



# Jefferson Parish Coastal Projects

# **PROJECTS IN CONSTRUCTION**

# West Bank and Vicinity (BA-0066)

GNO-HSDDRS - Estimated Cost \$4.3 billion/State Dollars: \$831 million

This project provides 100-year protection levels to the Greater New Orleans area on the west side of the Mississippi River in St. Charles, Jefferson, Orleans, and Plaquemines Parishes through rehabilitation or new construction of over 76 miles of levees and structures.

# Jean Lafitte Tidal Protection (BA-0075-1)

State - Estimated Cost \$29.4 million/State Dollars \$19 million

This project will provide flood protection improvements by raising 15,840 linear feet of existing earthen levee. This includes approximately 7,600 linear feet of concrete capped, steel sheet pile floodwall, 7,000 linear feet of bulkhead and 8 flood gates.

# HSDRRS Mitigation – WBV (BA-0109)

GNO-HSDDRS - Estimated Cost \$126 million

NOTE: These are being funded by LERRDS as part of the maintenance program

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

# Northwest Turtle Bay Marsh Creation (BA-0125)

CWPPRA - Total Cost \$31,083,470

This project involves the creation of approximately 423 acres and nourishment of approximately 337 acres of marsh in Northwest Turtle Bay in Jefferson Parish using sediment dredged from Turtle Bay or Little Lake.

# Previously Authorized Mitigation – WBV (BA-0154)

# HSDRRS - Estimated Cost \$11 million

USACE mitigation projects, 100% federally funded for impacts during construction of the West Bank and Vicinity (WBV) Pre-Katrina (2005) Hurricane protection projects, consisting of approx. 1,217 acres of swamp and bottomland hardwood habitats. Two Specific Projects: Bayou Segnette acquisition/improvement/management of bottomland hardwood adjacent to Bayou Segnette State Park; St. Charles- acquisition of swamp and acquisition/improvement/management of bottomland hardwood in St. Charles Parish.

# SELA – HSDRRS (PO-0057)

HSDRRS - Estimated Cost \$1.2 billion

Project reduces damages due to rainfall flooding in Orleans and Jefferson Parishes through increases in pump station capacity, and improvements in surface and sub-surface drainage features.

## Grand Isle Bayside Segmented Rock Breakwater Project and Habitat Enhancements

Surplus – Estimated Cost \$6,500,000

Construction of 16 350-ft. bayside near-shore segmented breakwaters on the north (bay) side of Grand Isle to bridges the existing gap in bayside breakwaters previously constructed Jefferson Parish to provide storm surge flood protection for the island.

### Lafitte Area Independent Levee District Tidal Protection

Surplus – Estimated Cost \$5,000,000

Project involves supplemental funding to expedite construction of one or more segments of the Lafitte Tidal Protection alignment currently being implemented by the Lafitte Area Independent Levee District in Jefferson Parish.

### Rosethorne Basin Phase 1 & 2 (LAILD)

GOMESA – Estimated Cost \$11,000,000

Rosethorne Tidal Protection Project. Phase 1 – Construct 1.9 mi. of floodwalls/bulkheads/gates to +7.5 ft. Phase 2 – Improve 3.5 mi. levee to +8.5 ft.

## Grand Isle Beach Stabilization (GILD)

GOMESA – Estimated Cost \$10,357,808

The Grand Isle and Vicinity Beach/Dune Restoration and Stabilization Project is located on the western end of the island, near the Caminada Pass Jetty. The project includes the restoration and shoreline protection of approximately 1-mile of the Grand Isle beach and dune system.

### **Goose Bayou Penn Levee**

GOMESA – Estimated Cost \$11,700,000

This project will complete the Goose Bayou Penn Levee, a segment of the Lafitte Tidal Protection levee alignment.

### **PROJECTS IN HEADED TO BID**

### **Rosethorne Tidal Protection** (BA-0075-2)

State - Estimated Construction Cost \$23 million

This project will provide flood protection improvements consisting of new earthen levees, approximately 8,010 linear feet of reinforced concrete floodwall, and flood gates.

### **PROJECTS IN ENGINEERING AND DESIGN**

### **Mid-Barataria Sediment Diversion** – (BA-0153)

NFWF - Estimated Cost \$1.4 billion

Sediment diversion into Mid-Barataria near Myrtle Grove to build and maintain land, 75,000 cfs capacity (modeled at 5,000 cfs for Mississippi River flows below 200,000 cfs; variable flows to capacity between 200,000 and 1,250,000 cfs calculated using a linear function; diverts exactly 75,000 cfs when flows are at 1,250,000 cfs).

### Barataria Bay Rim Marsh Creation and Nourishment (BA-0195)

CWPPRA - Estimated Cost \$23.5 million

The goal of this project is to create approximately 251 acres of marsh and nourish approximately 266 acres of marsh (517 acres total) with dredged material from Barataria Bay.

## West Grand Terre Beach Nourishment and Stabilization (BA-0197)

**RESTORE - Estimated Cost \$65 million** 

This project would complete Engineering and Design to build an estimated 12,700 feet of beach and dune, restore up to 66 acres of back barrier marsh and rock revetment to protect restored marsh.

### **Queen Bess Island Restoration** (BA-0202)

**RESTORE - Estimated Cost \$17.5 million** 

This project is designed to restore suitable colonial waterbird nesting and brood rearing habitat on the island from its current size of less than 5 acres to approximately 36 acres. This will be accomplished by hydraulically dredging sediment from a nearby suitable offshore sand source and disposing of it within existing rock ring that outlines the island. The island will be pumped to a post-construction settled elevation of +5.5 NAVD88. Small limestone will be deposited on most of the perimeter of the island to create a low maintenance beach-like feature for nesting terns and skimmers. The island will be planted with suitable vegetation to provide optimal nesting substrate (oyster grass, wire grass, marsh elder, & black mangrove).

### Northeast Turtle Bay Marsh Creation & Critical Areas Shoreline Protection (BA-0206)

CWPPRA - Estimated Cost \$43.5million

The goal of this project is to restore marshes and protect shoreline along the northeast rim of Turtle Bay. The project will create approximately 377 acres of marsh and nourish approximately 300 acres of marsh with material dredged from Turtle Bay. It will also protect approximately 2,870 feet of critical shoreline and prevent further enlargement of two primary water exchange points.

#### Large-Scale Barataria Marsh Creation (BA-0207)

NRDA - Estimated Cost \$178,251,000

This project involves the creation of approximately 1,400 acres of marsh near the south shore of The Pen in Jefferson and Plaquemines parishes using sediment from the Alliance Anchorage and Willis Point Anchorage borrow areas. The project is an increment of the Large-Scale Marsh Creation Project Component E identified in the NRDA Draft Strategic Restoration Plan for the Barataria Basin.

### Grand Isle & Vicinity Breakwater (BA-0210)

WRDA - Estimated Cost \$15,000,000

The purpose of this project is to stabilize the western portion of beach and dune in Grand Isle in Jefferson Parish. The stabilization will consist of the construction of beach, dune, and segmented rock breakwaters.

#### Sediment Diversion Implementation and Program Management (LA-0276)

NFWF – Estimated Cost TBD

This project will include all work involved in the development of the Diversion Management program. This will be performed by CPRA personnel and CH2M and will initially result in the development of full Engineering and Design scopes for both the Mid-Barataria and Mid-Breton diversions.

### **PROJECTS IN PLANNING**

#### **WBV Risk Reduction** (BA-0212)

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

This study seeks to determine if it the work necessary to sustain the 1% level of risk reduction is technically feasible, environmentally acceptable, and economically justified

## NRDA REC USE PROJECTS

### **Elmer's Island Access**

#### NRDA-LDWF - \$6,000,000

Suite of recreations use projects on Elmer's Island including operation of a shuttle service along Caminada Beach; installation of enhanced hydrology features; construction of kayak launches; and funding for road maintenance and trash abatement.

#### WHARF Phase 1

NRDA– City of Westwego - \$995,000

Construction of a boardwalk for fishing and wildlife viewing fishing piers, and restroom facilities; installation of lighting features.

### **The Wetlands Center**

NRDA– Town of Lafitte - \$2,000,000

Construction of an educational and cultural venue adjacent to the existing Lafitte Community Center with wetlands and natural history exhibits.

#### Jean Lafitte National Historic Park Improvements

NRDA-U. S. Department of Interior - \$1,284,062

Construction and reconfiguration of boardwalks and trails; replacement and installation of wayside exhibits.

### **Bayou Segnette State Park Improvements (BA-0213)**

NRDA/STATE PARKS - Estimated Total Cost \$2,126,724

This project would make improvements to infrastruction in Bayou Segnette State Park, including: 1) upgrades to an existing boating area to address soil subsidence issues affecting recreational opportunity; 2) upgrades to a playground to comply with ADA requirements; and 3) repairs to road and parking areas damaged by repeated flooding from storms and soil subsidence.

#### Grand Isle State Park Improvements (BA-0214)

### NRDA/CPRA - Estimated Total Cost \$6,126,967

The Grand Isle State Park Improvements project was submitted by the Louisiana Office of State Parks and selected as one of the alternatives for the LA TIG RP/EA, to restore lost recreational use in the State of Louisiana. This project will provide improved fishing and recreational use of the state park and also provide protection of coastal, nearshore marine habitats, and inland infrastructure. The project will upgrade the existing fishing pier, extend the rock jetty on the east shore of the park and extend the jetty on the north end of the park.

# **Statewide Artificial Reefs**

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

This project enhances eleven multipurpose reef sites across coastal Louisiana.

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# **Projects Completed in 2018**

## Permanent Canal Closures and Pump Stations (PO-0060)

HSDRRS - Estimated Cost \$614.8 million

In June 2006, Congress passed Public Law 109-234 giving the USACE authorization and appropriations to reduce storm surge risk to Orleans and Jefferson Parish by the design and construction of permanent protection at three outfall canals. This will be accomplished by modifying the 17th Street, Orleans Avenue, and London Avenue drainage canals and installing pumps and closure structures at or near the lakefront.

# Projects Completed in 2017

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

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

The purpose of this project was to reduce or eliminate shoreline erosion for about 22,800 feet along the west bank of Bayou Perot and the north shore of Little Lake through construction of rock dike shoreline protection.

## Mississippi River Long Distance Sediment Pipeline (BA-0043-EB)

CIAP - Total Cost \$66,310,461/State Dollars: \$14,752,953

The project goals were to use sustainable sediment sources from the Mississippi River to create and nourish marsh in an area where sediment is limited, create a reusable corridor for future restoration projects, and begin restoration of the Barataria Landbridge. The project created and nourish approximately 415 acres of marsh.

# **Bayou Dupont Marsh and Ridge Creation** (BA-0048)

CWPPRA - Total Cost \$38,324,646/State Dollars \$5,644,637

The Bayou Dupont Marsh and Ridge Creation project used 2.15 million cubic yards of sediment from the Mississippi River to create 277 acres of marsh, nourish 93 acres of marsh, and create 20 acres (11,000 linear feet) of ridge.

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

NFWF - Total Cost \$147,063,587

This project will restore and protect 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 will be restored.

# **Bayou Dupont Sediment Delivery – Marsh Creation #3 and Terracing** (BA-0164)

CWPPRA -Total Cost \$18,733,494/State Dollars \$2,622,525

The primary goal of this project was to create and nourish approximately 415 acres of emergent intermediate marsh with sediment from the Mississippi River. The proposed project involved dredging sediment and pumping the sediment via pipeline into an area of open water and broken marsh.

# Lake Pontchartrain and Vicinity (PO-0063)

## HSDRRS - Total Cost \$3,852,000,000

This project was designed to provide 100-year protection levels to the Greater New Orleans area on the east side of the Mississippi River in St. Charles, Jefferson, Orleans, and St. Bernard Parishes. It is through rehabilitation or new construction on over 150 miles of the levees and structures that will make up the Lake Pontchartrain and Vicinity Hurricane Protection System.

# Living Shoreline Demonstration Project (PO-0148)

CIAP - Total Cost \$14,300,000/State Dollars \$2,550,000

The primary goal of this project was to provide shoreline protection to 3 miles of marsh shoreline in St. Bernard Parish around Eloi Point and 1500 feet of shoreline in Jefferson Parish near Camanada Pass by installing various living shoreline products. Secondary goals were to stimulate oyster growth on the shoreline protection features, thereby enhancing biodiversity in the immediate area.

# **Projects Completed in 2016**

# Grand Isle-Fifi Island Breakwaters (BA-0168)

State - Total Cost \$6,000,000/State Dollars: \$6,000,000

The project constructed rock breakwaters along the southwestern portion of Fifi Island to reduce erosion on Fifi Island and the bay side of Grand Isle in order to protect commercial and residential infrastructure, wetlands, and fisheries.

# Projects Completed in 2015

# Storm-Proofing of Interior Pumping Stations: (BA-0074)

GNO-HSDRRS - Total Cost \$340,000,000

This project repaired and improved features of interior pump stations of Orleans and Jefferson Parish under the Hurricane and Storm Damage Risk Reduction System (HSDRRS). These improvements were done to allow the pump stations to remain operable during and after future storm events. Examples of stormproofing include raising critical components to avoid submersion during floods and adding backup power and fuel sources.

# **Projects Completed in 2012**

# Jonathan Davis Wetland Protection (BA-0020)

CWPPRA - Total Cost \$30,136,616/State Dollars \$2,906,343

The goal of this project was to restore the natural hydrologic conditions of the area and reduce shoreline erosion. The goal was partly accomplished through constructing a series of water control structures. Construction unit 4 consists of 4,180 linear feet of rock rip rap revetment, 15,110 linear feet of concrete sheetpile wall, plugs, and marsh creation.

# South Shore of the Pen Shoreline Protection and Marsh Creation (BA-0041)

CWPPRA - Total Cost \$17,475,047/State Dollars \$2,433,757

Approximately 1,000 feet of concrete pile and panel wall and 10,900 feet of rock revetment were constructed along the south shore of The Pen and Bayou Dupont. Dedicated dredging was used to create approximately 74 acres of marsh, and nourish an additional 107 acres of marsh, within the triangular area bounded by the south shore of The Pen, the Barataria Bay Waterway (Dupre Cut), and the Creole Gas Pipeline Canal.

# **Projects Completed in 2010**

## Dedicated Dredging on the Barataria Land Bridge (BA-0036)

State/CWPPRA/CIAP - Total Cost \$36,281,893/State Dollars \$4,816,351

Approximately 5,368,000 cubic yards of material was placed in two contained marsh creation areas to construct approximately 1,211 acres of intertidal marsh at a final elevation of +2.5 feet NAVD88. Approximately 3,901,000 cubic yards of material was placed in adjoining fill areas to nourish approximately 1,578 acres of marsh.

### Mississippi River Sediment Delivery System – Bayou Dupont (BA-0039)

CWPPRA - Total Cost \$26,797,363/State Dollars \$3,389,023

The goal of this project was to create/restore 493 acres of brackish marsh by delivering via pipeline dredged material from the Mississippi River to an adjacent area within the Barataria Basin.

## East Harvey Canal Interim Hurricane Protection (BA-0152)

State - Total Cost \$4,000,000/State Dollars \$4,000,000

This project involved installing a combination of sheet pile and earthen flood protection, ultimately to an elevation of 10.0 feet along the east side of the Harvey Canal from the sector gate at Lapalco Boulevard to the existing levee at the west end.

# **Projects Completed in 2009**

## Barataria Basin Landbridge Shoreline Protection – Phase 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. The length of protection is estimated to be approximately 71,000 feet.

### Grand Isle and Vicinity (BA-0073)

HSDRRS - Total Cost \$25,000,000

The Grand Isle and Vicinity Hurricane Protection Project consists of a 7.5 mile vegetated sand dune extending the length of Grand Isle's gulf shore, a jetty to stabilize the western end of the island at Caminada Pass, and an offshore breakwater system.

# 2017 COASTAL MASTER PLAN PROJECTS

# **Risk Reduction Projects Year 1-30**

# Upper Barataria Risk Reduction (002.HP.06)

Construction of a levee to an elevation between 12.5 and 15 ft. NAVD88 along Highway 90 between the West Bank and Larose.

### Grand Isle Nonstructural Risk Reduction (JEF.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.

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# Lafitte/Barataria Nonstructural Risk Reduction (JEF.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.

# **Risk Reduction Projects Year 31-50**

## Greater New Orleans High Level (001.HP.04)

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 NAVD88.

# Restoration Projects: Year 11-30

## Large-Scale Barataria Marsh Creation – Component E (002.MC.05e)

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.

**Restoration Projects: Year 31-50** 

## Lower Barataria Marsh Creation- Component A (002.MC.04a)

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.