 acres and nourish 124 acres of saline marsh east of Leeville in Lafourche Parish using sediment dredged from Caminada Bay

Sediment Diversion Implementation and Program Management (LA-0276)

NFWF

This project will include all work involved in the development of the NFWF Diversion Management program. Program management will be performed by CPRA personnel and contracted support staff and includes the development of full engineering and design scopes for both the Mid-Barataria (BA-0153) and Mid-Breton (BS-0030) diversions.

North Catfish Lake Marsh Creation (TE-0112)

CWPPRA - Estimated Cost \$31,635,887

The project involves the creation of approximately 415 acres and nourishment of 251 acres on the northern shoreline of Catfish Lake in Lafourche Parish using sediment dredged from Catfish Lake.

Terrebonne Basin Barrier Island and Beach Nourishment (TE-0143)

NFWF - Estimated Cost \$150,000,000

This project includes the engineering, design, and construction of beach, dune, and marsh habitat within the Terrebonne Basin barrier shoreline system, and includes restoration efforts on West Belle Headland, Timbalier Island, and Trinity Island.

Grand Bayou Freshwater Reintroduction (TE-0145)

RESTORE MATCHING – Estimated Cost \$412, 722

The main purpose of the project is to continue and complete engineering and design of a project that will ultimately increase the flow of fresh water down Grand Bayou Canal from the GIWW.

Hollywood Canal Closure Structure

GOMESA – NLLD - \$6,527,500

This project will construct canal closure structure with 400 c.f.s. pump capacity on the Hollywood Canal at Prospect St.

Reach L

GOMESA – SLLD - \$6,000,000

The main purpose of the project is for the Design & Construction of approximately 1.5 miles of earthen levee to El. 10.

40 Arpent Canal Levee – Lockport Co. Canal to Butch Hill Station

GOMESA- NLLD - \$6,450,000

This project will improve the 40 Arpent Canal Levee from the Lockport Company Canal to the Butch Hill Pump Station.

Bayou Lafourche Pump Station

GOMESA - \$35,000,000

This project will provide improved pumping capacity for a critical pump station on Bayou Lafourche that will provide freshwater to the marshes in Lafourche Parish.

PROJECTS IN PLANNING

Upper Barataria Basin Flood Management (BA-0211)

USACE - Estimated Total Cost \$3,000,000

The Barataria Basin Flood Risk Management Study will investigate alternatives to address flood risk from tidal surges, coastal storms and heavy rainfall in the area between Bayou Lafourche and the Mississippi River System. The study will evaluate a range structural and non-structural approaches to regulate upper basin stages and storage capabilities. Possible solutions include a combination of small scale levees and floodwalls, conveyance channels, flood gates, tidal exchange structures, flood walls, and pumping stations.

NRDA REC USE PROJECTS

Statewide Artificial Reefs

NRDA – LDWF – Estimated Cost \$6,000,000

This project enhances eleven multipurpose reef sites across coastal Louisiana.

COMPLETED PROJECTS

Projects Completed in FY 2018

Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp (BA-0034-2)

CWPPRA - Total Cost \$6,470,448 / State Dollars \$1,106,484

This project involved the reestablishment of historic hydrologic durations in the Des Allemands Swamp in Lafourche and St. James parishes to maintain swamp elevation, improve swamp water quality, and increase productivity and regrowth of trees. Project features include spoil bank gapping, culvert installation, breaching of internal impediments, reestablishment of natural channels, and site-specific vegetative plantings.

Kraemer Bayou Boeuf Levee Lift (BA-0169)

State - Estimated Cost \$1.2 million

This project will improve and raise approximately 33,000 feet of ring levees surrounding the Kraemer Community, a forced drainage area. The levees were not sufficient during Hurricane Isaac and overtopped.

Projects Completed in FY 2017

Barataria Basin Landbridge Shoreline Protection Phase 3 (BA-0027C)

CWPPRA - Total Cost \$26,351,988 State Dollars \$3,765,298

This CWPPRA project provided additional shoreline protection in Lafourche and Jefferson Parishes, with over 5,500 acres benefitted in total with the last phase for around \$26 million.

Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD (BA-0161)

CIAP - Total Cost \$26,691,418

This project improved the capacity of Bayou Lafourche to allow for flows of up to 1,000 cfs. This project continued the dredging of Bayou Lafourche to a 1,000 cfs channel for an additional 7-12 miles at the location(s) determined.

Larose to Golden Meadow - Larose Sheetpile (TE-0065-SP)

STATE - Total Cost \$8,000,000 / State Dollars \$8,000,000

This project involves the construction of approximately 2400 feet of sheet pile to an elevation of +13 feet along the GIWW at Larose in Lafourche Parish to increase the level of hurricane protection for the adjacent area.

Projects Completed in 2016

Caminada Headland Beach and Dune Restoration Increment 2 (BA-0143)

NFWF – Total Cost \$147,063,387

This project restored and protected beach and dune habitat across the Caminada Headland through the direct placement of approximately 5.4 million cubic yards of sandy material from Ship Shoal (an offshore borrow source). A total of 489 acres of beach and dune habitat were restored.

Breach Management Plan (BA-0170)

STATE - Total Cost \$471,340 / State Dollars \$7,106,511

This project assisted CPRA's Engineering and Project Management divisions in developing a system-wide program for handling breaching that occurs within the barrier island and headland system of the Louisiana coastline. The analysis area extended eastward from Raccoon Island to Scofield Island within the Terrebonne and Barataria Basins. The project included development of identification, classification, and prioritization methodologies with recommendations for breach prevention and response measures.

CIAP Performance Evaluation - Caminada Moreau Subsidence Study (LA-0012-6)

CIAP - Total Cost \$432,793 / State Dollars \$432,793

The Caminada – Moreau Subsidence Study (CMSS) was conceptualized, planned, developed and undertaken to evaluate the existing geological profile of deltaic deposits at foreshore, dune, and backshore locations along the Caminada Moreau; evaluate subsidence in these areas; and monitor subsidence before (for baseline measurement) and after loading sediment for the restoration of Caminada Headland.

Projects Completed in 2015

CIAP Performance Evaluation Borrow Area Management and Monitoring (LA-0012-7)

CIAP - Total Cost \$813,512 / State Dollars \$813,512

The Borrow Area Monitoring and Management (BAMM) performance evaluation involved the collection of geophysical, geotechnical, and water quality data from several borrow areas to understand the evolution of borrow pits for restoration projects (inshore, nearshore, and offshore) over time, with a particular focus on the infilling (rates and types of sediment) and gradient of the pit-slopes as well as potential dredge impacts.

Projects Completed in 2014

Caminada Headland Beach and Dune Restoration (BA-0045)

CIAP - Total Cost \$70,679,580 / State Dollars \$30,000,000

This project restored 303 acres of beach and dune habitat on Caminada Headland in Lafourche Parish (beginning at Belle Pass and extends approximately six miles east towards Bayou Moreau) through the direct placement of approximately 3.3 million cubic yards of sandy material from Ship Shoal (an offshore borrow source).

Larose to Golden Meadow - Flood Protection (TE-0065)

STATE - Total Cost \$19,820,000 / State Dollars \$19,820,000

This project involves modifications and improvements along 23 miles of the federal Larose to Golden Meadow alignment in Lafourche Parish. The project was allocated \$19.82 million in State Surplus funds.

Valentine to Larose (TE-0111)

STATE - Total Cost \$1,000,000 / State Dollars \$500,000

This project involved the engineering, design, survey, repair, rehabilitation and possible construction of approximately 2,000 linear feet of levee along Bayou Lafourche, from the town of Valentine to the town of Larose in Lafourche Parish.

Projects Completed in 2012

West Belle Pass Barrier Headland Restoration (TE-0052)

CWPPRA - Total Cost \$39,422,093 / State Dollars \$5,913,314

This project reestablished the West Belle headland in Lafourche Parish by rebuilding approximately 9,300 linear feet (362 acres) of beach, dune, and back barrier marsh using 4.2 million cubic yards of sediment dredged from the Gulf of Mexico.

Projects Completed in 2010

LA 1 Improvements - Fourchon to Leeville Bridge (BA-0055)

CIAP - Total Cost \$33,000,000 / State Dollars \$18,000,000

This project constructed a five-mile long, two lane elevated highway (two 12-ft lanes and two 8-ft shoulders) along LA-1 approximately 60 miles south of New Orleans in lower Lafourche Parish between Leeville and Port Fourchon. The Phase IA project connects to the Phase IB and Phase IC projects (in Leeville) by relocating LA-1 on a new alignment.

Raising of LA-1 at Golden Meadow Floodgate and Completion of Golden Meadow Lock Structure (TE-0135)

STATE - Total Cost \$18,000,000

This project funded the raising of LA-1 to the 100-year flood elevation and to complete the lock in Bayou Lafourche, both critical elements of the Larose to Golden Meadow Hurricane Protection System.

Projects Completed in 2009

Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2 (BA-0027)

CWPPRA - Total Cost \$32,538,623 / State Dollars \$4,693,293

The objective of the project was to select a cost-effective erosion control technique to stop the erosion on the southwestern shoreline of Bayou Perot and the southeastern shoreline of Bayou Rigolettes in Jefferson and Lafourche parishes. The total length of needed shoreline protection is estimated to be approximately 71,000 feet.

Projects Completed in 2007

Little Lake Shoreline Protection/ Dedicated Dredging Near Round Lake (BA-0037)

CWPPRA - Total Cost \$44,931,412

This project is designed to protect area wetlands, which currently experience high rates of shoreline erosion. This project protects approximately 21,000 feet of Little Lake shoreline, create 488 acres of intertidal wetlands, and nourish an additional 532 acres of fragmented, subsiding marsh.

Grand Bayou Blue Site - Dedicated Dredging (LA-0001-E)

STATE - Total Cost \$1,831,534 / State Dollars \$1,831,534

This project created approximately 38 acres of marsh near Catfish Lake in Lafourche Parish using dredged material from Bayou Blue. The project was implemented through the coastwide State Dedicated Dredging Program.

2017 MASTER PLAN PROJECTS

Restoration Projects: Year 1-10

East Snail Bay Shoreline Protection (002.SP.102)

Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD88 along approximately 7,300 feet of the northeastern shore of Snail Bay south of Little Lake to preserve shoreline integrity and reduce wetland degradation from wave erosion.

Bayou Perot Shoreline Protection (002.SP.106)

Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD88 along approximately 5,900 feet of the western shore of Bayou Perot to preserve shoreline integrity and reduce wetland degradation from wave erosion.

Bayou Lafourche Diversion (03a.DI.01)

Diversion of the Mississippi River into Bayou Lafourche to increase freshwater flow down Bayou Lafourche with 1,000 cfs capacity (modeled with continuous operation at 1,000 cfs, independent of Mississippi River flow).

Terrebonne Bay Rim Marsh Creation Study (03a.MC.03p)

Planning, engineering, and design of marsh creation features to provide benefits to communities in Terrebonne Parish and the Morganza to the Gulf protection system.

Restoration Projects: Year 11-30

Grand Bayou Hydrologic Restoration (03a.HR.100)

Dredging of Margaret's Bayou and Grand Bayou in conjunction with the construction of a fixed crest structure at Grand Bayou and the installation of (5) 48-inch flap-gated culverts on the western bank of Grand Bayou.

West Snail Bay Shoreline Protection (002.SP.103)

Shoreline protection through rock breakwaters designed to an elevation of 3.5 feet NAVD88 along approximately 16,600 feet of the western shoreline of Snail Bay south of Little Lake to preserve shoreline integrity and reduce wetland degradation from wave erosion.

Belle Pass-Golden Meadow Marsh Creation (03a.MC.07)

Creation of approximately 23,200 acres of marsh from Belle Pass to Golden Meadow to create new wetland habitat and restore degraded marsh.

Risk Reduction Projects: Year 1-30

Lafourche - Lower Nonstructural Risk Reduction (LAF.01N)

Project includes floodproofing non-residential properties where 100-year flood depths are 1-3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.

Lafourche - Larose/Golden Meadow Nonstructural Risk Reduction (LAF.02N)

Project includes floodproofing non-residential properties where 100-year flood depths are 1-3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.

Lafourche - Raceland Nonstructural Risk Reduction (LAF.03N)

Project includes floodproofing non-residential properties where 100-year flood depths are 1-3 feet, elevating residential properties where 100-year flood depths are 3-14 feet, and acquiring residential properties where 100-year flood depths are greater than 14 feet.

Upper Barataria Risk Reduction (002.HP.06)

Construction of a levee to an elevation between 12.5 and 15 feet NAVD88 along Highway 90 between the West Bank and Larose. Project includes 204,300 feet of earthen levee, 8,200 feet of T-wall, (4) 10-foot sluice gates, (1) 250-foot barge gate, (2) 40-foot swing gates, and (8) pump stations with a total capacity of 6,837 cfs.

Morganza to the Gulf (03a.HP.02b)

Construction of a levee to an elevation between 15 and 26.5 feet NAVD88 around Houma and Terrebonne Ridge communities from Larose to Humphreys Canal. Project features 471,500 feet of earthen levee, 39,600 feet of T-wall, (22) 6-foot sluice gates, (1) 30-foot stop log, (2) 20-foot stop logs, (13) 56-foot sector gates, (1) 250-foot sector gate, (1) 175-foot sector gate, (1) 125-foot sector gate, (1) 110-foot sector gate, (1) 30-foot sector gate, (1) 110-foot lock gate, (1) 30-foot roller gate, (4) 40-foot roller gates, (1) 56-foot barge gate, (1) 30-foot barge gate, and (4) pump stations.

Larose to Golden Meadow (03a.HP.20)

Improvements to the existing Larose to Golden Meadow levee system, including raising to an elevation between 12 and 21 feet NAVD88. Project features approximately 249,900 feet of earthen levee and approximately 6,700 feet of T-wall.

Note: Barrier islands and headlands will be addressed through CPRA's Barrier Island Program. Lafourche Parish may also receive some benefits from sediment diversion projects in adjacent parishes.