



DRAFT

Integrated Ecosystem Restoration & Hurricane Protection in Coastal Louisiana: Fiscal Year 2019 Annual Plan



committed to **our coast**







With the passage of Act 8 of the First Extraordinary Session of 2005 (Act 8), the Louisiana Legislature mandated the integration of hurricane protection activities (e.g., levee construction) and coastal restoration activities (e.g., river diversions or marsh creation). Act 8 also created the Coastal Protection and Restoration Authority Board (CPRA Board) and tasked it with oversight of these activities. The Office of Coastal Protection and Restoration (OCPR) was designated as the implementation arm of the CPRA Board. To avoid confusion, the 2012 Louisiana Legislature changed the name of the state agency from OCPR to the Coastal Protection and Restoration Authority (CPRA).

The CPRA Board, with the assistance of CPRA, is required by Act 523 of the 2009 Regular Legislative Session, amended by Act 604, to produce an Annual Plan that inventories projects, presents implementation schedules for these projects, and identifies funding schedules and budgets. This Fiscal Year (FY) 2019 Annual Plan provides an update on the state's efforts to protect and restore its coast and describes the short-term and long-term results that citizens can expect to see as the state progresses toward a sustainable coast.

Fiscal Year 2019 Annual Plan: Integrated Ecosystem Restoration and
Hurricane Protection in Coastal Louisiana.

Submitted to the Senate Natural Resources Committee;
House Natural Resources and Environment Committee Senate;
Transportation, Highways and Public Works Committee House;
Transportation, Highways and Public Works Committee;
by The Coastal Protection and Restoration Authority of Louisiana.
In accordance with R.S. 49:214.5.3 and R.S. 49:214.6.1

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The seal of the State of Louisiana is a large, faint watermark in the background. It features an eagle with wings spread, perched on a bundle of cotton. The words "SEAL OF THE STATE OF LOUISIANA" are written in a circular border around the eagle. The word "CONFIDENCE" is written at the bottom of the seal.

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State of Louisiana



JOHN BEL EDWARDS
GOVERNOR

Dear Friends,

I am pleased to submit to you the Coastal Protection and Restoration Authority's *Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana: Fiscal Year 2019 Annual Plan*. In this plan, a three-year revenue and expenditure outlook is provided, and project implementation schedules are identified. In addition, some notable projects completed or in construction are highlighted.

This past year, Louisiana's coastal program created or restored thousands of acres using dredged material for marsh creation projects like Oyster Bayou in Cameron Parish and Bayou Bonfouca in St. Tammany Parish and many other areas in between. In addition, significant sections of Louisiana's barrier island chain were restored, including Elmer's Island and Whiskey Island. Several protection projects were also implemented, including levee enhancements in the Cut-Off/Pointe Aux Chene area, Jean Lafitte, Morgan City, Bayou Boeuf in Lafourche Parish, and the Falgout Canal Road levee in Terrebonne Parish.

Included in this year's Annual Plan are several restoration projects which qualify to utilize settlement funds from the *Deepwater Horizon* oil spill. This money is being used to address injuries to natural resources in Louisiana, to create marsh and living shoreline projects, and to continue the advancement of two major sediment diversion projects. Also noteworthy in FY2019 is the state's first payment under Phase II of the Gulf of Mexico Energy Security Act (GOMESA). GOMESA revenues will largely go to fund hurricane protection projects such as levees, flood gates, pump stations, and surge barriers throughout coastal Louisiana.

Also, this past year, our legislature unanimously approved the third iteration of Louisiana's Coastal Master Plan which identifies the implementation and sequence of a \$50 billion suite of coastal projects over the next 50 years. Although CPRA does not have \$50 billion in the bank, I can assure you that we are working every day, with a tremendous sense of urgency, to identify funds and to develop innovative financing approaches to deliver these projects.

Since 2007, CPRA has dredged 130 million cubic yards to restore or benefit 41,305 acres of land, constructed 60 miles of barrier islands and berms, improved 297 miles of levees, and secured \$20 billion for protection and restoration in 20 parishes. Our achievements have been significant over the last ten years, and there is much more to accomplish.

Under Governor John Bel Edwards' administration, the CPRA and its Board will continue to work for the people of Louisiana who raise their families and make a living on our working coast. They deserve the chance to continue doing so for many generations to come, and we are dedicated to this goal.

Sincerely,

Johnny Bradberry
Chairman of the Board, Coastal Protection and Restoration Authority

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Purpose of the Annual Plan

The Annual Plan presents a spending plan for the upcoming fiscal year, as well as two additional fiscal year cycles. For the upcoming fiscal year, specific projects, funding and implementation schedules are identified. Three years of revenues, expenditures, and projects are overviewed herein. Additional information and projections are included to foster a better understanding of project implementation schedules and funding.

Origin of the Annual Plan

In 2007, in response to Act 8, the State released an Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast (2007 Coastal Master Plan). The 2007 Coastal Master Plan was passed unanimously in the Louisiana Legislature and its primacy was subsequently reaffirmed by Gov. Bobby Jindal in Executive Order BJ2008-7, which directed all state agencies to administer their activities, to the maximum extent possible, in accordance with the 2007 Coastal Master Plan's recommendations.

To accommodate the dynamic nature of coastal processes, Act 8 specifies that the Coastal Master Plan is a living document that will be updated every five years to incorporate new data and planning tools as indicated. To comply with the mandate set forth in Act 8, two updates of the Coastal Master Plan have been submitted to the Louisiana Legislature and unanimously approved, both in March 2012 and April 2017.

Act 523 of the 2009 Regular Legislative Session, amended by Act 604, directed the CPRA Board, with the assistance of CPRA, to produce an Annual Plan each year that inventories integrated coastal protection projects, presents implementation schedules for these projects, and identifies funding schedules and budgets.*

Evolution of the Annual Plan

Historically, the state's Annual Plans for coastal projects provided: 1) an inventory of projects for which the state planned to expend money and resources for a given fiscal year, and 2) recommendations for allocating Coastal Protection and Restoration Funds to those projects. The FY 2010 Annual Plan was the first plan to address the new integrated planning and prioritization directives specified in Act 8. The FY 2019 Annual Plan fulfills the legislative mandate of Act 8 by presenting CPRA's three-year program for funding and implementing projects during FY 2019–FY 2021.

Additionally, the FY 2019 Annual Plan builds on the process which began in the FY 2010 plan and provides an expanded discussion of CPRA's progress in protecting and restoring the coast. Section 2 provides a summary of some of the progress and accomplishments achieved through FY 2018; Section 3 outlines an implementation plan for FY 2019; Section 4 gives fiscal projections for FY 2019 to 2021; and the Appendices provide detailed information on CPRA projects, programs and initiatives.

*La R.S. 49:214.2(11) defines "integrated coastal protection" as "plans, projects, policies, and programs intended to provide hurricane protection or coastal conservation or restoration, and shall include but not be limited to coastal restoration; coastal protection; infrastructure; storm damage reduction; flood control; water resources development; erosion control measures; marsh management; diversions; saltwater intrusion prevention; wetlands and central wetlands conservation, enhancement, and restoration; barrier island and shoreline stabilization and preservation; coastal passes stabilization and restoration; mitigation; storm surge reduction; or beneficial use projects."



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Section 1 Executive Summary

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Section 1

Executive Summary

Accomplishments and Notable Projects

Some accomplishments and notable projects completed or in construction in Fiscal Year 2018 include:

- **Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp (BA-0034-2):** Increasing the health of the 2,400 acres of swamp ecosystem by increasing water flow via gaps cut in the spoil bank, breaching internal impediments, and reestablishing natural channels. Native vegetation will also be planted at the site.
- **Oyster Bayou Marsh Creation and Terracing (CS-0059):** Rebuilding and nourishing 740 acres of marsh in Cameron Parish using sediment dredged three miles offshore and pipelined to the area behind the Gulf Beach Highway and a section of the 8.7 miles of beach and dune restored in 2014.
- **Rockefeller Refuge Gulf Shoreline Stabilization (ME-0018):** Constructing a 2.8 mile rock breakwater along the gulf shoreline of the Rockefeller Wildlife Refuge in Cameron Parish. The shore has been retreating at an average rate of 46 feet per year, causing marsh loss and threatening habitat of the refuge's endangered species, including Whooping Cranes.
- **Bayou Bonfouca Marsh Creation (PO-0104):** Restoring 620 acres of marsh, nourishing 310 additional acres and reestablishing the Lake Pontchartrain shoreline rim that was breached during Hurricane Katrina near Bayou Bonfouca, allowing saltier water to degrade the marsh.
- **Lost Lake Marsh Creation and Hydrologic Restoration (TE-0072):** Restoring the structural framework between Lake Pagie and Bayou Decade, increasing the delivery of fresh water, sediments, and nutrients into 749 acres of marshes north and west of Lost Lake, and constructing a terrace field to reduce fetch in open water areas.
- **Cut-Off/Pointe Aux Chene Levee (TE-0078):** Refurbishing approximately 2.1 miles of existing levee near the town of Cut Off in Lafourche Parish to a minimum constant crest elevation of 10 feet.
- **Caillou Lake Headlands (TE-0100):** Restoring another Louisiana barrier island. Part of the Caillou Lake Headlands that used to be Isle Derniere, Whiskey Island is being refurbished with sand dredged from offshore to create 172 acres of marsh habitat and 730 acres of dune and beach habitat.
- **Jean Lafitte Tidal Protection (BA-0075-1):** Providing flood protection improvements by raising 15,840 linear feet of existing earthen levee, including approximately 14,000 linear feet of concrete capped, steel sheet pile floodwall, and flood gates. Led by the Lafitte Area Independent Levee District.
- **Kraemer Bayou Boeuf Levee Lift (BA-0169):** Assisting the North Lafourche Conservation, Levee and Drainage District to enhance the 33,000 foot ring levee surrounding the community south of Lac des Allemands by enhancing drainage and clearing woody vegetation encroaching on the levee in preparation for a future levee lift.

- **Spanish Pass Ridge and Marsh Restoration (BA-0191):** Part of the Louisiana Coastal Area Beneficial Use of Dredged Material Program. Sediment routinely dredged from the Mississippi River by the U.S. Army Corps of Engineers (USACE) for channel maintenance is being beneficially used near Venice in Plaquemines Parish to restore 5,000 feet of historic ridge backed by a marsh platform approximately 450-foot wide that will serve as a means to reduce wave energy on the leeward side of the marsh.
- **Permanent Canal Closures and Pump Stations (PO-0060):** A design-build project of the USACE to reduce storm surge risk to Orleans and Jefferson Parishes by the design and construction of permanent protection and pump stations on three outfall canals that failed following Hurricane Katrina in 2005 at 17th Street, Orleans Avenue, and London Avenue.
- **Falgout Canal Road Levee (TE-0063):** This Terrebonne Parish project involves the construction of the Reach E levee along Falgout Canal Road. The project supports a larger effort that will provide protection to the Bayou Dularge communities, encompassing over 2,300 homes within a 13,413-acre area, which suffered severe flooding from Hurricanes Gustav and Ike.
- **St. Mary Backwater Flooding (TE-0116):** As part of the parish master plan to improve the Morgan City levee system to 100-year level of flood protection, the St. Mary Parish Consolidated Gravity Drainage District No. 2 is adding elevation to a half-mile stretch of land beneath the road bed of Highway 70, an important evacuation route that serves as a levee near Lake End Park, and replacing the capacity of two older pump stations with a new one on the bank of Lake Palourde.
- **Morgan City/St. Mary Flood Protection (TV-0055):** Continuing the advancement of the parish master plan for improvements to the Morgan City levee system, this project is providing flood protection improvements by raising or improving 2.5 miles of the current levee system from Lake End Park to Justa Street in the Morgan City area, reducing the risk of flooding from tropical storm events.
- **New Orleans to Venice (BA-0067):** The ongoing project consists of 20 areas of work constructing 37 miles of back levees and 29 miles of co-located Mississippi River Levees from St. Jude on the west bank down to the vicinity of Venice, and on the east bank, approximately 16 miles of back levee from Phoenix to Bohemia.
- **St. Charles West Bank Hurricane Protection Levee (BA-0085):** Constructing a system of levees, drainage structures, and pump stations to provide flood protection to the communities on the West Bank of the Mississippi River in St. Charles Parish.
- **HSDRRS Mitigation – WBV (BA-0109):** The West Bank and Vicinity Hurricane and Storm Damage Risk Reduction System (HSDRRS) mitigation effort is designed to compensate for damages inflicted upon wetland habitats through the construction of the Federal levee system after Hurricane Katrina. The project involves restoring fresh marsh, bottomland hardwood, and swamp habitats in the Barataria Basin, the same hydrologic basin in which the levee-related wetland impacts occurred.
- **Cameron-Creole Watershed Grand Bayou Marsh Creation (CS-0054):** Restoring and nourishing more than 600 acres of marsh with material dredged from Calcasieu Lake to benefit fish and wildlife resources in the Cameron Prairie National Wildlife Refuge and adjacent brackish marshes.

Anticipated Projects

- **West Bank and Vicinity (BA-0066):** The USACE is working to complete 100-year level of flood protection on the west side of the Mississippi River through rehabilitation or new construction of more than 90 miles of levees and structures as part of the HSDRRS system for greater metropolitan New Orleans.
- **Morganza to the Gulf (TE-0064):** Continuing progress towards 100-year levels of risk reduction measures for the protection of vulnerable communities, businesses, and infrastructure in Terrebonne and parts of Lafourche parishes using levees and t-walls, navigation structures, water control structures, and floodgates.
- **SELA (PO-0057):** Reducing 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.
- **Lafitte Area Levee Repair (BA-0082):** Repairing damage to the earthen levees/banks along Bayou Barataria in the Lafitte area using available rock material donated by BP.
- **Violet Canal North Levee Alignment (PO-0170):** Constructing a levee/floodwall in the vicinity of the Violet Canal to maintain flood protection for the public and provide mutual benefit to the citizens within the territorial jurisdictions of Orleans Levee District and Lake Borgne Basin Levee District.

Projects anticipated to begin or continue construction in Fiscal Year 2019 include:

- CS-0066 Cameron Meadows Marsh Creation and Terracing
- PO-0170 Violet Canal North Levee Alignment
- TV-0063 Cole's Bayou Marsh Restoration
- ME-0018 Rockefeller Refuge Gulf Shoreline Stabilization
- TE-0078 Cut-Off/Pointe Aux Chene Levee
- BA-0067 New Orleans to Venice
- BA-0085 St Charles West Bank Hurricane Protection Levee
- BA-0075-1 Jean Lafitte Tidal Protection
- BA-0109 HSDRRS Mitigation- WBV
- TE-0072 Lost Lake Marsh Creation and Hydrologic Restoration
- CS-0054 Cameron-Creole Watershed Grand Bayou Marsh Creation
- TE-0116 St Mary Backwater Flooding
- BA-0066 West Bank and Vicinity
- TE-0064 Morganza to the Gulf
- PO-0057 SELA
- BA-0125 Northwest Turtle Bay Marsh Creation

The FY 2019 Annual Plan contains budget projections (Tables ES-1 and ES-2) that show projected revenues and the amount of funds that would actually be needed to accomplish the proposed implementation plan over the next three fiscal years. Resources in FY 2019 will be focused on constructing coastal projects that have already been planned and/or designed (Figure ES-1). Funding projections include state budget surplus funds allocated for coastal projects. The implementation plan and funding projections presented in the FY 2019 Annual Plan represent a snapshot in time based on the available funding sources. The state is actively exploring new sources of funding to ensure that the coastal program maintains its current momentum.

New project opportunities may arise if additional funds become available after the approval of the FY 2019 Annual Plan, and conditions may necessitate reprogramming of existing funds to address changes on the ground. If necessary, reprogramming of existing and new funds would occur, with approval from the CPRA, to ensure that limited coastal program funds are allocated in accordance with Master Plan objectives. Such flexibility allows the coastal program to respond effectively to unforeseen events that take place outside the legislatively mandated planning cycle.

We encourage you to join us as we move forward in our efforts to protect and restore coastal Louisiana. The CPRA Board conducts monthly meetings to provide a forum to hear updates and receive public receive comment on work. In addition, many tools are available online to allow greater visibility of our progress and to provide increased access to information. These resources and information about them can be accessed online at www.coastal.la.gov.

► **Table ES-1: Projected Three-Year Revenues (FY 2019 - FY 2021)**

Revenue Sources	FY 2019	FY 2020	FY 2021	Program Total (FY 2019 - FY 2021)
CPR Trust Fund Annual Revenue ^{1,2}	\$14,379,625	\$13,600,000	\$13,200,000	\$41,179,625
CPR Trust Fund Carried Forward	\$14,746,774	TBD	TBD	\$14,746,774
GOMESA ^{1,3}	\$70,000,000	\$70,000,000	\$70,000,000	\$210,000,000
GOMESA Carried Forward ⁴	\$65,190,150	\$87,679,870	\$49,630,813	\$202,500,834
DOTD Interagency Transfer ¹	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
CWPPRA Federal Funds ⁵	\$74,630,825	\$76,289,212	\$76,493,168	\$227,413,206
Surplus '07, '08, '09 Carried Forward	\$124,533,205	\$17,847,474	\$14,189,960	\$156,570,639
Community Development Block Grants	\$4,545,928	\$692,388	\$0	\$5,238,316
Capital Outlay Funds (Previously Appropriated)	\$8,705,000	TBD	TBD	\$8,705,000
NRDA Revenues (<i>Deepwater Horizon</i>)	\$94,045,087	\$435,363,012	\$342,989,562	\$872,397,660
NFWF Revenues (<i>Deepwater Horizon</i>)	\$78,079,656	\$165,721,027	\$122,563,957	\$366,364,641
RESTORE Revenues (<i>Deepwater Horizon</i>)	\$43,748,005	\$55,894,004	\$178,434,962	\$278,076,970
LDNR Mitigation Funds ⁶	\$300,000	\$300,000	\$300,000	\$900,000
LDNR Beneficial Use Funds ⁶	\$150,000	\$150,000	\$150,000	\$450,000
LDWF Interagency Transfer ⁷	\$1,000,000	\$0	\$0	\$1,000,000
MOEX Settlement ⁸	\$352,343	\$131,250	\$1,057,030	\$1,540,623
OM&M Federal Funds ⁹	\$27,759,800	\$15,619,145	\$13,160,767	\$56,539,712
LOSCO Funding ¹⁰	\$89,384	\$89,384	\$84,384	\$263,152
Project Billing ¹¹	\$23,254,531	\$23,000,000	\$23,000,000	\$69,254,531
Capital Outlay Request Submitted for HSDRRS 30-Year Payback	\$0	\$98,432,119	\$98,432,119	\$196,864,238
Total Projected Revenue	\$649,510,313	\$1,064,808,885	\$1,007,686,722	\$2,722,005,920

Notes

1. Annually recurring revenue source to be spent in accordance with the Louisiana Constitution, specifically State Law Section 214.5.4(E) and the provisions within paragraph (3).
2. Estimate tied to mineral revenue.
3. GOMESA funds must be disbursed to the applicable states by the end of the federal fiscal year. FY 2019 GOMESA funds are anticipated to be received between April 2019 (4Q19) and September 2019 (1Q20).
4. Represents carry-forward of unexpended funds from prior-year GOMESA payments.
5. Represents anticipated Federal reimbursement for CWPPRA projects led by CPRA in which the State is initially incurring more than its 15% cost share during project implementation.
6. Supplemental funding to augment construction of eligible projects (specific projects to be determined at a later date).
7. Supplemental funding to augment construction of project ME-0018.
8. Represents anticipated balance as of FY 2019 of an initial deposit of \$6.75 million of funds from the MOEX settlement.
9. Represents anticipated Federal reimbursement for CWPPRA and WRDA OM&M activities led by CPRA in which the State is initially incurring more than its cost share during project implementation.
10. Represents reimbursement of expenditures for CPRA (non-DWH) oil spill response activities.
11. Represents salary and other work-in-kind reimbursements for work performed on projects in funding programs listed in the table above.

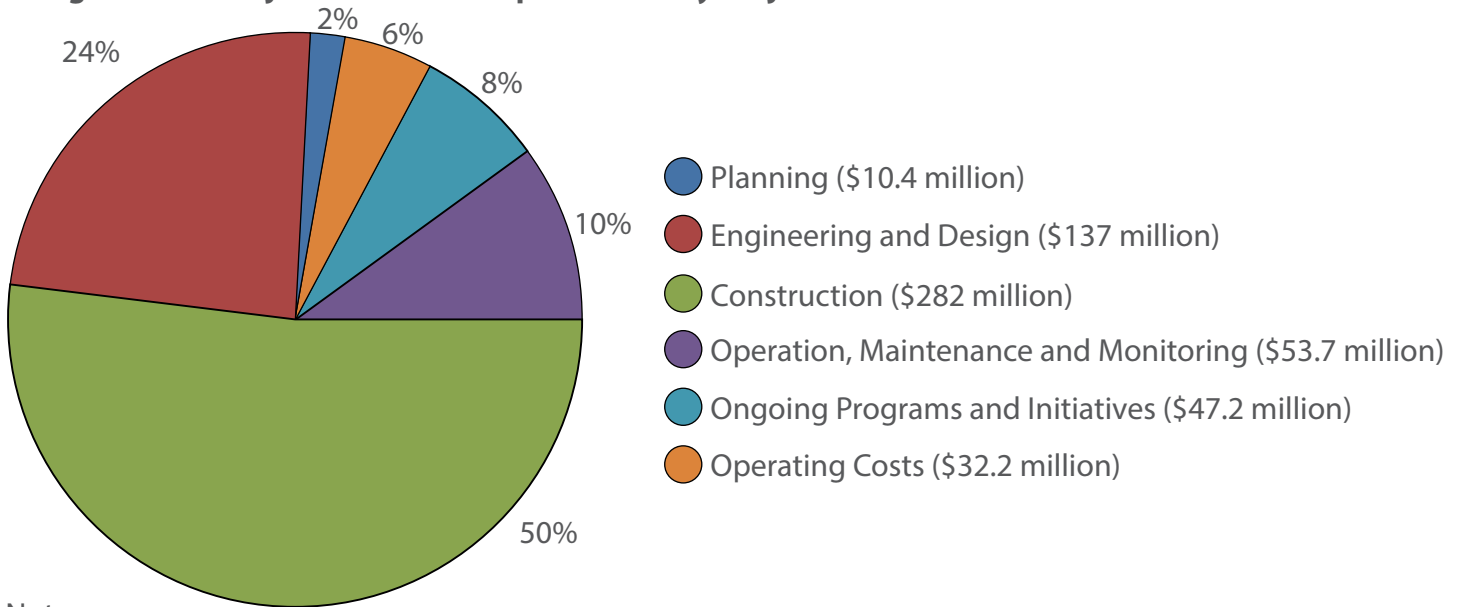
► **Table ES-2: Projected Three-Year Expenditures¹ (FY 2019 - FY 2020)**

Program / Funding Source	FY 2019	FY 2020	FY 2021	Program Total (FY 2019- FY 2021)
CWPPRA State Expenditures (not including Surplus expenditures) ²	\$13,630,380	\$13,710,788	\$13,506,832	\$40,847,999
CWPPRA Federal Expenditures ³	\$74,630,825	\$76,289,212	\$76,493,168	\$227,413,206
WRDA Project Expenditures (not including Surplus expenditures)	\$0	\$0	\$0	\$0
Surplus Projects and Program Expenditures	\$124,533,205	\$17,847,474	\$14,189,960	\$156,570,639
Community Development Block Grants	\$4,545,928	\$692,388	\$0	\$5,238,316
HSDRRS 30-Year Payback ⁴	\$0	\$98,432,119	\$98,432,119	\$196,864,238
MOEX Project Expenditures	\$352,343	\$131,250	\$1,057,030	\$1,540,623
Capital Outlay Project Expenditures	\$8,705,000	TBD	TBD	\$8,705,000
State-Only Project Expenditures (Non-Surplus)	\$212,953	\$94,146	\$40,003	\$347,102
NRDA Expenditures (<i>Deepwater Horizon</i>)	\$94,045,087	\$435,363,012	\$342,989,562	\$872,397,660
NFWF Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$78,079,656	\$165,721,027	\$122,563,957	\$366,364,641
RESTORE Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$43,748,005	\$55,894,004	\$178,434,962	\$278,076,970
LDNR Mitigation Expenditures ⁵	\$300,000	\$300,000	\$300,000	\$900,000
LDNR Beneficial Use Expenditures ⁵	\$150,000	\$150,000	\$150,000	\$450,000
LDWF Interagency Transfer Expenditures ⁶	\$1,000,000	\$0	\$0	\$1,000,000
OM&M- State Expenditures (not including Surplus or GOMESA expenditures)	\$10,434,118	\$5,789,759	\$5,069,363	\$21,293,240
OM&M- Federal Expenditures ⁷	\$27,759,800	\$15,619,145	\$13,160,767	\$56,539,712
GOMESA Expenditures	\$47,510,280	\$108,049,057	\$72,129,618	\$227,688,955
Operating Costs (see Tables 4-3 and 4-4) ⁸	\$32,192,863	\$35,077,751	\$36,005,417	\$103,276,031
Total Planned Expenditures	\$561,830,442	\$1,029,161,132	\$974,522,758	\$2,565,514,332

Notes:

1. Represents proposed expenditures provided that commensurate level of funding is received.
2. Because CWPPRA projects compete for funding annually, CWPPRA expenditures as presented in Appendix B (which include projected expenditures for approved projects only) do not adequately capture likely CWPPRA expenditures in outlying years. The State's estimated CWPPRA expenditures for FY 2020 - FY 2021 are therefore based on prior years' expenditures.
3. Represents anticipated Federal reimbursement for CWPPRA projects led by CPRA in which the State is initially incurring more than its 15% cost share during project implementation.
4. Payback is based on current HSDRRS construction schedule; payback will not commence until completion of HSDRRS construction activities. According to current USACE estimates, payback will commence in September 2019 with an estimated annual payment of \$98 million. CPRA has made a request through the Capital Outlay process for this funding.
5. Supplemental funding to augment construction of eligible projects (specific projects to be determined at a later date).
6. Supplemental funding to augment construction of project ME-0018.
7. Represents anticipated Federal reimbursement for CWPPRA and WRDA OM&M activities led by CPRA in which the State is initially incurring more than its cost share during project implementation.
8. In the event of a declared emergency, CPRA may need to expend Operating Costs in support of the State's disaster response efforts. Up to 75 percent of these expenditures would be reimbursable by FEMA.

► **Figure ES-1: Projected FY 2019 Expenditures by Project Phase**



Notes

- Construction includes Beneficial Use (\$2 million)
- OM&M includes BIMP (\$2.9 million) and Repair/Rehabilitation of Projects (\$1.1 million)

TOTAL Expenditures
\$562 million





Section 2

Progress to Date:
Results on All Fronts

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Section 2

Progress to Date: Results on All Fronts

Project Highlights

In addition to forecasting revenues and expenditures for the coming fiscal year and beyond, this Annual Plan chronicles some of CPRA's success in accomplishing Coastal Master Plan goals and projects during the past fiscal year. CPRA oversees planning, design, and construction of an increasing number of protection and restoration projects and is making significant strides in ecosystem restoration to counter one of the biggest environmental disasters in our nation's history. Progress toward achieving a sustainable coastal Louisiana has never been more evident. Some of last year's most notable accomplishments include:

Oyster Bayou Marsh Creation and Terracing (CS-0059)

To restore some of the dense marsh that once protected areas of Cameron Parish from storm surge, CPRA transported sediment from three miles offshore to create and nourish marsh in an area behind the Gulf Beach Highway. That roadway was the only thing separating the area east of Holly Beach from the Gulf of Mexico until CPRA rebuilt 8.7 miles of beach and dune in 2014. The marsh creation project encompasses four areas totaling 740 acres, including a 135-acre expansion of the original footprint. The sediment is held in place by over 50,000 linear feet of earthen containment dikes. Additionally, twenty 450-foot-long terraces were constructed in the northeast section of the project to further reduce wave erosion.



This once dense marsh suffered from the decline of the beachfront that protected it from the salt water of the adjacent Gulf of Mexico. After having restored the beach, CPRA has now reestablished the marsh platform that can buffer areas to the north from the surge of gulf water pushed inland by tropical storms and hurricanes.

Creating a marsh habitat involves more than just filling an area with sediment. This ecosystem will benefit from the elements planned and achieved prior to the pumping of offshore fill material. Tidal creeks and ponds were constructed and retention levees were strategically gapped to achieve a functional marsh that supports estuarine fisheries' access.



Bayou Bonfouca Marsh Creation (PO-0104)

The marsh on the north shore of Lake Pontchartrain between Lacombe and Slidell in St. Tammany Parish was fairly stable before Hurricanes Katrina and Rita ravaged the area in 2005. Since then it has been turning into open water at an increasing rate, mostly through wind-driven erosion and shoreline breaches that allowed salt water to intrude into the fresher interior marshes. This project used sediment dredged from the lake to create 620 acres of marsh and nourish 310 additional acres. Several historic marsh ponds have been restored, and tidal creeks connect these ponds to facilitate water exchange and fisheries access.



Sediment dredged from Lake Pontchartrain is achieving the project goal of creating 620 acres of marsh habitat and nourishing 310 acres of low salinity brackish marsh in open water areas adjacent to Bayou Bonfouca in the Big Branch Marsh National Wildlife Refuge.

Reestablishing the lake shoreline is important to the resiliency of the project, enabling the return of a healthy and protective marsh ecosystem, as exemplified by the success of a similar marsh creation project completed in 2009 in the adjacent Goose Point area.



Caillou Lake Headlands (TE-0100)

The rebuilding of Louisiana's first line of coastal defense—our chain of barrier islands—has added another link with the continued restoration of Whiskey Island, part of the Caillou Lake Headlands that used to be the famed Isle Derniere. Almost five miles of beach and dune are being created using sand from Ship Shoal in the Gulf of Mexico, along with restoration of the marsh platform along the western half of the island. Restoration of the island provides a buffer to help reduce the full force and effects of wave action, saltwater intrusion, storm surge and tidal currents on associated estuaries and wetlands. It also provides wetland habitat for a diverse number of plant and animal species.



Beach and dune construction on the eastern end of the island has also been extended to the west (top of the picture) where the creation of a back marsh now completes the transformation. Whiskey Island is located about 18 miles southwest of Cocodrie in Terrebonne Parish.

Approximately 10.4 million cubic yards of dredged material was pipelined from a borrow area nine miles offshore to restore more than 900 acres of barrier island and marsh habitat. The project was paid for with funds from the Deepwater Horizon Natural Resources Damage Assessment (NRDA) Early Restoration Program.



Jean Lafitte Tidal Protection (BA-0075-1)

Completion of this project is another step in the goal of providing a ring levee system for the historic Jean Lafitte community south of New Orleans. While no storm surge in the past 30 years has been higher than six feet, the new levee system will stand at 7.5 feet with the capacity to be raised higher in the future. This project in the Fisher Basin area included the raising of 15,840 linear feet of existing earthen levee, with approximately 14,000 linear feet of concrete-capped steel sheet pile floodwall, and flood gates. CPRA is currently working on two additional projects with the Lafitte Area Independent Levee District.



The need for increased levee protection is substantiated by the fact that the Jean Lafitte area has been damaged by multiple flooding disasters since 2005, including the inundation seen here from Hurricane Isaac in 2012.

The three miles of floodwalls and earthen levee improvements include six swing gates and five roller gates that can be closed during expected high tides and storm surges.



Falgout Canal Road Levee (TE-0063)

Located near the community of Theriot in Terrebonne Parish, this levee (also known as the Morganza to the Gulf Reach E Levee) connects to an existing forced drainage levee and a proposed Morganza to the Gulf Hurricane Protection levee, enclosing the communities of Bayou Dularge within the protection system. More than 2,300 homes within that 13,413-acre area suffered severe flooding from Hurricanes Gustav and Ike. The project also expands the zone of beneficial Atchafalaya River influence, reducing salinity and enhancing distribution of fresh water and its associated nutrients.



The marshes above Falgout Canal Road have become hydrologically isolated from their historical flow patterns because of manmade navigational changes. Now the prevailing hydrologic influence is confined to southern tidal flows, resulting in higher salinity and land loss in historically fresh and intermediate marshes.

Built in two increments, the levee totals more than 4.3 miles in length along Falgout Canal Road between Bayou Dularge Road and the Houma Navigation Canal. Built to a height of 12 feet, it will settle into its design height of 10 feet to achieve a protection level of 25 years.



The LSU Center for River Studies

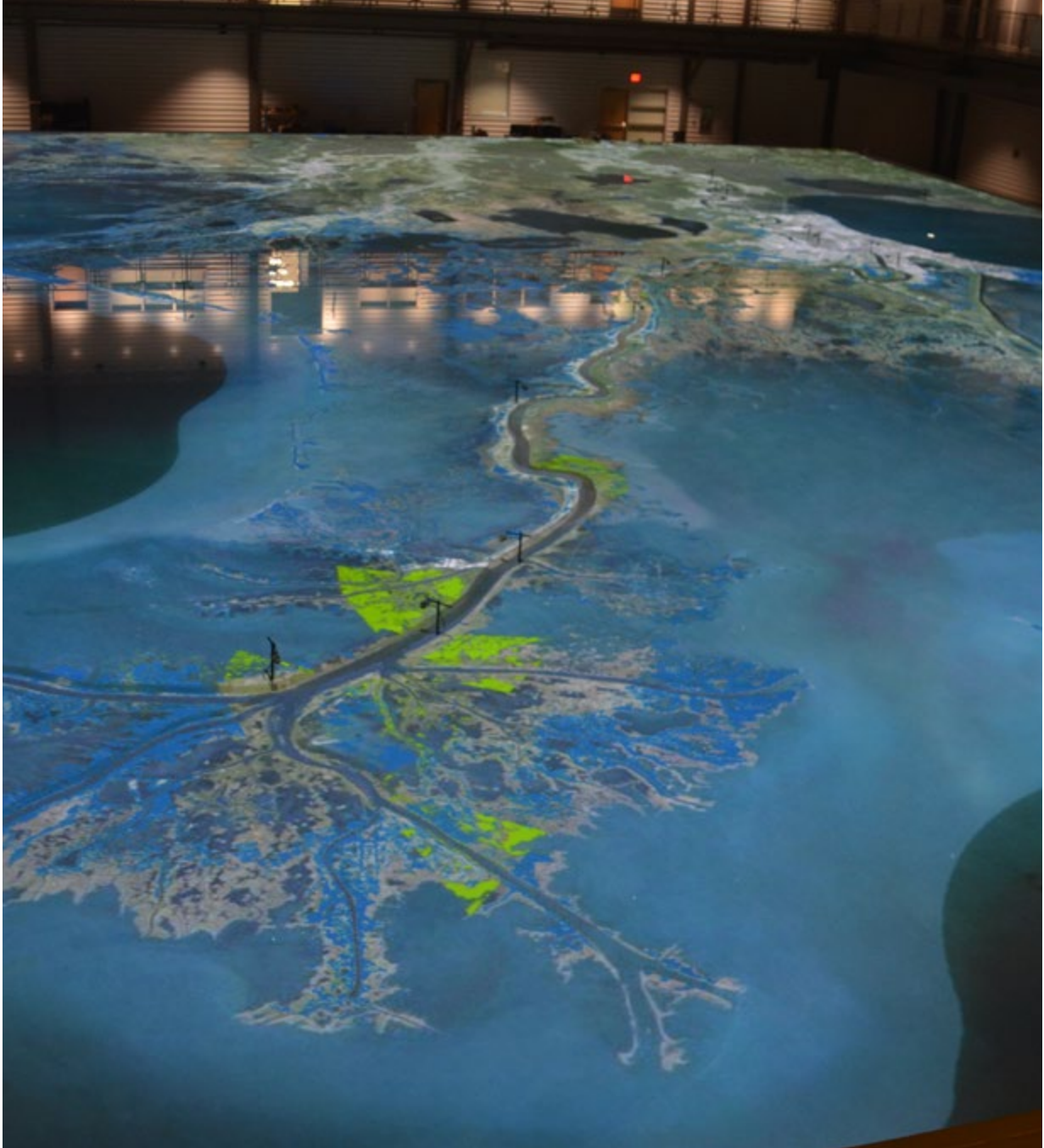
This collaborative partnership between CPRA and LSU showcases Louisiana's working delta, the state's coastal program, and research dedicated to coastal restoration and river management. Within its walls is one of the world's largest physical models of the Mississippi River with the ability to produce qualitative land-building results associated with sediment diversions in the lower river. The Center provides an opportunity for researchers, scientists, and engineers to develop coastal knowledge that can be exported to other coastal communities around the world. It is located on The Water Campus in Baton Rouge, between CPRA headquarters and The Water Institute of the Gulf.



The LSU Center for River Studies is located in Baton Rouge, between CPRA headquarters and The Water Institute of the Gulf. One of the first completed buildings on The Water Campus, this world-class research and engineering center will serve as a focal point for public, private, and non-profit collaboration to develop innovative solutions for the challenges facing coastal communities in Louisiana and all over the world.

In addition to the river model, the LSU Center for River Studies also features a large interactive coastal exhibit area featuring five distinct coastal-related educational themes. The model serves as an important tool for research, and for engagement with coastal stakeholders and visitors.





Overhead equipment projects the landscape onto the 3-dimensional representation of the lower Mississippi River, starting at Donaldsonville and flowing into the Gulf of Mexico. Based on exact parameters of the river's physical and dynamic properties, the model flows water and sediment across a 14,000 square mile section of Southeast Louisiana, Terrebonne, Barataria, Breton Sound, and Pontchartrain Basins.

For decades, sediment diversion projects have been a staple of every coastal plan that has been published. The question is rarely whether we should build them, but more so how and where to build them, how to pay for them, and how to operate them once built. That all has changed over the past five years since Louisiana's 2012 Coastal Master Plan made it an absolute priority to develop and implement river diversion projects that focus on sediment capture and land building, and since the recent *Deepwater Horizon* Oil Spill settlement has made funding more certain.

CPRA and United States Army Corps of Engineers (USACE) have worked together since the 2012 Coastal Master Plan on the Mississippi River Hydrodynamic and Delta Management Study to develop cutting edge technical models to better understand and predict the effects of using river resources for large-scale restoration projects such as Mississippi River sediment diversions on the river as well as its adjacent basins. These models have led to improvements in our understanding of river and estuarine dynamics and to the development of river and basin wide models to support project implementation in Barataria and Breton basins.

The 2012 Coastal Master Plan called for eight sediment diversions along the Mississippi River. Over the past several years, CPRA has conducted in-depth analyses on the Lower Breton (50,000 cfs), Lower Barataria (50,000 cfs), Mid-Breton (5,000 cfs), and Mid-Barataria (50,000 cfs) diversion projects in order to determine which projects should be prioritized for engineering and design and construction. As such, each project was modeled to predict project effects on variables such as land building, salinity, sediment transport, nutrients, and water levels. As part of this analysis, the state also considered innovative marsh creation projects that could be implemented in conjunction with sediment diversion projects in order to enhance sediment capture and build more land.

This modeling effort helped inform CPRA's decision in Fall 2015 to recommend that the Mid-Breton and Mid-Barataria sediment diversion projects move forward to preliminary engineering and design. The purpose of these projects will be to divert sediment-laden water from the Mississippi River to the adjacent basins. By re-establishing a connection between the Mississippi River and the Basin, these projects will restore historic deltaic sediment deposition necessary to build, maintain, and sustain critical coastal lands.

Over the next three years, CPRA will work to optimize operations, formulate the final design, and apply for appropriate construction permits. More specifically, work on the Mid-Barataria Environmental Impact Statement (EIS) began during the spring of 2017, followed by engineering and design work in late 2017. An EIS is a document required by the National Environmental Policy Act (NEPA) to evaluate the impact on human environments for a proposed action. As part of the EIS process, significant public engagement will occur and the document will clearly and transparently describe the environmental effects of the proposed Mid-Barataria Sediment Diversion. This action is the next step in the state's expedited plans to implement projects that will protect and restore coastal Louisiana. The process will include development a draft EIS which will be released for public comment, public hearings on the draft EIS, and the development of a final EIS to address public comments prior to USACE's decision on the permit.

In addition to the formal required engagement in the permitting process, CPRA is committed to providing numerous opportunities for public engagement:

- Visit with CPRA Staff Members during our recurring visits to coastal Louisiana. For a schedule of upcoming visits, please visit www.coastal.la.gov/calendar
- Attend a CPRA Board Meeting to engage with CPRA leadership (schedule is posted at www.coastal.la.gov/calendar).
- Visit www.coastal.la.gov to learn more about this project and other coastal restoration efforts.
- Email us at coastal@la.gov to request a meeting.
- Follow CPRA on social media for relevant updates.

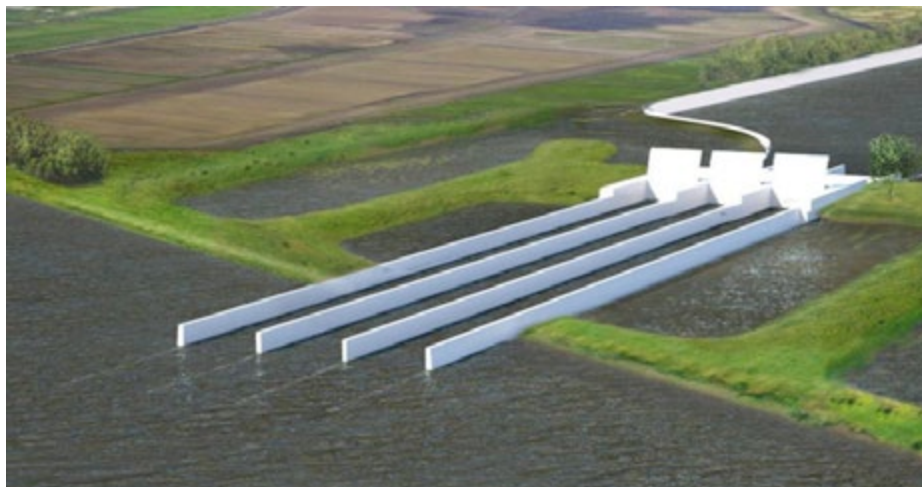
The funds utilized to conduct the studies described and the future engineering and permitting work was made available through criminal settlements associated with the *Deepwater Horizon* oil spill. The settlements identify approximately \$1.27 billion to be directed to the National Fish and Wildlife Foundation (NFWF) specifically dedicated for barrier island and diversion projects in Louisiana.



Proposed General Locations of the Mid-Barataria and Mid-Breton Diversion Projects



Proposed Mid-Barataria Sediment Diversion Project Layout



Sediment Diversion Conceptual Design

2017 Coastal Master Plan Update

Louisiana's Comprehensive Master Plan for a Sustainable Coast was unanimously adopted by the Louisiana Legislature in April 2017. The Coastal Master Plan is the vehicle by which the CPRA articulates a clear statement of priorities to focus development and implementation efforts to achieve comprehensive coastal protection and restoration for the state.

As CPRA carries forth the planning efforts detailed in the 2007 and 2012 Coastal Master Plans, the 2017 plan continues to build on the past and establishes clear priorities for the future through an integrated and comprehensive approach. As with previous plans, the 2017 Coastal Master Plan was developed with world-class science and engineering expertise and extensive engagement and input from citizens and stakeholders in an effort to focus our resources wisely.

The Coastal Master Plan also provides important information to Louisiana's coastal citizens. Information and tools are available to help Louisiana coastal residents assess their current and future storm-surge flood risk, and recommendations for flood-proofing and home elevation are provided with suggestions that guide actions to reduce future damages and economic losses.

Five key priorities were recognized in the 2017 Coastal Master Plan that place an emphasis on communities, focus on flood risk and resilience, incorporate new project ideas and information, improve upon the models and analysis based on the best available science, and expand partnerships and collaboration. The 2017 plan provides a list of projects that build or maintain land and reduce flood risks that will be studied, planned, designed, constructed, operated, and monitored. CPRA acknowledges the the cost of continued land loss as well as potential effects of protection and restoration project actions on local communities and businesses, and to our regional and national economies.

The 2017 Coastal Master Plan documents and appendices are available to view and/or download at CPRA's website, www.coastal.la.gov

Emphasizing Communities

Coastal restoration and protection goals ultimately intend to support the people who live and work in coastal Louisiana. The 2017 Coastal Master Plan places great emphasis on understanding continued land loss, as well as potential effects of protection and restoration project actions on local communities and businesses, as well as our regional and national economy. That's why we created Appendix B – People in the Landscape – which reviews the 2017 Coastal Master Plan results as they relate to Louisiana's coastal residents. The appendix discusses issues of special relevance to people who live and work in south Louisiana, with a particular emphasis on explaining the implications of rising sea levels.

What's At Stake

If the latest "worst case" sea level rise estimates prove to be accurate, then coastal communities around the world will all face tremendous risks. Louisiana will be no different, especially considering the fact that much of our coast is also experiencing some degree of subsidence. Louisiana has already lost at least 1,900 square miles of land since the 1930s, and we know we will lose more. In fact, our latest predictions show that if we do nothing, we stand to lose in the range of 2,250 to 4,100 additional square miles of land – our homes, our jobs, and our culture at stake.

Taking Action Today For Tomorrow's Good

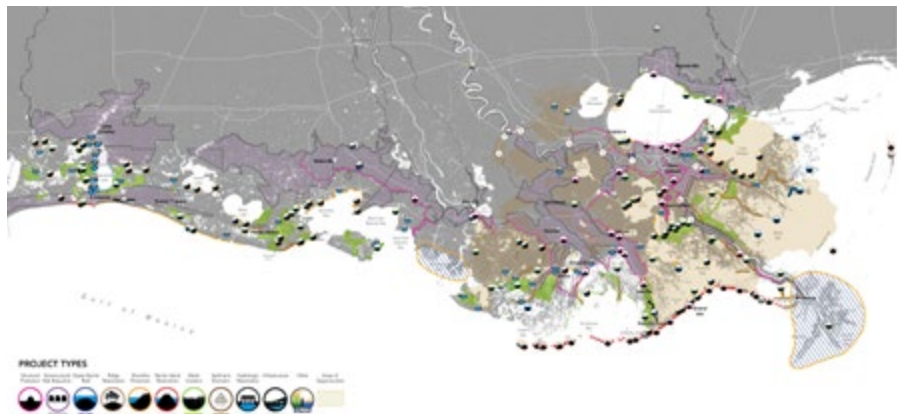
The 2017 Coastal Master Plan focuses on identifying and prioritizing high-performing projects that could be implemented over the next 10 years, while also planning for the next 50. The plan recommends a diversity of projects to build land and reduce storm-surge in order to balance short-term needs with long-term goals. In all, the master plan outlines projects that cost, in present value, approximately \$50 billion. By year 50, these projects provide land building benefits of 800 to 1,200 square miles and reduce economic damage by \$150 billion when compared to no action.



Master Plan Data Viewer

The Master Plan Data Viewer is an interactive tool that enables coastal Louisiana residents to view potential flood risk to their community or property over time as well as to view land loss projections and various socio-economic factors across the coast. It also provides updated information on the implementation of projects in order that citizens can be aware of our coastal program progress. The Master Plan Data Viewer encourages resilience awareness and promotes access to resources that can help communities reduce their storm-surge flood risk.

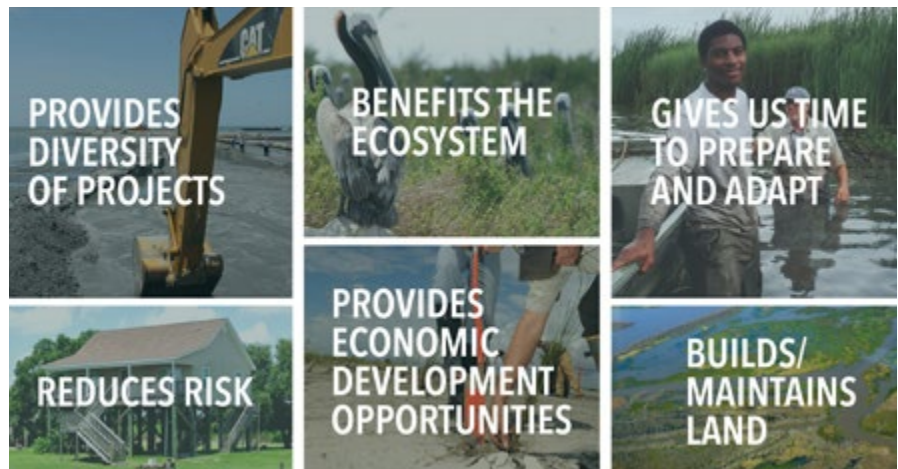
Access the Master Plan Data Viewer at <http://cims.coastal.louisiana.gov/masterplan/>



What The Plan Delivers

Coastal program investments will not only provide direct restoration and risk reduction benefits, but will also provide tremendous economic development opportunities for Louisiana and its residents. The unprecedented investment in coastal restoration and protection will continue to put Louisiana at the forefront of using science and innovation to plan a sustainable future for our coastal communities and our valuable ecosystem. Louisiana is proactively preparing for a bright future in an ever- changing landscape.

The 2017 Coastal Master Plan identifies more than \$17.7 billion in marsh creation using dredged material, \$5 billion in sediment diversions, and more than \$2 billion in other types of restoration projects that benefit 800 square miles of coast. The plan also identifies \$19 billion in structural and \$6 billion in nonstructural risk reduction projects that would reduce expected annual damages from flooding by \$150 billion over 50 years.



Focusing on Flood Risk Reduction and Resilience

In an effort to use all of the tools available to reduce communities' storm surge flood risk, different types of nonstructural measures and refined policies were explored and suggested to help communities improve their resilience.

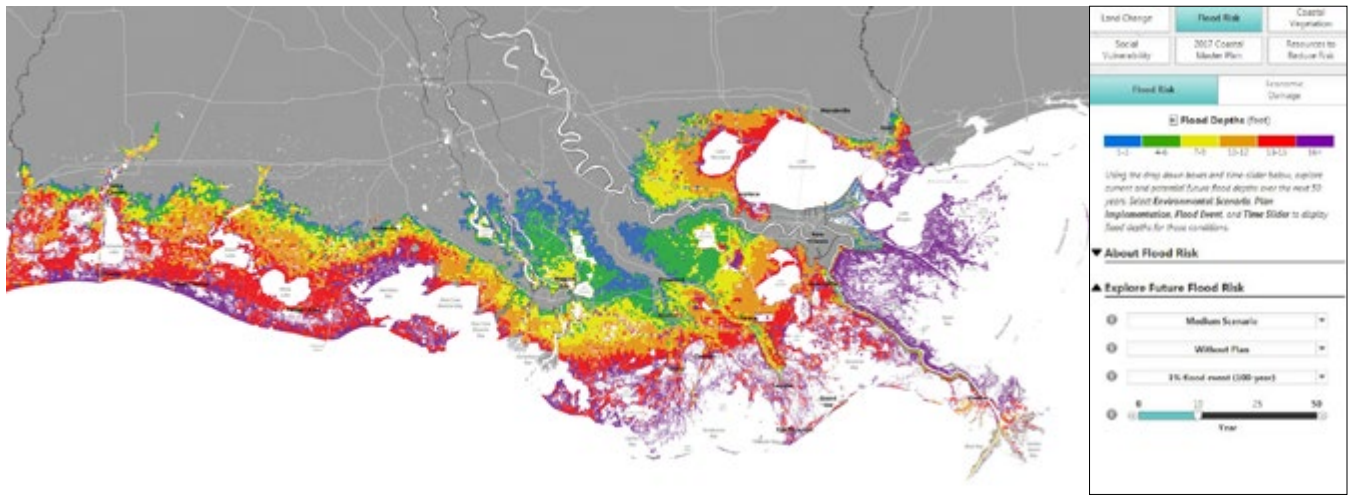
The 2017 Coastal Master Plan presents a more detailed path forward for nonstructural project recommendations, implementation procedures, and policy recommendations. In addition, CPRA also expanded outreach through the creation of a new, interactive web-based viewer to help residents better understand their storm-surge flood risk now and in the future.

This innovative online tool provides Louisiana coastal residents with access to the state's best information about how our coast may change in the future, as well as resources to make communities and properties more resilient.

This information can be used by Louisiana state agencies, coastal stakeholders, and community advocates in coastal planning and hazard mitigation efforts. In addition, a variety of resources are provided to enable homeowners and business owners to take steps towards reducing their flood risk. Please be encouraged to visit the online tool to explore your own community through the following link: <http://cims.coastal.louisiana.gov/masterplan/>

Expanding Partnerships and Collaboration

Because a successful plan is built on local knowledge, input from a diverse range of coastal stakeholders and extensive dialogue with the public, the many partnerships developed for the 2012 Coastal Master Plan continued for the 2017 Coastal Master Plan. These partnerships included a coastal stakeholder advisory group — the Framework Development Team — as well as focus groups that represented our communities, landowners, recreational interests, and commercial activities (fisheries, navigation, and energy and industry). Throughout the process, these stakeholder and focus groups met to review and discuss key master plan developments, engaged with ongoing sediment diversion planning, and provided valuable feedback and input to help guide the process with regard to their respective interest groups. CPRA also coordinated more closely with key groups such as floodplain managers, hazard mitigation specialists, other state agencies, and NGOs. Furthermore, CPRA reached out to the public in new ways to better share information related to our changing landscape, communities' storm-surge flood risk, and solutions to create a more resilient and sustainable coast.



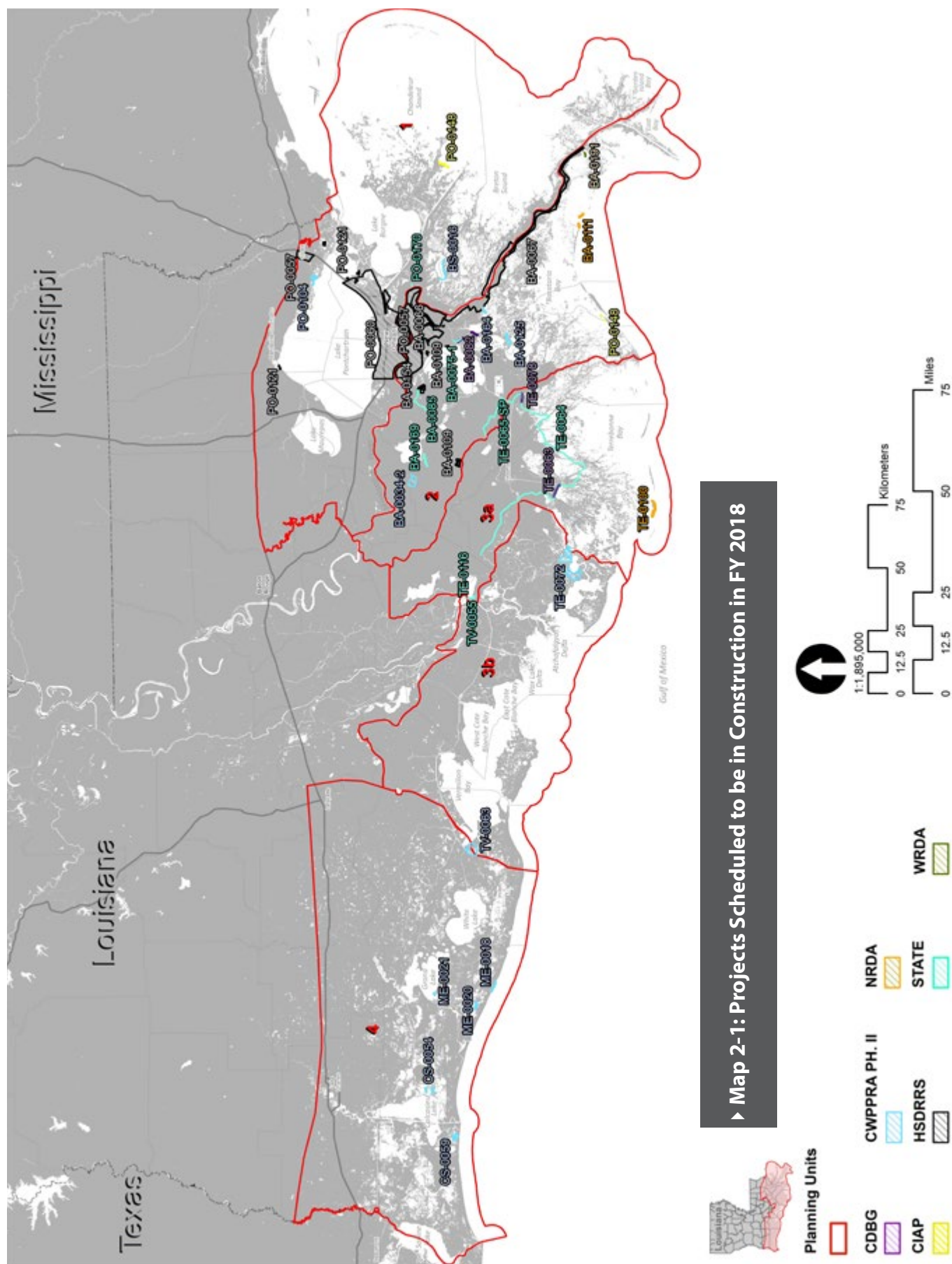
Learn more about how coastal flood risk impacts communities today and in the future, as well as how to make your community safer and more resilient. The Master Plan Data Viewer displays the results from Louisiana's 2017 Coastal Master Plan and provides resources to reduce storm-surge flood risk. This information is for coastal planning purposes, and is not appropriate for site-specific decision making.

► **Table 2-1: Projects Scheduled to be in Construction in FY 2018**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CWPPRA Phase II Projects				
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp	27-Jun-17	27-Mar-18	\$6,470,448
BA-0125	Northwest Turtle Bay Marsh Creation	15-May-18	23-Oct-19	\$31,083,470
BA-0164	Bayou Dupont Sediment Delivery - Marsh Creation #3 and Terracing	15-Jan-16	3-Aug-17	\$18,733,494
BS-0016	South Lake Lery Shoreline and Marsh Restoration	05-Sep-13	15-Aug-17	\$33,716,987
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	11-May-17	22-Oct-18	\$24,655,612
CS-0059	Oyster Bayou Marsh Creation and Terracing	30-Jun-16	30-Mar-18	\$30,866,713
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	25-May-17	2-May-19	\$35,426,478
ME-0020	South Grand Chenier Marsh Creation Project	03-Mar-17	6-Aug-19	\$23,873,346
ME-0021	Grand Lake Shoreline Protection	17-May-16	6-Jul-17	\$11,305,616
PO-0104	Bayou Bonfouca Marsh Creation	28-Apr-16	12-Jan-18	\$29,273,984
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	07-Sep-16	30-Aug-18	\$35,876,728
TV-0063	Cole's Bayou Marsh Restoration	15-Dec-17	5-Apr-19	\$24,930,426
CIAP Projects				
PO-0148	Living Shoreline ²	02-Oct-15	7-Aug-17	\$14,300,000
State-Only Projects				
BA-0075-1	Jean Lafitte Tidal Protection	19-Feb-14	25-Jun-19	\$29,403,973
BA-0085	St. Charles West Bank Hurricane Protection Levee	01-Nov-13	1-Sep-22	\$14,500,000
BA-0169	Kraemer Bayou Boeuf Levee Lift	17-Jun-17	9-Apr-18	\$1,200,000
PO-0170	Violet Canal North Levee Alignment	14-Nov-17	17-Sep-18	\$1,164,000
TE-0064	Morganza to the Gulf	30-Nov-05	1-Jun-20	\$177,003,835
TE-0065-SP	Larose to Golden Meadow - Larose Sheetpile	26-Jan-15	15-Sep-17	\$5,205,702
TE-0116	St. Mary Backwater Flooding	25-May-17	9-Apr-19	\$10,394,609
TV-0055	Morgan City/St. Mary Flood Protection	20-Oct-16	18-May-18	\$10,900,000
CDBG Projects				
BA-0082	Lafitte Area Levee Repair	20-Dec-17	21-Dec-18	\$819,185
TE-0063	Falgout Canal Road Levee	05-Aug-15	29-Dec-17	\$24,803,191
TE-0078	Cut-Off/Pointe Aux Chene Levee	25-Aug-17	19-Nov-19	\$9,714,158

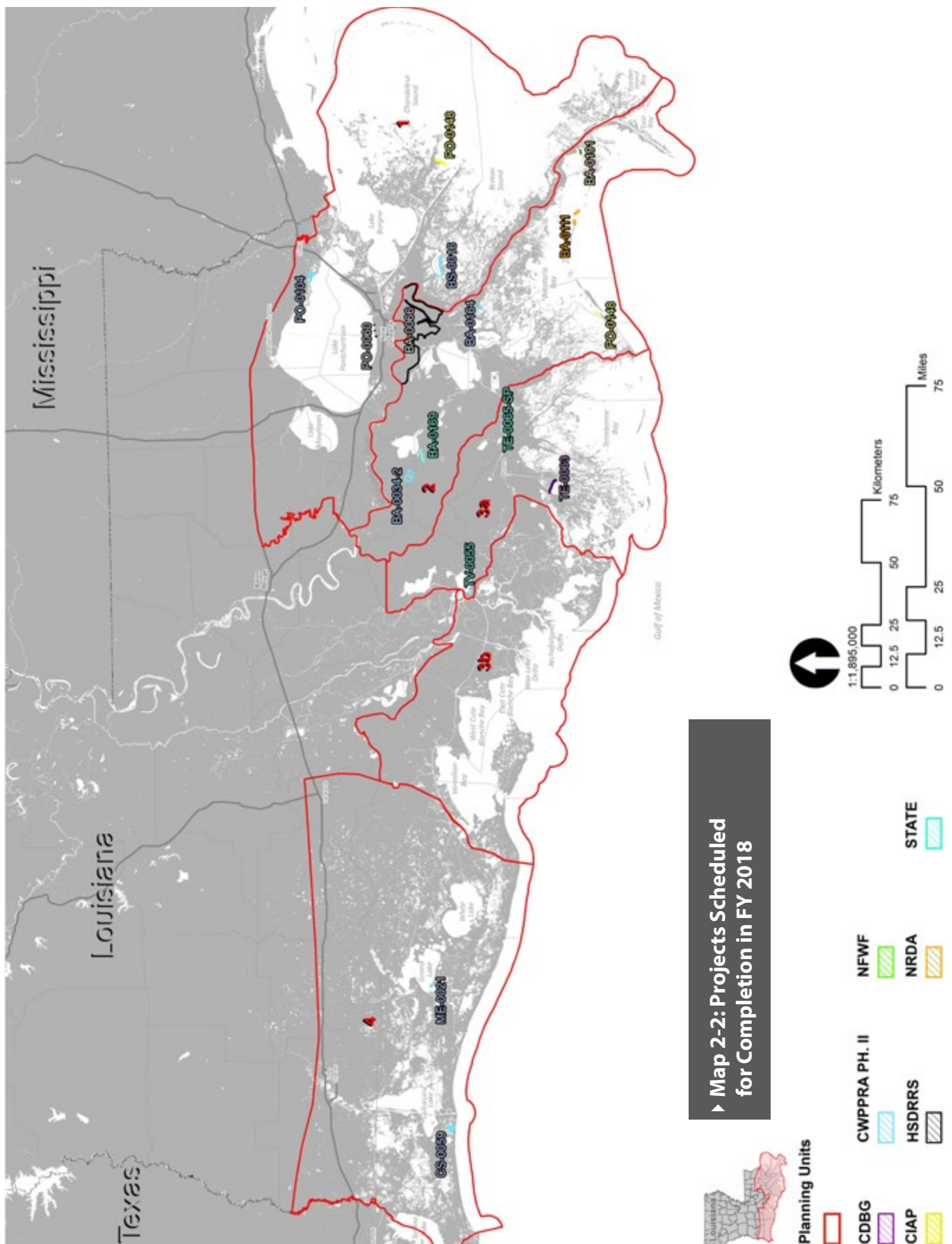
► **Table 2-1: Projects Scheduled to be in Construction in FY 2018**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
HSDRRS Projects				
BA-0066	West Bank and Vicinity	27-Mar-07	13-Feb-18	\$4,304,525,784
BA-0067	New Orleans to Venice	23-Nov-11	29-Aug-23	\$1,301,523,760
BA-0109	HSDRRS Mitigation- WBV ³	27-Feb-15	25-Oct-19	\$126,000,000
BA-0154	Previously Authorized Mitigation WBV ³	04-Aug-14	31-Oct-18	\$11,000,000
PO-0057	SELA- Overall	18-Feb-09	12-Oct-20	\$1,170,974,586
PO-0060	Permanent Canal Closures and Pump Stations ⁴	11-Mar-13	31-Dec-17	\$614,800,000
PO-0121	HSDRRS Mitigation- LPV ⁴	23-Jul-15	3-Sep-19	\$85,000,000
NRDA Early Restoration Projects				
BA-0111	Shell Island West	31-Mar-15	10-Jul-17	\$78,486,655
TE-0100	Caillou Lake Headlands	22-Jul-15	11-Oct-18	\$118,340,766
WRDA Projects				
BA-0191	Spanish Pass Ridge and Marsh Restoration	15-Jul-16	30-May-18	\$18,111,516
Notes				
1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.				
2. Project partially funded with Surplus funds.				
3. Project cost included in total cost for BA-0066.				
4. Project cost included in total cost for PO-0063.				



► **Table 2-2: Projects Scheduled to Complete Construction in FY 2018**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CWPPRA Phase II Projects				
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp	27-Jun-17	27-Mar-18	\$6,470,448
BA-0164	Bayou Dupont Sediment Delivery - Marsh Creation #3 and Terracing	15-Jan-16	3-Aug-17	\$18,733,494
BS-0016	South lake Lery Shoreline and Marsh Restoration	05-Sep-13	15-Aug-17	\$33,716,987
CS-0059	Oyster Bayou Marsh Creation and Terracing	30-Jun-16	30-Mar-18	\$30,866,713
ME-0021	Grand Lake Shoreline Protection	17-May-16	6-Jul-17	\$11,305,616
PO-0104	Bayou Bonfouca Marsh Creation	28-Apr-16	12-Jan-18	\$29,273,984
CIAP Projects				
PO-0148	Living Shoreline ²	02-Oct-15	7-Aug-17	\$14,300,000
State-Only Projects				
BA-0169	Kraemer Bayou Boeuf Levee Lift	17-Jun-17	9-Apr-18	\$1,200,000
TE-0065-SP	Larose to Golden Meadow - Larose Sheetpile	26-Jan-15	15-Sep-17	\$5,205,702
TV-0055	Morgan City/St. Mary Flood Protection	20-Oct-16	18-May-18	\$10,900,000
CDBG Projects				
TE-0063	Falgout Canal Road Levee	05-Aug-15	29-Dec-17	\$24,803,191
HSDRRS Projects				
BA-0066	West Bank and Vicinity	27-Mar-07	13-Feb-18	\$4,304,525,784
PO-0060	Permanent Canal Closures and Pump Stations ⁴	11-Mar-13	31-Dec-17	\$614,800,000
NRDA Early Restoration Projects				
BA-0111	Shell Island West	31-Mar-15	10-Jul-17	\$78,486,655
WRDA Projects				
BA-0191	Spanish Pass Ridge and Marsh Restoration	15-Jul-16	30-May-18	\$18,111,516
Notes				
1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.				
2. Project partially funded with Surplus funds.				



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Section 3

FY 2019

Implementation Plan:
More Projects, More
Action, More Results

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Section 3

FY 2019 Implementation Plan: More Projects, More Action, More Results

Project Status Summaries

This section presents an implementation plan that describes the state's proposed investment in coastal restoration and protection during FY 2019 (July 1, 2018, through June 30, 2019). Included are all of the coastal protection and restoration projects in which the state will participate. Projected schedules and budgets are estimates based on the most recent available information.

This implementation plan presents the status of state coastal projects according to the four phases traditionally used to track projects: 1) planning; 2) design; 3) construction; and 4) operation, maintenance, and monitoring. Below are summaries of project status by phase; Appendices A and B provide additional details about the projects. The current status of individual projects is presented by authorizing program in the project schedules in the Coastal Program Details section. Readers are referred to the state's coastal website (www.coastal.la.gov) for additional details about specific projects. Regional maps of projects in planning, design, and/or construction in FY 2019 are presented in Figures 3-1 through 3-3.

Projects in Planning

There are two projects in the planning phase in FY 2019, including one restoration project and one protection project. These projects, together with other non-project planning initiatives, represent a total state investment of \$10.4 million in FY 2019, and will proceed to design and construction according to their authorizing program as discussed in the Coastal Program Details section.

Projects in Design

There are 34 restoration projects in design for FY 2019. These projects represent a total state investment of \$137 million in FY 2019. The path these projects will take to construction varies according to the authorizing program as described in the Coastal Program Details section.

Projects Under Construction

There are 23 projects that will begin or continue construction in FY 2019, including 10 protection projects and 13 restoration projects. These projects represent a total state investment of \$282 million in FY 2019, and 11 of these projects are projected to complete construction in FY 2019. Table 3-1 presents additional information about projects set for construction in FY 2019, and Figure 3-4 provides a map with the locations of these projects.

Constructed Projects in Operation, Maintenance, and Monitoring

The CPRA will expend approximately \$54 million (including federal match dollars) in FY 2019 on operation, maintenance, and monitoring (OM&M). OM&M expenditures in FY 2019 will cover the operation and maintenance of 136 projects and monitoring of 105 projects. OM&M expenditures also include approximately \$9 million (in state and federal funds) for monitoring coast-wide conditions using CRMS-Wetlands (<http://www.lacoast.gov/crms2/Home.aspx>). Figure 3-5 provides a map with locations of all projects with OM&M expenditures in FY 2019. Project-specific OM&M expenditures are presented in Appendix B. The Barrier Island Status Report (Appendix C) is available online for review (www.coastal.la.gov). The Operating Plans for the Caernarvon and Davis Pond diversions during calendar year 2018 are referenced in Appendix D.

Ongoing Programs and Initiatives

The state operates six ongoing programs. These efforts provide supporting research, financial assistance, additional project benefits or educational support for our protection and restoration program, and are listed in the top portion of Table 4.3 (Section 4).

Adaptive Management

The Coastal Master Plan process recognizes the need to quickly implement large scale projects within an extremely dynamic environment. In so doing we must establish and maintain a robust adaptive management program that will allow us to modify constructed projects and inform the development of future projects.

Future conditions of coastal Louisiana are uncertain, due to the dynamics of riverine and marine processes, storm events, climate change, population growth, economic activity, and ongoing human reliance on the natural resources the coast provides. Managing such a complex system in which the natural and socio-economic systems are highly integrated is inherently difficult. In addition, deltaic environments are uniquely challenged due to the interdependence and delicate balance of water, land and economic systems and future uncertainties regarding the magnitude and rate of climate change impacts. Adaptive management encourages the integrated and flexible approach to land and water management that considers risk and uncertainty. It promotes solutions that are sustainable even if conditions change by providing a mechanism for robust decision making. Connecting short-term investments with long-term challenges and the selection of action paths that allow for maximum flexibility of future decisions are two of the key concepts of adaptive management. Historically, as human developments evolved in deltas, decisions were made that cannot be easily changed (such as the location of New Orleans). This results in some “path dependency”, meaning that future options are limited or constrained by past decisions. However, learning from past decisions and understanding the range of possible future scenarios allows us to avoid these constraints in the future by using adaptation pathways to make decisions that allow for maximum future flexibility. As new techniques and projects for restoration and risk reduction are being developed, there exists an opportunity to learn how the system will respond to the coastal protection and restoration program implementation and to use that learning to improve future program management decisions.

Adaptive management:

1. provides a structured process for making decisions over time through active learning;
2. enables adjustments in program implementation as new information becomes available; and
3. embraces a scientific approach that involves:
 - a. identifying explicit goals and objectives,
 - b. developing and implementing management actions,
 - c. assessing the system's response to the action(s), and then
 - d. using that knowledge to make management decisions.

Adaptive management relies on an accumulation of evidence to support decisions that demand action. It also relies on maintaining flexibility to make management changes when necessary to adjust to changing conditions and a growing knowledge base. Critical to the success of adaptive management are the actions that ensure feedback of information among the various phases of project selection, engineering and design, construction, monitoring, and operations and maintenance. Adaptive management is embodied by building institutional knowledge to continually improve understanding of the system and how management actions can best achieve project and program goals. All phases of project management must be coordinated and must share information, not only to maximize the benefits on a project-by-project basis, but also to carry the information learned from past projects into the development of future projects. A high level of commitment is needed to successfully incorporate adaptive management into ongoing business operations.

An adaptive management approach is generally employed when management decisions are hindered by uncertainties in the system dynamics or system response to management actions. Long-term restoration and protection in Louisiana's dynamic coastal environment must be an ongoing series of management decisions based upon a growing knowledge base of research information, updated measurements of ecosystem responses, and evaluations of degrees of progress in reaching goals and targets. The dynamic coastal environment associated with ongoing land loss, sea-level rise and subsidence as well as the periodic impact of tropical storms and hurricanes makes adaptive management imperative.

The scale and complexity of Louisiana's Coastal Master Plan requires a robust adaptive management strategy to cultivate a growing body of knowledge related to restoration and protection science. Although not formalized, CPRA has been actively practicing adaptive management since its inception. Examples of early improvements in CPRA's program include:

- Assessments and improvements in barrier island project designs based on project performance;
- Modifying operational regimes for freshwater diversion projects to mimic natural pulsing of the river; and
- Refining the types of projects authorized based on performance and improved understanding of land loss causes.

With the development of the first Coastal Master Plan in 2007, Louisiana moved from a project- and hydrologic basin-centric strategy to a more comprehensive program which demanded the development of robust and systematic decision support tools to assist with selecting portfolios of projects which would collectively address the goals and objectives of the state's coastal protection and restoration program.

CPRA's adaptive management approach balances the urgent need for action and the inherent uncertainty involved in large-scale coastal planning by ensuring new information is utilized in all aspects of the planning and implementation process. Adaptive management is a formalized, structured approach that identifies the pathways and mechanisms by which information is integrated into various activities related to achieving CPRA's mission.

CPRA will continue to build on the decades of research and analysis performed to date, and must move forward to maximize riverine resources even though our science may be imperfect. The projects discussed above are authorized through multiple programs, each of which entails different processes to proceed through implementation. Summaries of coastal programs with active projects are presented below. Detailed projected expenditures are presented in Appendix B by program.

Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

CWPPRA was authorized by Congress in 1990 to identify, prepare, and fund construction of coastal wetlands restoration projects. CWPPRA is managed by a Task Force comprised of the state and five federal agencies, including the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS), the National Marine Fisheries Service (NMFS), and the USACE. Annually, the CWPPRA Task Force evaluates projects proposed for inclusion in the CWPPRA program and prepares a ranked list of candidate projects annually based on cost-effectiveness, longevity, risk, supporting partnerships, public support, and support of CWPPRA goals. From this ranked list, the Task Force selects a final list of projects, the Priority Project List (PPL), for implementation.

Following project selection, CWPPRA projects proceed through a two-phased implementation process. Phase 1 consists of Engineering and Design, an in-depth process by which engineers and biologists further develop and assess project features and effects. After design, these projects will be considered for construction, which begins upon Phase 2 approval by the Task Force. Phase 2, referred to as Construction and Monitoring, involves the actual building and subsequent OM&M of the project. The state will expend funds in FY 2019 on the implementation of 17 CWPPRA Phase 1 projects (engineering and design), eight CWPPRA Phase 2 projects (construction and monitoring), and one CWPPRA demonstration project.

Examples of active CWPPRA projects include the following:

- East Leeville Marsh Creation and Nourishment (BA-0194) (Phase 1)
- West Fourchon Marsh Creation (TE-0134) (Phase 1)
- Northwest Turtle Bay Marsh Creation (BA-0125) (Phase 2)
- Cole's Bayou Marsh Restoration (TV-0063) (Phase 2)

Project schedules for CWPPRA projects are included in Table 3-2. Additional information about CWPPRA projects is available on the CWPPRA website (www.lacoast.gov). Project-specific CWPPRA expenditures are presented in Appendix B. The federal cost-share for CWPPRA projects is 85 percent of the total project cost, with the state assuming responsibility for the remaining 15 percent of the cost. The state's contribution must include a cash payment of not less than five percent of the total project cost. The remainder of the state's contribution may take the form of lands, easements, or rights-of-way, or any other form of in-kind contribution determined to be appropriate by the lead Task Force member. Cost-share agreement conditions for CWPPRA projects vary according to the federal partner.

Water Resources Development Act (WRDA)

The state is partnered with the USACE on multiple large-scale protection and restoration projects and studies that have been authorized through past WRDA bills. WRDA refers to any of a set of public laws enacted by Congress to address various aspects of water resources including environmental, structural, navigational, flood protection, and hydrologic issues.

Schedules for WRDA projects are presented in Table 3-3. Project-specific expenditures for WRDA projects are presented in Appendix B.

State-Only Projects

The Louisiana Legislature allocated \$790 million in state budget surpluses for the years 2007, 2008, and 2009 for coastal protection and restoration activities. The state is utilizing these funds to expedite its coastal program by funding ongoing programs, developing initiatives, and implementing protection and restoration projects. The overwhelming majority of these funds have been allocated to project implementation. Surplus funds have been used to supplement projects that are authorized through one of the other programs described in this section (e.g., Southwest Coastal Louisiana Feasibility Study [LA-0020]) and implement other state-only projects. The state has also begun implementation of other projects without a federal partner using Trust Fund revenues.

The state will expend funds in FY 2019 on seven state-only protection projects.

Broadly speaking, state-only projects generally involve one of the following categories:

- Expedited construction of components of federal protection projects (e.g., Morganza to the Gulf [TE-0064]);
- Feasibility studies for flood protection in areas not currently covered by the existing federal protection network (e.g., South Central Coastal Plan [TV-0054]); or
- Protection and restoration projects not included in one of the other coastal programs that are to be implemented in conjunction with local parishes (e.g., Jean Lafitte Tidal Protection [BA-0075-1], Morgan City/St. Mary Flood Protection [TV-0055]).

A total of \$293.3 million in 2008 and 2009 was allocated to cover LERRDS cost for the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS). Included within this total is \$193.3 million from Act 20 of the 2009 Regular Legislative Session that was approved for Southeast Louisiana Hurricane Protection projects. This includes credits and payments toward the state and levee district match requirements for the estimated \$15 billion HSDRRS work underway. The non-federal cost share of such work is estimated to be \$1.8 billion plus applicable interest. Under the plan, these funds may be utilized to advance planning, design, and construction of hurricane protection and flood control projects in southeast Louisiana.

These investments will match local and federal funds while improving the protection of our most vulnerable communities consistent with the Master Plan. These funds are projected to be expended in their entirety by the end of FY 2019.

Project schedules for state-only projects are included in Table 3-4. Project-specific expenditures for state-only projects are presented in Appendix B.

Of the seven active state-only projects, six are funded for construction and will proceed to construction in accordance with their schedules as presented in Table 3-4. The remaining project is funded for feasibility and would only proceed to design upon receipt of further authorization through another coastal funding program.

Community Development Block Grants (CDBG)

Louisiana received \$1.06 billion from HUD's CDBG program to assist in the recovery from Hurricanes Gustav and Ike. The vast majority of CDBG funds were allocated to the 19 coastal parishes for use in protecting their communities and infrastructure. However, included within the \$1.06 billion was an allocation of \$27.4 million to the Louisiana Office of Community Development-Disaster Recovery Unit (OCD-DRU) for state coastal protection and restoration projects that will help communities recover from the 2008 hurricanes and prepare to withstand future hurricanes with greater resilience. The state, in partnership with local interests, identified potential flood protection and restoration projects that could be implemented with these CDBG funds in all major regions of coastal Louisiana, including floodgate installation; levee construction or improvement to reduce storm surge impacts to coastal communities and critical infrastructure; and shoreline protection to benefit communities and related infrastructure and recreational facilities. HUD subsequently approved nine projects for CDBG funding.

Project schedules for CDBG projects are included in Table 3-5. Project-specific expenditures for CDBG projects are presented in Appendix B.

All active state CDBG projects are funded for construction and will proceed to construction in accordance with their schedules as presented in Table 3-5. State CDBG projects require an agreement with the local sponsor, where the local sponsor is responsible for ownership and OM&M costs after project completion. Project implementation requires submittal of an application to OCD-DRU for final approval and funding. Applicant projects are reviewed by OCD-DRU for consistency with program objectives and criteria. Potential issues that could affect CDBG project implementation include design issues, land rights issues, environmental compliance issues, and permitting issues.

Hurricane and Storm Damage Risk Reduction System

HSDRRS was authorized by PL 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006, and includes the West Bank and Vicinity project, the Lake Pontchartrain and Vicinity project, the IHNC Lake Borgne Surge Barrier and IHNC Seabrook Complex (each of which is managed separately). Each of these projects is in turn comprised of multiple segments, which have separate design and construction schedules. Schedules for remaining HSDRRS project components are included in Table 3-6 and are fully funded for construction to proceed according to the schedules provided. HSDRRS also covers multiple restoration projects that are currently under development as mitigation for wetland impacts associated with construction of hurricane protection projects.

As the non-federal sponsor along with the local levee authorities and levee districts, the state has contributed to the West Bank and Vicinity and Lake Pontchartrain and Vicinity projects through plans and specifications review, construction inspection assistance, project and program management, and payment of LERRDS costs. According to the USACE, the non-federal sponsor is responsible for the payback of the non-federal cost share (approximately 35 percent) over a 30-year period to begin upon acceptance of the system.

Non-State Projects

Act 545 of the 2008 Legislature mandates that State Annual Plans include descriptions of all projects and programs relating to hurricane protection, restoration, and infrastructure in coastal Louisiana, including federal-only projects, local parish and levee district projects, and those privately funded wetland enhancements and activities that require a Coastal Use Permit. Appendix E contains an inventory of non-state projects identified through outreach to coastal parishes and levee districts to obtain information on local, non-state coastal projects. Appendix E also includes an inventory of proposed local projects as presented in coastal parish Master Plans. These proposed projects represent desired local investment in protection and restoration activities. Appendix E also presents information on federal coastal protection projects for which local parishes or levee districts serve as the local sponsor. Finally, Appendix E presents information on non-state projects that have received State Restoration Partnership grants to support implementation. Adding non-state projects to this inventory will be a priority in future years as the state continues to gather information about non-state coastal protection and restoration efforts.

Deepwater Horizon Oil Spill Restoration Planning

The settlement with BP discussed in Section 2, combined with prior *Deepwater Horizon*-related settlements, and recoveries, totals \$8.7 billion over 15 years for Louisiana coastal restoration and economic damages. Understanding that each source of oil spill funding is subject to various criteria and public approval processes, the CPRA is looking at oil spill funding sources holistically in an effort to maximize the use of these dollars.

Schedules for projects that will be implemented by CPRA as part of *Deepwater Horizon* oil spill restoration are presented in Table 3-7. Project-specific expenditures are presented in Appendix B.

Natural Resource Damage Assessment (NRDA) Restoration

The Natural Resource Damage Assessment (NRDA) is the process used by Natural Resource Trustees to develop, on behalf of the public, their claim for natural resource damages against the responsible party or responsible parties for an oil spill. Through that claim, the Trustees seek compensation in the form of restoration for the harm done to natural resources and services. The overall goal of NRDA is to make the environment and public whole by restoring natural resources to their pre-spill conditions, and to provide compensation for the loss of those resources from the date of injury through completion of restoration.

NRDA Early Restoration

In April 2011, the Trustees and BP announced an agreement under which BP committed to provide \$1 billion toward the implementation of early restoration projects. The agreement represented an initial step toward fulfilling BP's obligation as a responsible party to fund complete restoration of natural resources. Early restoration provides an opportunity to implement restoration projects prior to the completion of the natural resource damage assessment process.

Louisiana received approximately \$370 million in early restoration funds which have been used for the following projects:

- Lake Hermitage Marsh Creation Project (\$14.4 M)
- Louisiana Oyster Cultch Project (\$15.6 M)
- Louisiana Outer Coast Restoration (\$318 M):
 - Caillou Lake Headlands (Whiskey Island) (\$110 M)
 - Shell Island West (\$101 M)
 - Chenier Ronquille (\$35 M)
 - North Breton Island (\$72 M)
(Implemented by Department of the Interior)
- Provide and Enhance Recreational Opportunities (\$22 M)¹

1. Due to site issues that arose during the planning and development of the originally proposed project (i.e., the Louisiana Marine Fisheries Enhancement, Research, and Science Center), these funds will be reallocated to restoration projects intended to provide and enhance recreational opportunities in Louisiana. Specific replacement projects are currently being evaluated and have been presented to the public for review and comment in a draft restoration plan released in December 2017.

Natural Resources Damages under the Oil Pollution Act

In February 2016, the *Deepwater Horizon* Trustees released the Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The PDARP/PEIS established the framework for utilizing the \$8.8 billion allocated for restoration of natural resource damages, including a minimum of \$5 billion specifically allocated for Louisiana. Further, the PDARP/PEIS proposes an allocation of funds by restoration type and geographic area based on the Trustees' understanding and evaluation of exposure and injury to natural resources and services, as well as an analysis of where restoration associated with the various restoration types would be most appropriate.

Following the PDARP/PEIS, a series of project-specific plans will be developed and released for public review. These plans will propose suites of projects intended to address injuries resulting from the oil spill for public consideration, and will be periodically presented and discussed with the public over the 15-year payment period specified in the settlement.

In January 2017, Louisiana finalized its first post-settlement, project-specific restoration plan, which informed the public about *Deepwater Horizon* NRDA restoration planning efforts and approved approximately \$22.3 million in engineering and design (E&D) work for six restoration projects. These projects should restore wetlands, coastal, and nearshore habitats; habitat projects on federally managed lands; and birds. The six projects are as follows:

- Terrebonne Basin Ridge and Marsh Creation Project:
Bayou Terrebonne Increment (TE-0139)
- Barataria Basin Ridge and Marsh Creation Project:
Spanish Pass Increment (BA-0203)
- Lake Borgne Marsh Creation Project: Increment One (PO-0180)
- Queen Bess Island Restoration Project (BA-0202)
- Rabbit Island Restoration Project (CS-0080)
- Shoreline Protection at Jean Lafitte National Historic Park and Preserve
(Implemented by Department of the Interior)

Once this work is completed, Louisiana will evaluate the feasibility of these projects and develop a restoration plan for the construction of the projects. If all six projects are feasible, construction is estimated to cost over \$460 million.

In December 2017, Louisiana released two additional restoration plans, a project-specific draft recreational use plan and a draft strategic restoration plan for the restoration of wetlands, coastal, and nearshore habitats in the Barataria Basin, and held a public meeting to discuss both plans during the January 2018 CPRA Board Meeting.

Recreational Use Restoration Plan

This Recreational Use Restoration Plan evaluated potential projects to restore for lost recreational use within Louisiana by evaluating alternatives that could compensate for a part of Louisiana's recreational fishing use injury. As such, Louisiana's approach to restoring for lost recreational use in this Restoration Plan emphasized the creation or enhancement of recreational fishing infrastructure, enhanced recreational fishing access or opportunity, and educational and outreach components that promote utilization of the natural resources and encourage conservation and stewardship for them, consistent with the injuries caused by the DWH Oil Spill and fisheries-based objectives.

The Louisiana Trustee Implementation Group proposed moving forward with the following proposed alternatives for recreational use within the "Provide and Enhance Recreational Opportunities" Restoration Type:

- Elmer's Island Recreational Access – \$6,000,000
- Statewide Artificial Reef Enhancement - \$6,000,000
- Lake Charles Science Center and Educational Complex - \$7,000,000
- Pointe-aux-Chenes Island Road Fishing Piers - \$3,000,000

The total funding proposed is \$22,000,000.

Draft Strategic Restoration Plan for the Restoration of Wetlands, Coastal, and Nearshore Habitats in the Barataria Basin

For this plan, Louisiana is undertaking a phased restoration planning approach to restore wetlands, coastal, and nearshore habitats in the Barataria Basin. The first phase involves the preparation of a strategic restoration plan for the Barataria Basin. This strategic plan will evaluate restoration approaches and techniques to serve as a preferred alternative for restoring wetlands, coastal, and nearshore habitats in the Barataria Basin. Any project or suite of projects discussed in the strategic plan will be further analyzed in subsequent phased project-specific restoration plans.

BP and Transocean Criminal Settlements - NFWF

In early 2013, a U.S. District Court approved two plea agreements resolving the criminal charges against BP and Transocean related to the *Deepwater Horizon* disaster. The agreements directed a total of \$2.54 billion to NFWF for natural resources restoration in the Gulf of Mexico. Within five years of settling, NFWF's newly established Gulf Environmental Benefit Fund will receive approximately \$1.27 billion to "create or restore barrier islands off the coast of Louisiana and/or to implement river diversion projects on the Mississippi and/or Atchafalaya Rivers for the purpose of creating, preserving and restoring coastal habitat."

The initial NFWF award funded the following projects:

- Adaptive Management: Louisiana River Diversions and Barrier Islands (\$13.2 M)
- Caminada Beach and Dune Increment II:
 - Engineering and Design (\$2.7 M)
 - Construction (\$144.5 M)
- East Timbalier Island: Engineering and Design (\$5.6 M)
- Mid-Barataria Sediment Diversion: Engineering and Design (\$37.7 M)
- Lower Mississippi River Sediment Diversions: Planning (\$12.8 M)
- Increase Atchafalaya Flow to Terrebonne: Planning (\$4.6 M)

The most recent funding award, \$245 million, is a milestone in advancing implementation of cornerstone projects within the Louisiana Coastal Master Plan and another victory for rehabilitating Louisiana's most valuable asset, our coast.

- Mid Barataria Sediment Diversion (Remaining Engineering and Design) (\$102.3 M)
- Mid Breton Sediment Diversion (Engineering and Design) (\$90.6 M)
- Increase Atchafalaya Flow to Terrebonne (Engineering and Design) (\$16.4 M)
- Adaptive Management: Louisiana River Diversions and Barrier Islands Phase II (\$19.6 M)
- Mississippi River Sediment Diversion Program Management (\$16.1 M)

The next NFWF grant application cycle begins in March 2018.

Clean Water Act Penalties

The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating water quality standards for surface waters. The CWA makes it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit is obtained. Violations of the CWA can result in both civil and criminal prosecutions by the federal government. The U.S. Department of Justice (DOJ), on behalf of the EPA, the United States Coast Guard (USCG), or another federal agency, may bring enforcement actions for civil or criminal penalties under the CWA.

RESTORE Act

In June 2012, Congress passed the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (the RESTORE Act), which dedicates 80 percent of all prospective CWA administrative and civil penalties related to the *Deepwater Horizon* spill to a Gulf Coast Restoration Trust Fund. The RESTORE Act also outlines a structure by which the funds can be utilized to restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, and economy of the Gulf Coast region.

The RESTORE Act outlines the following framework for allocation of the RESTORE Trust Fund:

- 35 percent equally divided among the five Gulf Coast States for ecological restoration, economic development, and tourism promotion (Direct Component) (Bucket 1);
- 30 percent plus interest managed by the Council for ecosystem restoration under the Comprehensive Plan (Council-Selected Restoration Component) (Bucket 2);
- 30 percent divided among the States according to a formula to implement state expenditure plans, which require approval of the Council (Spill Impact Component) (Bucket 3);
- 2.5 percent plus interest for the Gulf Coast Ecosystem Restoration Science, Observation, Monitoring and Technology Program within the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA Science Program) (Bucket 4); and
- 2.5 percent plus interest allocated in equal shares to the Gulf Coast States for the establishment of Centers of Excellence which will focus on science, technology, and monitoring related to Gulf restoration (Center of Excellence Component) (Bucket 5).

In February 2013, Transocean Deepwater Inc. (Transocean) agreed to pay \$1 billion to resolve federal CWA civil penalties associated with the *Deepwater Horizon* oil spill. In December 2015, a final judgment was issued against Anadarko Petroleum Corporation (Anadarko) for CWA penalties in the amount of \$159.5 million for its role in the oil spill. Finally, as part of the April 2016 BP consent decree, BP agreed to pay \$5.5 billion for CWA civil penalties. These CWA penalties from Transocean, Anadarko and BP are all subject to the RESTORE Act. Under the RESTORE Act and over a 15 year period, these settlements combined will direct a minimum of approximately \$988.4 million to the State of Louisiana, of which \$876.8 million will be allocated to CPRA for implementation of Master Plan projects.

Direct Component and Spill Impact Component Projects

In order to expend Direct Component or Spill Impact Component funds, CPRA is required to submit a plan describing how it will use those funds. On January 18, 2017, the state's First Amended RESTORE Plan (RESTORE Plan), which describes how the state will use these funds over 15 years, was approved by the CPRA Board for submission to the U.S. Department of Treasury (Treasury) for expenditure of Direct Component funds and the RESTORE Council for expenditure of Spill Impact Component funds.

In March 2017, Louisiana became the first state to have a plan accepted by both Treasury and the RESTORE Council for the expenditure of all of its Direct Component and Spill Impact Component funds from the Transocean, Anadarko Petroleum Corporation and BP Exploration & Production Inc. settlements over a 15 year period. Acceptance of the RESTORE Plan by Treasury and the RESTORE Council is a prerequisite to CPRA submitting grant applications to fund projects under the plan. Under the RESTORE Plan, the state committed to funding two projects and two programs for a total of approximately \$811.9 million:

- Direct Component (~\$260.4 M)
 - Calcasieu Ship Channel Salinity Control Measures project (~\$260.4 M)
- Spill Impact Component (~\$551.5 M)
 - Houma Navigation Canal Lock Complex project (~\$366 M)
 - Adaptive Management Program (~\$60.9 M)
 - Parish Matching Program (up to \$100 M)
 - Contingency funds (~\$24.6 M)

Council-Selected Restoration Component Projects

In December 2015, the Gulf Coast Ecosystem Restoration Council approved the Initial Funded Priorities List (FPL) which included funding for seven projects in Louisiana totaling approximately \$52 million. The funds allocated by the initial FPL are associated with the Transocean settlement.

The Coastal Master Plan projects receiving funding include:

- Golden Triangle Marsh Creation Project (\$4.3 M; design)
- Mississippi River Reintroduction into Maurepas Swamp (\$14.2 M; design)
- Biloxi Marsh Living Shoreline Project (\$3.2 M; design)
- West Grand Terre Beach Nourishment and Stabilization Project (\$7.3 M; design)
- Lower Mississippi River Management Program (\$9.3 M; planning)

Two additional projects, Jean Lafitte Canal Backfilling (\$8.7 million; implementation) and Bayou Dularge Ridge, Marsh and Hydrologic Restoration (\$5.2 million; planning) are also located in Louisiana. These two projects, submitted for funding by federal members of the Council, will directly benefit coastal Louisiana.

Although the future funding available for Louisiana under this component is unknown, the Council does anticipate that future iterations of the FPL will include significantly larger projects and project lists that reflect the full amount available to be spent for restoration activities. CPRA anticipates that future requests for FPL funding will include additional funds for future phases of work associated with the Coastal Master Plan projects included in the Initial FPL, as well as requests for funding other projects prioritized by CPRA for RESTORE.

RESTORE Act Louisiana Center of Excellence Grants Program

In November 2016 the Louisiana Center of Excellence (COE), the Water Institute of the Gulf, issued a request for proposals to fund research under the first installment of Louisiana's Center of Excellence research program. CPRA will provide over \$4 million under this first installment to the COE to administer and fund researchers contributing knowledge from a variety of fields that will inform and support implementation of the state's Coastal Master Plan.

In June 2017, the RESTORE Act Louisiana Center of Excellence Grants Program announced 13 research projects funded through the first round of a competitive grants process. The two-year grants fund projects that directly relate to the implementation of Louisiana's Coastal Master Plan. Three types of research awards were made – Louisiana-led collaborative awards, research awards, and Louisiana graduate studentship awards. To select the projects, the COE coordinated a peer-review process where three subject matter experts from within Louisiana and from around the country evaluated each proposal. Representatives from CPRA also evaluated how well each proposal applied to advancing the Coastal Master Plan. An External Review Board of independent experts provided funding recommendations based on the evaluations and the quality of the proposals. Nearly \$3 million was awarded to collaborative and research awards, and to graduate studentships. The Center of Excellence Grants Program is a significant opportunity to encourage research that will accelerate scientific progress relevant to implementation of Louisiana's Coastal Master Plan. A summary of awarded projects can be found at <http://coastal.la.gov/wp-content/uploads/2017/06/List-of-Awardees.pdf>.

Gulf of Mexico Energy Security Act (GOMESA)

The Gulf of Mexico Energy Security Act (GOMESA) provides four Gulf Coast states and their coastal political subdivisions, including Louisiana, with 37.5 percent of qualified federal revenue gained from Outer Continental Shelf leases. Revenue sharing is capped at \$500 million through federal FY 2055, but the revenue sharing established under GOMESA will continue beyond that date. The first payment from Phase II of GOMESA is expected in the Spring of 2018, and although prior projections for GOMESA's maximum potential contribution to Louisiana's coastal program ranged from \$120-\$140 million annually, estimates are now \$60-\$70 million, because the cap was not met.

Coastal parishes will share 20 percent of the total amount received by Louisiana according to a formula that considers inverse distance to the lease site population and coastline length. CPRA receives the remaining 80 percent.

CPRA GOMESA expenditures are limited by the allowable uses of the CPR Trust Fund; however, parishes may spend funds on any of the federally approved uses:

- Coastal Protection—conservation, restoration, hurricane protection
- Mitigation of damage to wildlife or natural resources
- Implementation of a federally approved conservation management plan
- Mitigation of effects from OCS activities through onshore infrastructure project
- Associated planning and administrative expenses (capped)

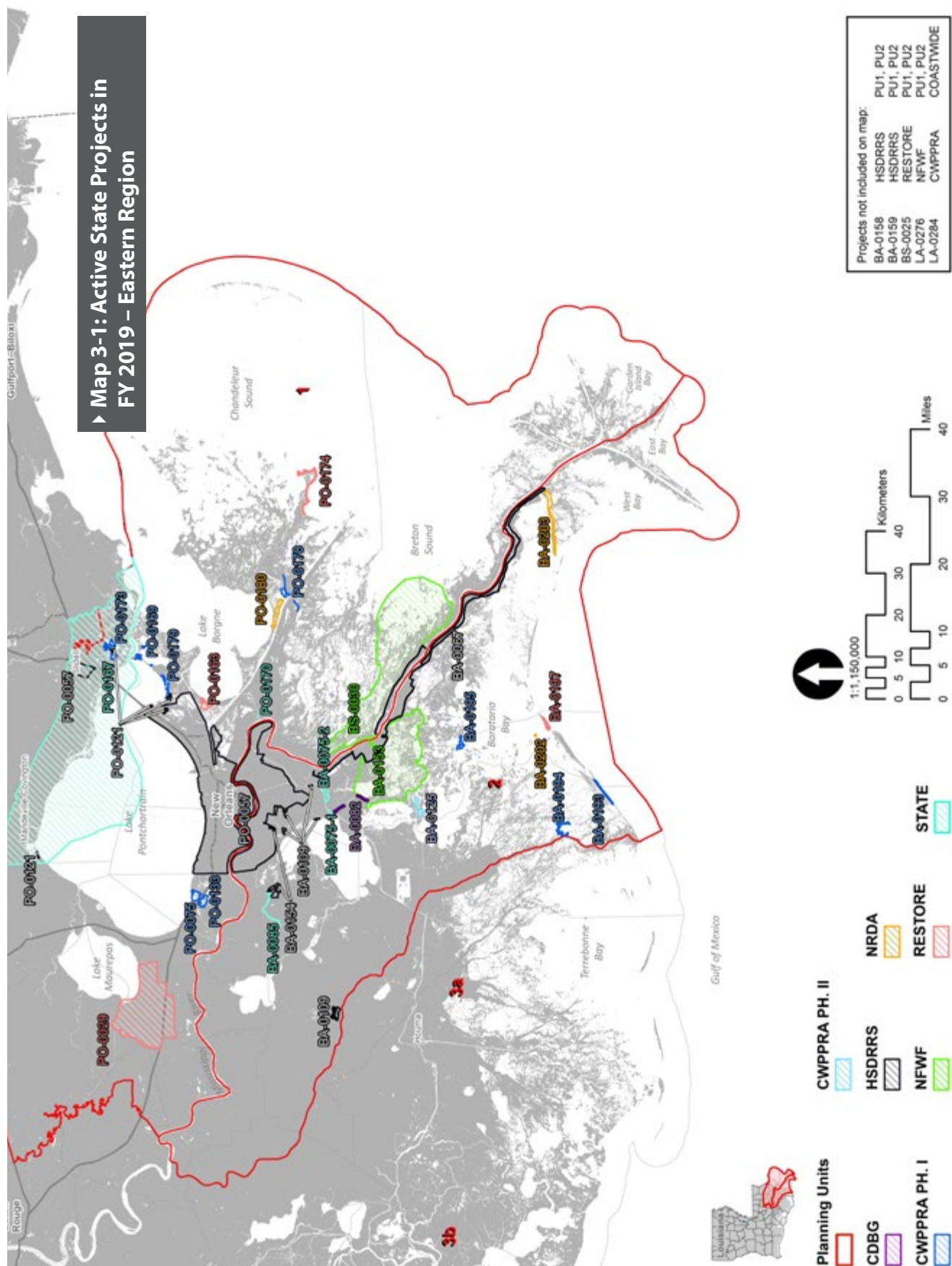
CPRA has been advised that the Phase II revenue sharing cap has not been met this year, and may also not be met in the coming three to five years. Based on this guidance, CPRA has established \$70 million as the annual expected GOMESA income level for the next three years and will reevaluate this decision as new information becomes available.

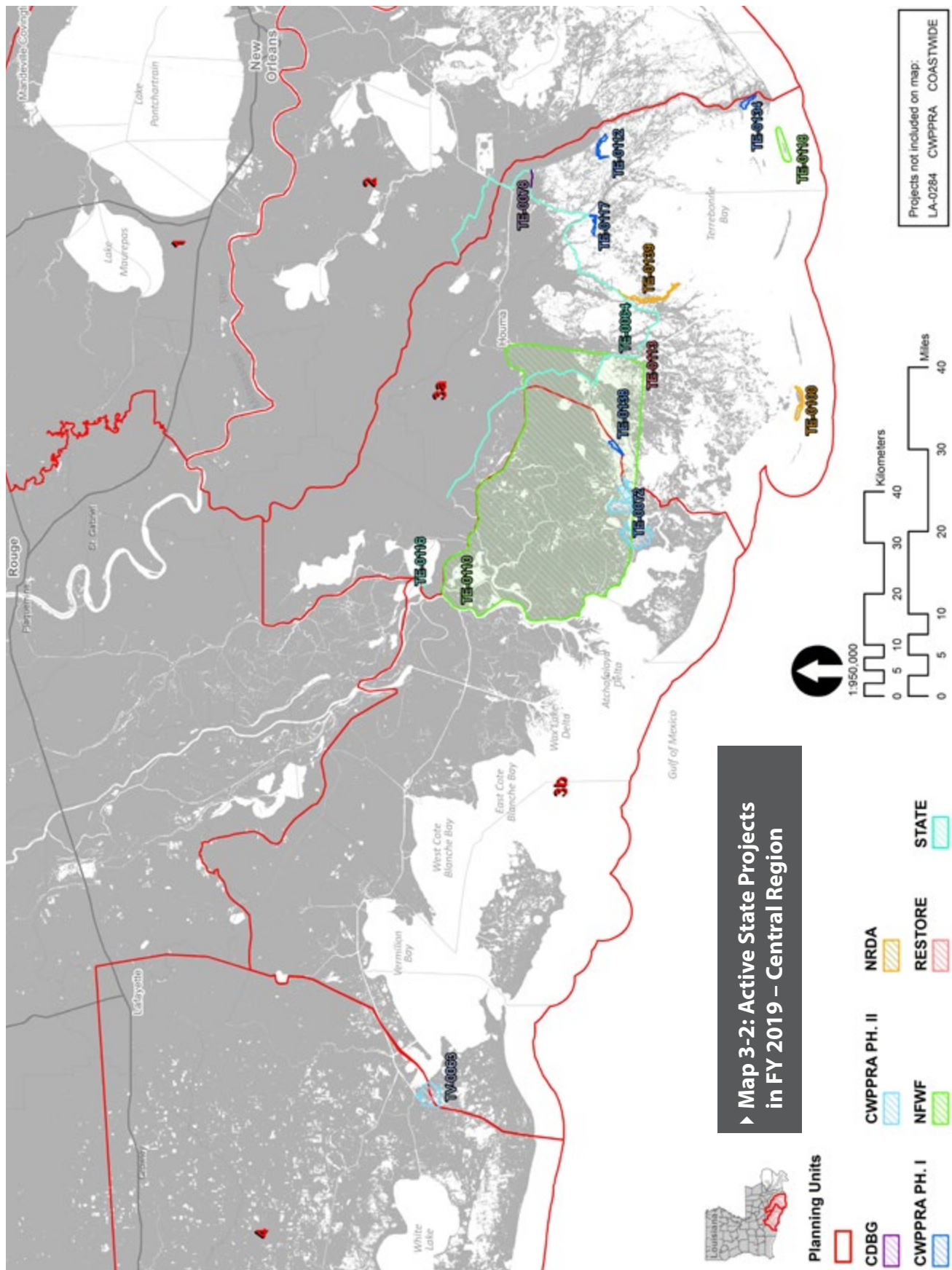
Because of the importance of this revenue stream and the uncertainty surrounding it, CPRA is partnering with Restore or Retreat to hire a team of economists and financial advisors for a large project which will include a reliable forecast for the GOMESA revenue stream. This information will be helpful for better estimating annual payments of this funding stream for the state and parishes. The results of this forecast analysis are anticipated by June 2018.

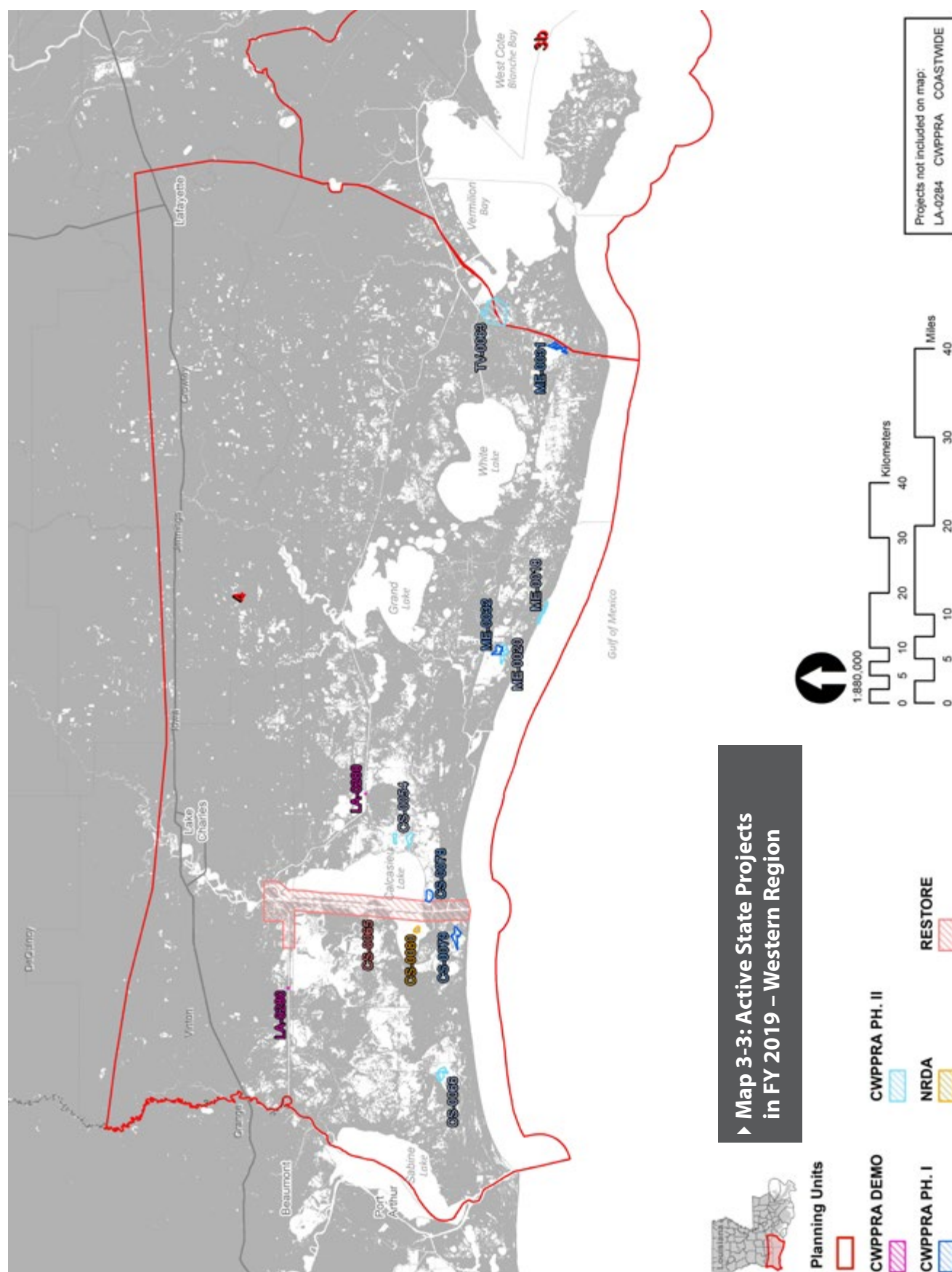
CPRA anticipates using GOMESA funds from the FY 2018 and FY 2019 allotments to fund implementation of the following projects (implementation will be led by the local parish or levee district):

- 40 Arpent Canal Levee- Lockport Co. Canal to Butch Hill Station (North Lafourche Levee District)
- Hollywood Canal Closure Structure (North Lafourche Levee District)
- Reach L (South Lafourche Levee District)
- Little Bayou Bleu (South Lafourche Levee District)
- Reach L Mitigation (South Lafourche Levee District)
- Rosethorne Basin Phase 1 & 2 (Lafitte Area Independent Levee District)
- Grand Isle Beach Stabilization (Grand Isle Independent Levee District)
- West Shore Lake Pontchartrain (Pontchartrain Levee District)
- NF-06a.1 Drainage Canal Relocation ROW Acquisition (Plaquemines Parish)
- Magnolia Ridge Levee Lift and Road (St. Charles Parish)
- St. James Parish 30% Design- Phases 1-3 (St. James Parish)
- Davis Pond Upper Barataria Risk Reduction (Lafourche Basin Levee District)
- St. Tammany Ring Levee (St. Tammany Parish)
- Vermilion Parish Hydrology & Hydraulics Study (Vermilion Parish)

Schedules for these projects will be developed after funding agreements are in place and will be included in future annual plans. Project-specific GOMESA expenditures are presented in Appendix B.

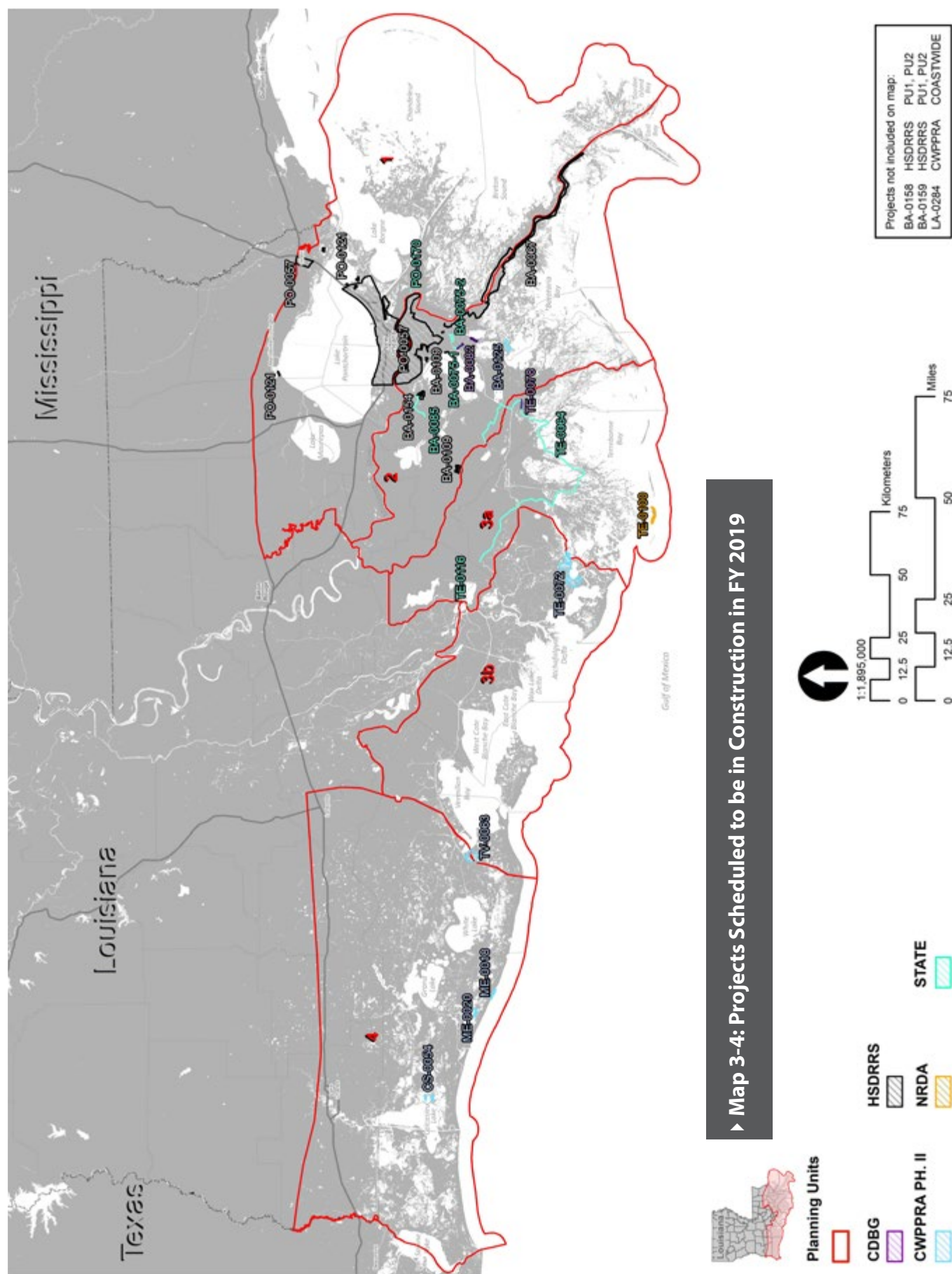


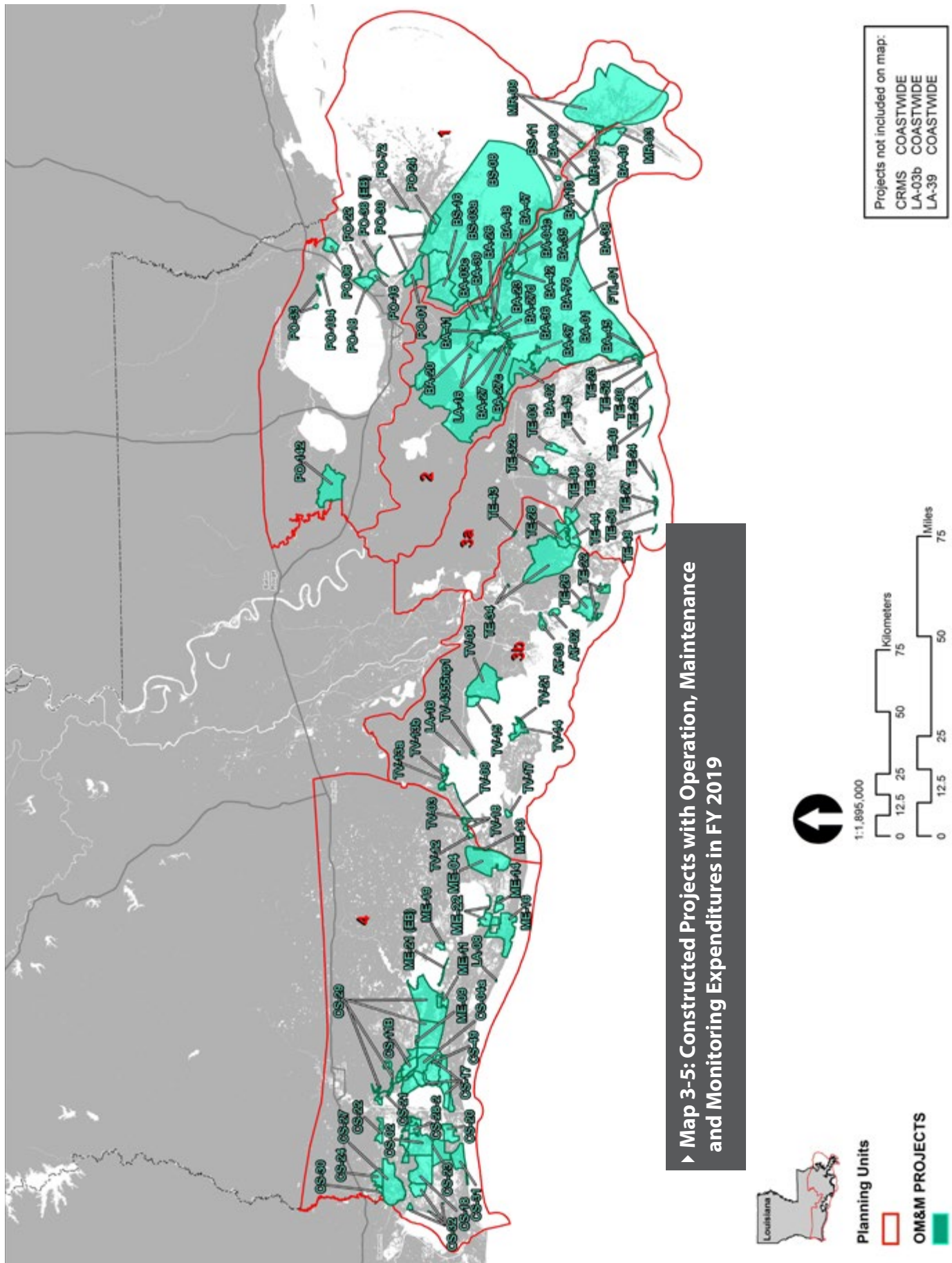




► **Table 3-1: Projects Scheduled to be in Construction in FY 2019**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CWPPRA Phase II Projects				
BA-0125	Northwest Turtle Bay Marsh Creation	15-May-18	23-Oct-19	\$31,083,470
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	11-May-17	22-Oct-18	\$24,655,612
LA-0284	Salvinia Weevil Propagation Facility	01-Jul-18	29-Mar-19	\$5,052,748
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	25-May-17	2-May-19	\$35,426,478
ME-0020	South Grand Chenier Marsh Creation Project	03-Mar-17	6-Aug-19	\$23,873,346
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	07-Sep-16	30-Aug-18	\$35,876,728
TV-0063	Cole's Bayou Marsh Restoration	15-Dec-17	5-Apr-19	\$24,930,426
State-Only Projects²				
BA-0075-1	Jean Lafitte Tidal Protection	19-Feb-14	25-Jun-19	\$29,403,973
BA-0075-2	Rosethorne Tidal Protection	16-Jul-18	23-Apr-20	\$22,950,000
BA-0085	St. Charles West Bank Hurricane Protection Levee	01-Nov-13	1-Sep-22	\$14,500,000
PO-0170	Violet Canal North Levee Alignment	14-Nov-17	17-Sep-18	\$1,164,000
TE-0064	Morganza to the Gulf	30-Nov-05	1-Jun-20	\$177,003,835
TE-0116	St. Mary Backwater Flooding	25-May-17	9-Apr-19	\$10,394,609
CDBG Projects				
BA-0082	Lafitte Area Levee Repair	20-Dec-17	21-Dec-18	\$819,185
TE-0078	Cut-Off/Pointe Aux Chene Levee	25-Aug-17	19-Nov-19	\$9,714,158
HSDRRS Projects				
BA-0067	New Orleans to Venice	23-Nov-11	29-Aug-23	\$1,301,523,760
BA-0109	HSDRRS Mitigation- WBV ³	27-Feb-15	25-Oct-19	\$126,000,000
BA-0154	Previously Authorized Mitigation WBV ³	04-Aug-14	31-Oct-18	\$11,000,000
BA-0158	New Orleans to Venice Mitigation - Plaquemines Non-Fed	18-Feb-19	4-Jun-21	\$14,500,000
BA-0159	New Orleans to Venice Mitigation - Fed	18-Feb-19	7-Jun-21	\$30,000,000
PO-0057	SELA- Overall	18-Feb-09	12-Oct-20	\$1,170,974,586
PO-0121	HSDRRS Mitigation- LPV ⁴	23-Jul-15	3-Sep-19	\$85,000,000
NRDA Early Restoration Projects				
TE-0100	Caillou Lake Headlands	22-Jul-15	11-Oct-18	\$118,340,766
Notes				
1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.				
2. Project partially funded with Surplus funds.				
3. Project cost included in total cost for BA-0066.				
4. Project cost included in total cost for PO0063.				





► **Table 3-2: Projected Three-Year Schedules for Active CWPPRA Projects¹ (FY 2019 - 2021)**

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
CWPPRA Phase I Projects														
BA-0193	Caminada Headlands Back Barrier Marsh Creation Increment 2	EPA	D	D	W	W	W	W	W	W	W	W	W	W
BA-0194	East Leeville Marsh Creation and Nourishment	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
BA-0195	Barataria Bay Rim Marsh Creation and Nourishment	NRCS	D	D	D	D	D	D	W	W	W	W	W	W
CS-0078	No Name Bayou Marsh Creation & Nourishment	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
CS-0079	Oyster Lake Marsh Creation and Nourishment	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
ME-0031	Freshwater Bayou Marsh Creation (CWPPRA)	NRCS	D	D	D	D	D	D	W	W	W	W	W	W
ME-0032	South Grand Chenier Marsh Creation - Baker Tract	NRCS	D	D	D	D	D	D	W	W	W	W	W	W
PO-0075	LaBranche East Marsh Creation	NRCS	D	D	W	W	W	W	W	W	W	W	W	W
PO-0133	Labranche Central Marsh Creation	NRCS	D	D	W	W	W	W	W	W	W	W	W	W
PO-0169	New Orleans Landbridge Shoreline Stabilization & Marsh Creation	USFWS	D	D	W	W	W	W	W	W	W	W	W	W
PO-0173	Fritchie Marsh Creation and Terracing	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
PO-0178	Bayou La Loutre Ridge Restoration and Marsh Creation	NRCS	D	D	D	D	D	D	D	D	D	D	W	W
PO-0179	St. Catherine Island Marsh Creation and Shoreline Protection	USFWS	D	D	D	D	D	D	W	W	W	W	W	W
TE-0112	North Catfish Lake Marsh Creation	NRCS	D	D	D	D	D	D	D	D	D	D	W	W
TE-0117	Island Road Marsh Creation and Nourishment	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
TE-0134	West Fourchon Marsh Creation	NOAA	D	D	W	W	W	W	W	W	W	W	W	W
TE-0138	Bayou DeCade Ridge and Marsh Creation	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
BA-0171	Caminada Headland Back Barrier Marsh Creation	EPA	W	W	W	W	W	W	W	W	W	W	W	W
BA-0173	Bayou Grande Cheniere Marsh and Ridge Restoration	USFWS	W	W	W	W	W	W	W	W	W	W	W	W
BS-0024	Terracing and Marsh Creation South of Big Mar	USFWS	W	W	W	W	W	W	W	W	W	W	W	W
CS-0049	Cameron-Creole Freshwater Introduction	NRCS	W	W	W	W	W	W	W	W	W	W	W	W
PO-0034	Alligator Bend Marsh Restoration and Shoreline Protection	NRCS	W	W	W	W	W	W	W	W	W	W	W	W
PO-0168	Shell Beach South Marsh Creation ¹	EPA												
TE-0039-CU2	South Lake Decade Freshwater Introduction - CU2 ¹	NRCS												

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
CWPPRA Phase II Projects														
BA-0125	Northwest Turtle Bay Marsh Creation	USFWS	C	C	C	C	C	F	O	O	O	O	O	O
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	USFWS	C	F	O	O	O	O	O	O	O	O	O	O
CS-0066	Cameron Meadows Marsh Creation and Terracing	NOAA	D	D	D	D	D	B	C	C	C	C	F	O
LA-0284	Salvinia Weevil Propagation Facility	USFWS	C	C	C	F	O	O	O	O	O	O	O	O
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	NOAA	C	C	C	F	O	O	O	O	O	O	O	O
ME-0020	South Grand Chenier Marsh Creation Project	USFWS	C	C	C	C	F	O	O	O	O	O	O	O
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	USFWS	F	O	O	O	O	O	O	O	O	O	O	O
TV-0063	Cole's Bayou Marsh Restoration	NOAA	C	C	C	F	O	O	O	O	O	O	O	O
Legend		P	Feasibility & Planning						B	Both Design & Construction				
References	1. Project currently on hold; schedule to be updated when implementation recommences.	D	Engineering & Design						F	Construction Complete				
		W	Awaiting Additional Funding for Implementation						I	Program Implementation				
		C	Construction						O	Operations, Maintenance, & Monitoring				

► **Table 3-3: Projected Three-Year Schedules for Active WRDA Projects (FY 2019 - 2021)**

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
LCA Projects														
PO-0068	LCA Small Diversion at Convent / Blind River ¹	USACE	W	W	W	W	W	W	W	W	W	W	W	W
MR-0016	Mississippi River Hydrodynamic and Delta Management Study ¹	USACE												
Other WRDA Projects														
LA-0020	Southwest Coastal Louisiana Feasibility Study ^{1,2}	USACE	W	W	W	W	W	W	W	W	W	W	W	W
Legend		P	Feasibility & Planning						B	Both Design & Construction				
References	1. Project currently on hold; schedule to be updated when implementation recommences.	D	Engineering & Design						F	Construction Complete				
	2. Project partially funded by Surplus funds.	W	Awaiting Additional Funding for Implementation						I	Program Implementation				
		C	Construction						O	Operations, Maintenance, & Monitoring				

► **Table 3-4: Projected Three-Year Schedules for Active State-Only Projects (FY 2019 - 2021)**

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
State Surplus Projects														
BA-0075-1	Jean Lafitte Tidal Protection	N/A	C	C	C	F								
BA-0075-2	Rosethorne Tidal Protection	N/A	C	C	C	C	C	C	C	F				
BA-0085	St. Charles West Bank Hurricane Protection Levee	N/A	C	C	C	C	C	C	C	C	C	C	C	C
PO-0167	St. Tammany Parish Coastal Protection Study	N/A	P	P	P	P	P							
PO-0170	Violet Canal North Levee Alignment	N/A	C	F										
TE-0064	Morganza to the Gulf	USACE	C	C	C	C	C	C	F					
TE-0116	St. Mary Backwater Flooding	N/A	C	C	C	F								
TV-0057	Delcambre-Avery Canal (E&D)	N/A	W	W	W	W	W	W	W	W	W	W	W	W
PO-0062	West Shore-Lake Pontchartrain, Louisiana Hurricane Protection Project Feasibility Study ¹	USACE												
TV-0067	Bayou Tigre Flood Control Project ¹	N/A												
TV-0075	Bayou Tigre Flood Control Complex ¹	N/A												
Legend		P	Feasibility & Planning						B	Both Design & Construction				
References	1. Project currently on hold; schedule to be updated when implementation recommences.	D	Engineering & Design						F	Construction Complete				
		W	Awaiting Additional Funding for Implementation						I	Program Implementation				
		C	Construction						O	Operations, Maintenance, & Monitoring				

► Table 3-5: Projected Three-Year Schedules for Active CDBG Projects (FY 2019 - 2021)

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
BA-0082	Lafitte Area Levee Repair	HUD	C	F										
TE-0078	Cut-Off/Pointe Aux Chene Levee	HUD	C	C	C	C	C	F						
Legend		P	Feasibility & Planning						B	Both Design & Construction				
References		D	Engineering & Design						F	Construction Complete				
		W	Awaiting Additional Funding for Implementation						I	Program Implementation				
		C	Construction						O	Operations, Maintenance, & Monitoring				

► Table 3-6: Projected Three-Year Schedules for Active HSDRRS Projects (FY 2019 - 2021)¹

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021	
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021
BA-0067	New Orleans to Venice ^{2,3}	USACE	C	C	C	C	C	C	C	C	C	C	C	C
BA-0109	HSDRRS Mitigation- WBV ^{2,3}	USACE	C	C	C	C	C	C	C	C	C	C	C	C
BA-0154	Previously Authorized Mitigation WBV ^{2,3}	USACE	C	F										
BA-0158	New Orleans to Venice Mitigation - Plaquemines Non-Federal ^{2,3}	USACE	D	D	D	C	C	C	C	C	C	C	C	C
BA-0159	New Orleans to Venice Mitigation - Federal ^{2,3}	USACE	D	D	D	C	C	C	C	C	C	C	C	C
PO-0057	SELA- Overall ^{2,3}	USACE	C	C	C	C	C	C	C	C	C	F		
PO-0121	HSDRRS Mitigation- LPV2 ^{2,3}	USACE	C	C	C	C	F							
Legend		P	Feasibility & Planning						B	Both Design & Construction				
References	1. OM&M duties are the responsibility of the local sponsor. 2. Schedule based on USACE estimates. 3. State expenditures may be covered with Surplus allocation for HSDRRS LERRDS.	D	Engineering & Design						F	Construction Complete				
		W	Awaiting Additional Funding for Implementation						I	Program Implementation				
		C	Construction						O	Operations, Maintenance, & Monitoring				

► **Table 3-7: Projected Three-Year Schedules for Active and Proposed Oil Spill Projects (FY 2019 - 2021)**

Project ID	Project Name	Federal Sponsor	CY 2018		Calendar Yr 2019				Calendar Yr 2020				CY 2021		
			1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020	1FQ 2021	2FQ 2021	3FQ 2021	4FQ 2021	
Deepwater Horizon NRDA Projects															
BA-0202	Queen Bess Island Restoration	N/A	D	D	D	D	D	D	W	W	W	W	W	W	
BA-0203	Barataria Basin Ridge and Marsh Restoration- Spanish Pass Increment	N/A	D	D	D	D	D	D	D	W	W	W	W	W	
CS-0080	Rabbit Island Restoration	N/A	D	D	D	D	D	D	D	D	W	W	W	W	
PO-0180	Lake Borgne Marsh Creation- Increment 1	N/A	D	D	D	D	D	D	D	D	D	D	W	W	
TE-0100	Caillou Lake Headlands	N/A	C	F											
TE-0139	Terrebonne Basin Ridge and Marsh Creation- Bayou Terrebonne Increment	N/A	D	D	D	D	D	D	D	D	D	D	D	D	
NFWF Projects															
BA-0153	Mid-Barataria Sediment Diversion	N/A	D	D	D	D	D	D	W	W	W	W	W	W	
BS-0030	Mid-Breton Sediment Diversion	N/A	D	D	D	D	D	D	D	D	D	D	W	W	
LA-0276	Sediment Diversion Implementation and Program Management	N/A	I	I	I	I	I	I	I	I	I	I	W	W	
TE-0110	Increase Atchafalaya Flow to Eastern Terrebonne	N/A	D	D	D	D	D	D	D	D	D	D	D	D	
TE-0118	East Timbalier Island Restoration	N/A	D	D	D	D	D	D	W	W	W	W	W	W	
RESTORE Projects															
BA-0197	West Grand Terre Beach Nourishment and Stabilization	N/A	D	D	D	D	D	D	D	W	W	W	W	W	
BS-0025	Lower Mississippi River Management	N/A	P	P	P	P	P	P	P	P	P	P	P	P	
CS-0065	Calcasieu Ship Channel Salinity Control Measures	N/A	D	D	D	D	D	D	D	D	D	W	W	W	
PO-0029	Mississippi River Reintroduction into Maurepas Swamp	N/A	D	D	D	D	D	D	D	D	D	W	W	W	
PO-0163	Golden Triangle Marsh Creation	N/A	D	D	D	D	D	D	D	D	W	W	W	W	
PO-0174	Biloxi Marsh Living Shoreline Project	N/A	D	D	D	D	D	D	D	D	D	D	W	W	
TE-0113	Houma Navigation Canal Lock Complex	N/A	D	D	D	D	W	W	W	W	W	W	W	W	
N/A	Parish Matching Program	N/A	I	I	I	I	I	I	I	I	I	I	I	I	
Legend		P	Feasibility & Planning						B	Both Design & Construction					
		D	Engineering & Design						F	Construction Complete					
		W	Awaiting Additional Funding for Implementation						I	Program Implementation					
		C	Construction						O	Operations, Maintenance, & Monitoring					

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Section 4
Projections:
2019 - 2020 - 2021

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Section 4

Projections: Fiscal Years 2019 – 2020 – 2021

Table 4-1 presents projected state revenues over the next three fiscal years. Tables 4-2 through 4-4 show a proposal of expenditures over the next three fiscal years. Figures 4-1 through 4-3 depict projected expenditures by project phase for FY 2019–FY 2021, respectively.

While the three-year projections provide readers with an informative picture of the state's upcoming activities, the Legislature only reviews and approves expenditures for FY 2019 (July 1, 2018 through June 30, 2019). The implementation plan incorporates projects that have received funding for planning, design, construction, or OM&M. The state is exploring new ways to fund projects, with the intent of obtaining a level of funding consistently from year to year so that new projects can continue to be brought on line. The state acknowledges that new project opportunities may arise as federal funds become available after the approval of the FY 2019 Annual Plan. In this event, any requests for additional expenditures will be submitted for approval by the CPRA Board.

Sources of Coastal Funding

The state will continue to pursue new possible funding sources while we make the most efficient use of existing funding sources, which include the following:

- The state Coastal Protection and Restoration Trust Fund is largely supported by mineral revenues and severance taxes on oil and gas production on state lands. The Trust Fund provides funding for the coastal program's ongoing operating expenses, for state's 15% cost share match in the CWPPRA program.
- The Louisiana Legislature allocated funds from state budget surpluses in 2007, 2008, and 2009 to the coastal program, providing a \$790 million investment in coastal protection and restoration efforts. All surplus funds are currently projected to be expended by the end of FY 2021.
- The Gulf of Mexico Energy Security Act (GOMESA) provides four Gulf Coast states and their coastal political subdivisions, including Louisiana, with 37.5 percent of qualified federal revenue gained from Outer Continental Shelf leases. Revenue sharing is capped at \$500 million through federal FY 2055, but the revenue sharing established under GOMESA will continue beyond that date. The first payment from Phase II of GOMESA is expected in the Spring of 2018, and although prior projections for GOMESA's maximum potential contribution to Louisiana's coastal program ranged from \$120–\$140 million annually, estimates are now \$60–\$70 million, because the cap was not met. CPRA has been advised that this reduced revenue could continue over the next several years.
- Louisiana received \$1.06 billion in Community Development Block Grant (CDBG) funding to assist in the recovery from Hurricanes Gustav and Ike. This total includes an allocation of \$27.4 million for state coastal protection and restoration projects. All CDBG funding resulting from Hurricanes Gustav and Ike is currently projected to be expended by FY 2020.
- The Office of the Governor generates a Capital Outlay Budget Proposal with a list of projects to be granted cash and non-cash lines of credit. State and non-state entities may submit Capital Outlay requests for inclusion in the proposal. For FY 2019, the CPRA is requesting Capital Outlay funding to supplement implementation of 13 coastal projects and to fund the state's 30-year HSDRRS payback obligation. Additional information about this request is presented in Appendix F. Final decisions on Capital Outlay requests will be announced at the close of the 2018 Regular Legislative Session.

Development of Funding Projections

The budget projections in Tables 4-2 through 4-4 show the amount of state funds that would actually be needed to accomplish the proposed implementation plan for the next three fiscal years. When developing these projections, the planning team worked with the following assumptions:

- Projected Trust Fund revenues are based on the most recent available information; however, this revenue is difficult to estimate in advance because of a complicated formula and funding triggers based largely on fluctuating mineral revenues.
- All remaining funds earmarked for projects from 2007, 2008, and 2009 surplus funds were carried forward and are shown as revenue for the purposes of the FY 2019 Annual Plan.
- Funding projections represent known avenues through which funding will be received. However, many uncertainties persist regarding the percentages and amounts of funding to be provided by the federal government and local sponsors. Should more dollars become available, the state will be able to expand its efforts and allocate these funds under the direction of the CPRA Board.

Forecasting the Future Funding Picture

The Coastal Master Plan outlines projects for implementation over a 50-year planning horizon. To support this effort, the state is actively pursuing possible sources of funding that may be available over the next 50 years to support future coastal restoration and storm-surge flood risk reduction projects.

Flexibility to Respond to Changing Conditions

Revenue and expenditure projections in Tables 4-1 and 4-2 are based on the most recent available information. Tables 4-1 and 4-2 present a forecast based on a snapshot in time. However, as the *Deepwater Horizon* oil spill illustrates, the coastal program needs some degree of funding flexibility to enable the state to respond appropriately to changing conditions on the ground. CPRA has been granted authority to reprogram dollars from approved funding streams and to reallocate dollars to best meet new opportunities or needs. Reprogramming of existing and new funds will likely occur, with approval from the CPRA Board, to ensure that limited coastal program funds are allocated to the areas of greatest need and in a manner that will provide the greatest overall benefit to the coast. Such flexibility allows the coastal program to respond effectively to unforeseen events that take place outside the legislatively mandated planning cycle.

LaGov

LaGov is a new statewide integrated financial and procurement system that CPRA began using July 1, 2014. This new system integrates financial, human resources, payroll, procurement, and logistics, and brings multiple benefits to CPRA, most notably, system generated project accounting. Other important advantages are better management of federal grants and other funding sources, improvements in managing vendor relationships, improved reporting, and more efficient business processes. CPRA has most recently begun the implementation of the Project Systems module which has multiple advantageous features for Project Managers to use in managing projects. CPRA will soon participate in a pilot project to develop the state's budget-development module.

Innovative Funding and Financing Initiatives

Louisiana's coastal program is entering into a phase in which it will have the financial means to implement some of the most significant projects called for in its \$50 billion, 50-year Louisiana Coastal Master Plan. This funding will be made available over the next 15 years largely as a result of the *Deepwater Horizon* oil spill settlements and the maturation of the GOMESA into Phase II. In order to make the most of this anticipated funding, CPRA will undertake a number of initiatives related to finance and funding beginning in FY 2019. These projects will address innovative financing options for certain coastal restoration projects, the marrying of a financing strategy with project implementation mileposts to insure the greatest return on investment in the near and medium term, and developing a road map for potential future revenue streams in the long term.

Outcome-Based Performance Contracting

Another new project implementation initiative being developed by CPRA is Outcome Based Performance Contracting, which was authorized by the Louisiana Legislature in the 2017 Regular Session (Act 356). This project delivery model can provide CPRA with a tool to utilize private investment to get projects on the ground faster, shift significant risk of project success to the contractor, and potentially obtain better overall value, innovation and efficiency in delivering projects. Payment is not based on a contractor merely completing a project, but is instead based on the contractor meeting defined performance criteria for the project over a defined period of time. CPRA is currently exploring which projects and funding streams are best suited for this project-implementation approach.

Restore or Retreat "Financing Louisiana's Future"

The CPRA Board called into action the CPRA Finance Working Group, to advance the state's efforts to identify and procure additional funds and funding sources for the Louisiana Coastal Master Plan. Restore or Retreat, a non-governmental organization, is partnering with CPRA to maximize and leverage future funding opportunities along with innovative cash management tools and techniques.

Restore or Retreat has contracted with a team of experts to analyze the multiple coastal revenue streams and develop recommendations for the most feasible and cost-efficient options for financing some portion of those revenues. CPRA has partnered with Restore or Retreat to provide information on the intricacies of each revenue stream, including what can and cannot be financed as well as how dollars must be drawn down, and identifying the funds potentially available for CPRA's priority projects. This effort will explicitly investigate new and innovative financial instruments as well as traditional bonds to develop a holistic financial strategy for the coastal program's anticipated revenues.

Long Term Funding Summit

While the coastal program is working to take full advantage of the opportunities provided by the revenues available today and for the next 15 years, the agency is cognizant of its long range funding gap. Currently, around \$20 billion has been identified for the coastal program over the next 50 years while the Coastal Master Plan envisions investing in projects with a total cost of \$50 billion in today's dollars. Early in 2018, CPRA plans to convene a meeting of key thought leaders from a variety of backgrounds to think through the funding challenges facing the coastal program in the long term. Goals of the meeting will include the identification of viable sources of future revenue as well as action items for furthering the development of the identified options.

Environmental Impact Bonds

Another innovative financing tool which provides up-front capital for environmental programs is Environmental Impact Bonds (EIB). In October, 2017, CPRA announced that the Environmental Defense Fund is performing a feasibility study to design an EIB and determine whether Louisiana can use it as a financing tool to fund coastal restoration. The aim is to develop innovative financing tools that can get projects built sooner, and that may serve as a means for attracting new sources of capital from beneficiaries of wetland restoration.

The CPRA Board called into action the CPRA Finance Working Group, to advance the state's efforts to identify and procure additional funds and funding sources for the Louisiana Coastal Master Plan. Restore or Retreat, a non-governmental organization, is partnering with CPRA to maximize and leverage future funding opportunities along with innovative cash management tools and techniques. A "Statements of Interests and Qualifications" was advertised by the Committee, to which ten teams submitted proposals, representative of 35 experts from all parts of the financial world.

Natural Resource Damage Restoration Banking (NRD Banking)

Natural Resource Damage Restoration (NRD) Banking is one alternative method that would incentivize private investment in Coastal Master Plan projects through a new project delivery method and a new type of mitigation bank targeted at Natural Resource Damages.

This would allow private entities to finance and carry out restoration projects that are in or consistent with Louisiana's Coastal Master Plan. The private entity could then sell restoration credits to responsible parties to mitigate for natural resource damages liability resulting from certain oil spills under the Oil Pollution Act that occur in Louisiana coastal waters. For the investor, there is potential profit from the sale of the restoration credits; for the potentially responsible party in an oil spill, buying the credits in lieu of lengthy natural resource damage assessment and restoration implementation as well as potentially avoiding probable years of pending litigation and ongoing liability would be beneficial. As for the state, this approach offers another method to facilitate getting Master Plan projects implemented.

In September, 2017, Louisiana's new NRD banking program was officially activated, and it will incentivize private investment in Coastal Master Plan projects. Entities can submit a prospectus to CPRA for review.

New legislation passed by the 2016 Louisiana Legislature and Governor John Bel Edwards directed CPRA to develop a framework and rules for a Natural Resource Damage restoration banking program and an oil spill compensation schedule. Over the past year, CPRA worked with stakeholders, federal agencies, the mitigation banking industry, the Louisiana Oil Spill Coordinator's Office, and the other trustee agencies to draft the framework and regulations for this new program. The final Restoration Banking Regulations were published on July 20, 2017 and are posted at www.doa.la.gov/osr/lac/43v31/43v31.doc and the final Compensation Schedule Regulations were published on August 20, 2017 and are posted at <http://doa.la.gov/osr/lac/43v29/43v29.doc>.

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► **Table 4-1: Projected Three-Year Revenues (FY 2019 - FY 2021)**

Revenue Sources	FY 2019	FY 2020	FY 2021	Program Total (FY 2019 - FY 2021)
CPR Trust Fund Annual Revenue ^{1,2}	\$14,379,625	\$13,600,000	\$13,200,000	\$41,179,625
CPR Trust Fund Carried Forward	\$14,746,774	TBD	TBD	\$14,746,774
GOMESA ^{1,3}	\$70,000,000	\$70,000,000	\$70,000,000	\$210,000,000
GOMESA Carried Forward ⁴	\$65,190,150	\$87,679,870	\$49,630,813	\$202,500,834
DOTD Interagency Transfer ¹	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
CWPPRA Federal Funds ⁵	\$74,630,825	\$76,289,212	\$76,493,168	\$227,413,206
Surplus '07, '08, '09 Carried Forward	\$124,533,205	\$17,847,474	\$14,189,960	\$156,570,639
Community Development Block Grants	\$4,545,928	\$692,388	\$0	\$5,238,316
Capital Outlay Funds (Previously Appropriated)	\$8,705,000	TBD	TBD	\$8,705,000
NRDA Revenues (<i>Deepwater Horizon</i>)	\$94,045,087	\$435,363,012	\$342,989,562	\$872,397,660
NFWF Revenues (<i>Deepwater Horizon</i>)	\$78,079,656	\$165,721,027	\$122,563,957	\$366,364,641
RESTORE Revenues (<i>Deepwater Horizon</i>)	\$43,748,005	\$55,894,004	\$178,434,962	\$278,076,970
LDNR Mitigation Funds ⁶	\$300,000	\$300,000	\$300,000	\$900,000
LDNR Beneficial Use Funds ⁶	\$150,000	\$150,000	\$150,000	\$450,000
LDWF Interagency Transfer ⁷	\$1,000,000	\$0	\$0	\$1,000,000
MOEX Settlement ⁸	\$352,343	\$131,250	\$1,057,030	\$1,540,623
OM&M Federal Funds ⁹	\$27,759,800	\$15,619,145	\$13,160,767	\$56,539,712
LOSCO Funding ¹⁰	\$89,384	\$89,384	\$84,384	\$263,152
Project Billing ¹¹	\$23,254,531	\$23,000,000	\$23,000,000	\$69,254,531
Capital Outlay Request Submitted for HSDRRS 30-Year Payback	\$0	\$98,432,119	\$98,432,119	\$196,864,238
Total Projected Revenue	\$649,510,313	\$1,064,808,885	\$1,007,686,722	\$2,722,005,920

Notes:

1. Annually recurring revenue source to be spent in accordance with the Louisiana Constitution, specifically State Law Section 214.5.4(E) and the provisions within paragraph (3).
2. Estimate tied to mineral revenue.
3. GOMESA funds must be disbursed to the applicable states by the end of the federal fiscal year. FY 2019 GOMESA funds are anticipated to be received between April 2019 (4Q19) and September 2019 (1Q20).
4. Represents carry-forward of unexpended funds from prior-year GOMESA payments.
5. Represents anticipated Federal reimbursement for CWPPRA projects led by CPRA in which the State is initially incurring more than its 15% cost share during project implementation.
6. Supplemental funding to augment construction of eligible projects (specific projects to be determined at a later date).
7. Supplemental funding to augment construction of project ME-0018.
8. Represents anticipated balance as of FY 2019 of an initial deposit of \$6.75 million of funds from the MOEX settlement.
9. Represents anticipated Federal reimbursement for CWPPRA and WRDA OM&M activities led by CPRA in which the State is initially incurring more than its cost share during project implementation.
10. Represents reimbursement of expenditures for CPRA (non-DWH) oil spill response activities.
11. Represents salary and other work-in-kind reimbursements for work performed on projects in funding programs listed in the table above.

► **Table 4-2: Projected Three-Year Expenditures¹ (FY 2019 - FY 2021)**

Program / Funding Source	FY 2019	FY 2020	FY 2021	Program Total (FY 2019- FY 2021)
CWPPRA State Expenditures (not including Surplus expenditures) ²	\$13,630,380	\$13,710,788	\$13,506,832	\$40,847,999
CWPPRA Federal Expenditures ³	\$74,630,825	\$76,289,212	\$76,493,168	\$227,413,206
WRDA Project Expenditures (not including Surplus expenditures)	\$0	\$0	\$0	\$0
Surplus Projects and Program Expenditures	\$124,533,205	\$17,847,474	\$14,189,960	\$156,570,639
Community Development Block Grants	\$4,545,928	\$692,388	\$0	\$5,238,316
HSDRRS 30-Year Payback ⁴	\$0	\$98,432,119	\$98,432,119	\$196,864,238
MOEX Project Expenditures	\$352,343	\$131,250	\$1,057,030	\$1,540,623
Capital Outlay Project Expenditures	\$8,705,000	TBD	TBD	\$8,705,000
State-Only Project Expenditures (Non-Surplus)	\$212,953	\$94,146	\$40,003	\$347,102
NRDA Expenditures (<i>Deepwater Horizon</i>)	\$94,045,087	\$435,363,012	\$342,989,562	\$872,397,660
NFWF Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$78,079,656	\$165,721,027	\$122,563,957	\$366,364,641
RESTORE Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$43,748,005	\$55,894,004	\$178,434,962	\$278,076,970
LDNR Mitigation Expenditures ⁵	\$300,000	\$300,000	\$300,000	\$900,000
LDNR Beneficial Use Expenditures ⁵	\$150,000	\$150,000	\$150,000	\$450,000
LDWF Interagency Transfer Expenditures ⁶	\$1,000,000	\$0	\$0	\$1,000,000
OM&M- State Expenditures (not including Surplus or GOMESA expenditures)	\$10,434,118	\$5,789,759	\$5,069,363	\$21,293,240
OM&M- Federal Expenditures ⁷	\$27,759,800	\$15,619,145	\$13,160,767	\$56,539,712
GOMESA Expenditures	\$47,510,280	\$108,049,057	\$72,129,618	\$227,688,955
Operating Costs (see Tables 4-3 and 4-4) ⁸	\$32,192,863	\$35,077,751	\$36,005,417	\$103,276,031
Total Planned Expenditures	\$561,830,442	\$1,029,161,132	\$974,522,758	\$2,565,514,332

Notes:

1. Represents proposed expenditures provided that commensurate level of funding is received.
2. Because CWPPRA projects compete for funding annually, CWPPRA expenditures as presented in Appendix B (which include projected expenditures for approved projects only) do not adequately capture likely CWPPRA expenditures in outlying years. The State's estimated CWPPRA expenditures for FY 2020 - FY 2021 are therefore based on prior years' expenditures.
3. Represents anticipated Federal reimbursement for CWPPRA projects led by CPRA in which the State is initially incurring more than its 15% cost share during project implementation.
4. Payback is based on current HSDRRS construction schedule; payback will not commence until completion of HSDRRS construction activities. According to current USACE estimates, payback will commence in September 2019 with an estimated annual payment of \$98 million.
5. Supplemental funding to augment construction of eligible projects (specific projects to be determined at a later date).
6. Supplemental funding to augment construction of project ME-0018.
7. Represents anticipated Federal reimbursement for CWPPRA and WRDA OM&M activities led by CPRA in which the State is initially incurring more than its cost share during project implementation.
8. In the event of a declared emergency, CPRA may need to expend Operating Costs in support of the State's disaster response efforts. Up to 75 percent of these expenditures would be reimbursable by FEMA.

► **Table 4-3: Programmatic Projected Three-Year Expenditures (FY 2019 - FY 2021)**

Program ID	Program Name	FY 2019	FY 2020	FY 2021	Program Total (FY 2019 - FY 2021)
Ongoing Program Expenditures					
N/A	Beneficial Use Program ¹	\$2,000,000	\$2,000,000	\$2,000,000	\$6,000,000
LA-0251	Barrier Island Maintenance Program ¹	\$2,904,804	TBD	TBD	\$2,904,804
N/A	Vegetative Plantings	\$400,000	\$400,000	\$400,000	\$1,200,000
PO-0162	Assistance to Levee Authorities	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
LA-0028	Restoration Partnerships	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
N/A	Project Support	\$3,500,000	\$3,500,000	\$3,500,000	\$10,500,000
Total Ongoing Programs Expenditures		\$10,804,804	\$7,900,000	\$7,900,000	\$26,604,804
Adaptive Management Expenditures					
Future Project Development					
LA-0255	Project Development and Implementation Program	\$250,000	\$250,000	\$250,000	\$750,000
LA-0025	Innovative Programs	\$150,000	\$150,000	\$150,000	\$450,000
LA-0261	Non-structural Program Development ¹	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
Focused Applied Research					
LA-0158	Coastal Science Assistantship Program ²	\$235,000	\$235,000	\$335,000	\$805,000
Science and Technical Advisory Boards					
LA-0260	Master Plan Advisory Committees ²	\$0	\$300,000	\$300,000	\$600,000
Model Development and Refinement					
LA-0250	Master Plan Predictive Models ²	\$2,500,000	\$3,500,000	\$4,000,000	\$10,000,000
MR-0016-SSPM	Small Scale Physical Model ³	\$500,000	\$500,000	\$500,000	\$1,500,000
System Wide Assessment and Monitoring Program (SWAMP)					
LA-0252	SWAMP Development ⁴	\$0	\$0	\$0	\$0
N/A	Fisheries ⁵	\$7,500,000	\$7,800,000	\$8,000,000	\$23,300,000
N/A	SWAMP Implementation ^{3,4,5}	\$11,800,000	\$16,280,000	\$16,280,000	\$44,360,000
LA-0226	Barrier Island Comprehensive Monitoring ³	\$735,300	\$1,927,159	\$765,659	\$3,428,118
LA-0030	CRMS-Wetlands	\$1,250,000	\$1,250,000	\$1,250,000	\$3,750,000
N/A	Regional Geology and Sediment Management ⁴	\$830,000	\$830,000	\$830,000	\$2,490,000
Data Management and Analysis					
LA-0258	Data Management ⁴	\$2,400,000	\$2,400,000	\$2,400,000	\$7,200,000
LA-0254	Monitoring Data Interpretations ^{3,4,5}	\$1,050,000	\$1,050,000	\$1,050,000	\$3,150,000
Communication and Messaging					
N/A	Workshop and Conference Development	\$150,000	\$150,000	\$150,000	\$450,000
N/A	Language Access	\$25,000	\$25,000	\$25,000	\$75,000
LA-0249	Coastal Education	\$600,000	\$600,000	\$600,000	\$1,800,000
Total Adaptive Management Expenditures		\$30,975,300	\$38,247,159	\$37,885,659	\$107,108,118

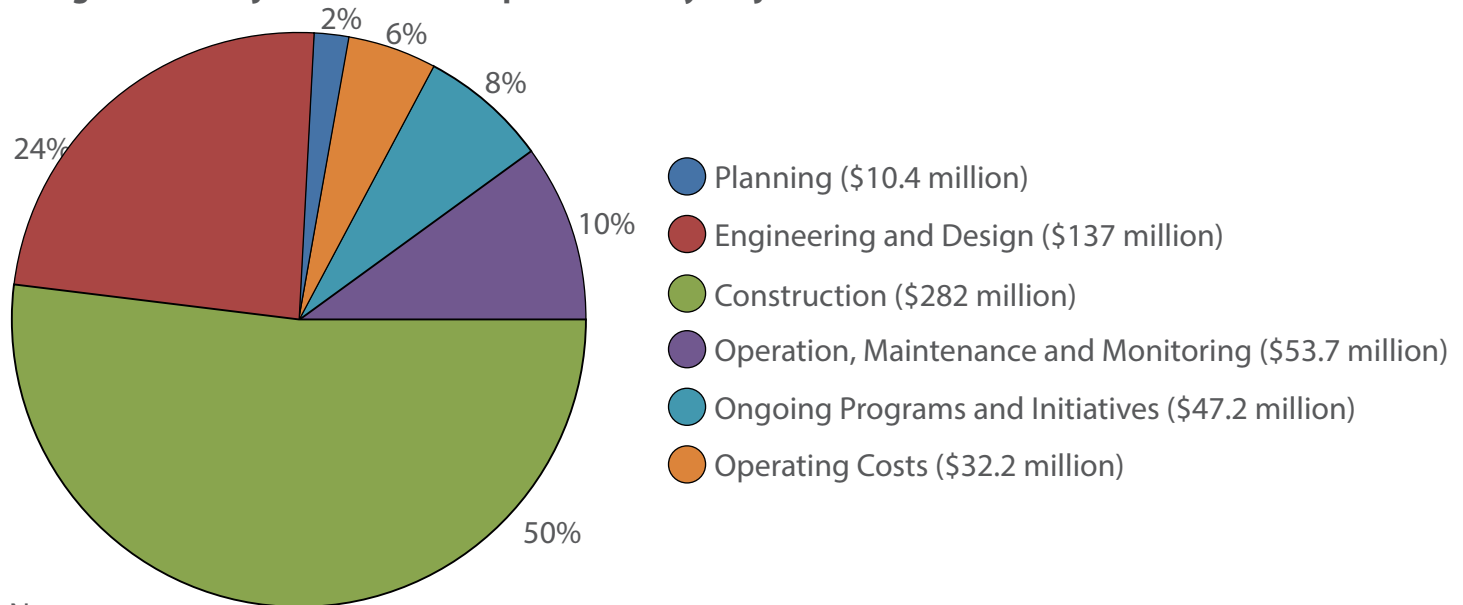
► **Table 4-3: Programmatic Projected Three-Year Expenditures (FY 2019 - FY 2021)**

Program ID	Program Name	FY 2019	FY 2020	FY 2021	Program Total (FY 2019 - FY 2021)
	TOTAL Programmatic Expenditures	\$41,780,104	\$46,147,159	\$45,785,659	\$133,712,922
	Programmatic Surplus Expenditures (See Table B-5)	\$5,193,990	\$151,047	\$0	\$5,345,037
	Programmatic NRDA Expenditures (See Table B-14)	\$12,250,000	\$14,258,475	\$14,458,475	\$40,966,949
	Programmatic NFWF Expenditures (See Table B-14)	\$6,860,300	\$10,016,905	\$8,855,405	\$25,732,610
	Programmatic RESTORE Expenditures (See Table B-14)	\$5,705,000	\$6,511,780	\$6,511,780	\$18,728,559
	Programmatic GOMESA Expenditures	\$2,735,000	\$4,035,000	\$4,635,000	\$11,405,000
	Programmatic Operations Expenditures	\$9,035,814	\$11,173,953	\$11,325,000	\$31,534,767
Notes					
1. FY 2019 expenditures funded at least partially with Surplus funds 2. FY 2019 expenditures funded by GOMESA funds. 3. FY 2019 expenditures funded by NFWF Adaptive Management funds. 4. FY 2018 expenditures funded by RESTORE Adaptive Management funds. 5. FY 2019 expenditures funded by NRDA Adaptive Management funds.					

► **Table 4-4: State Protection and Restoration Projected Three-Year Operating Expenditures (FY 2019 - FY 2021)**

Program	FY 2019	FY 2020	FY 2021	Program Total (FY 2019 - FY 2021)
CPRA	\$18,668,730	\$19,415,479	\$20,192,098	\$58,276,308
OCM	\$2,827,134	\$2,827,134	\$2,827,134	\$8,481,402
Office of the Governor - Coastal Activities	\$1,476,185	\$1,476,185	\$1,476,185	\$4,428,555
DNR Secretary (OMF Back Office Support)	\$0	\$0	\$0	\$0
Office of the Attorney General	\$185,000	\$185,000	\$185,000	\$555,000
Total Operating Costs	\$23,157,049	\$23,903,798	\$24,680,417	\$71,741,265

► **Figure 4-1: Projected FY 2019 Expenditures by Project Phase**

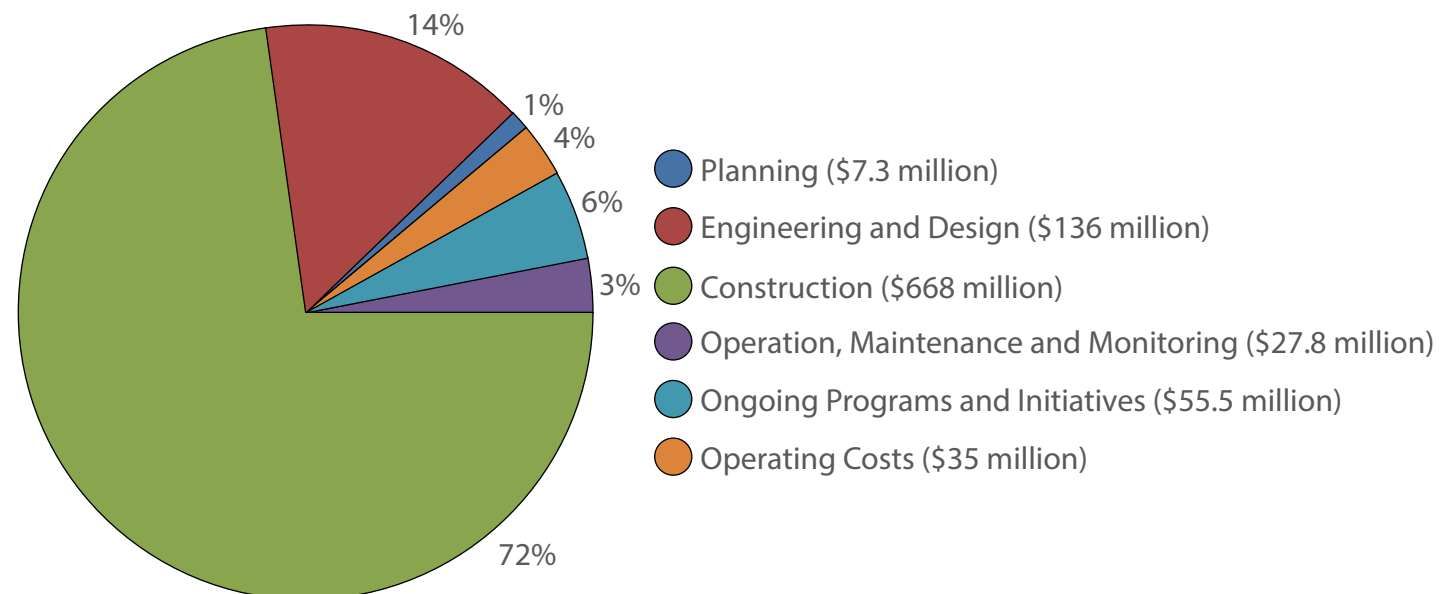


Notes

- Construction includes Beneficial Use (\$2 million)
- OM&M includes BIMP (\$2.9 million) and Repair/Rehabilitation of Projects (\$1.1 million)

TOTAL Expenditures
\$562 million

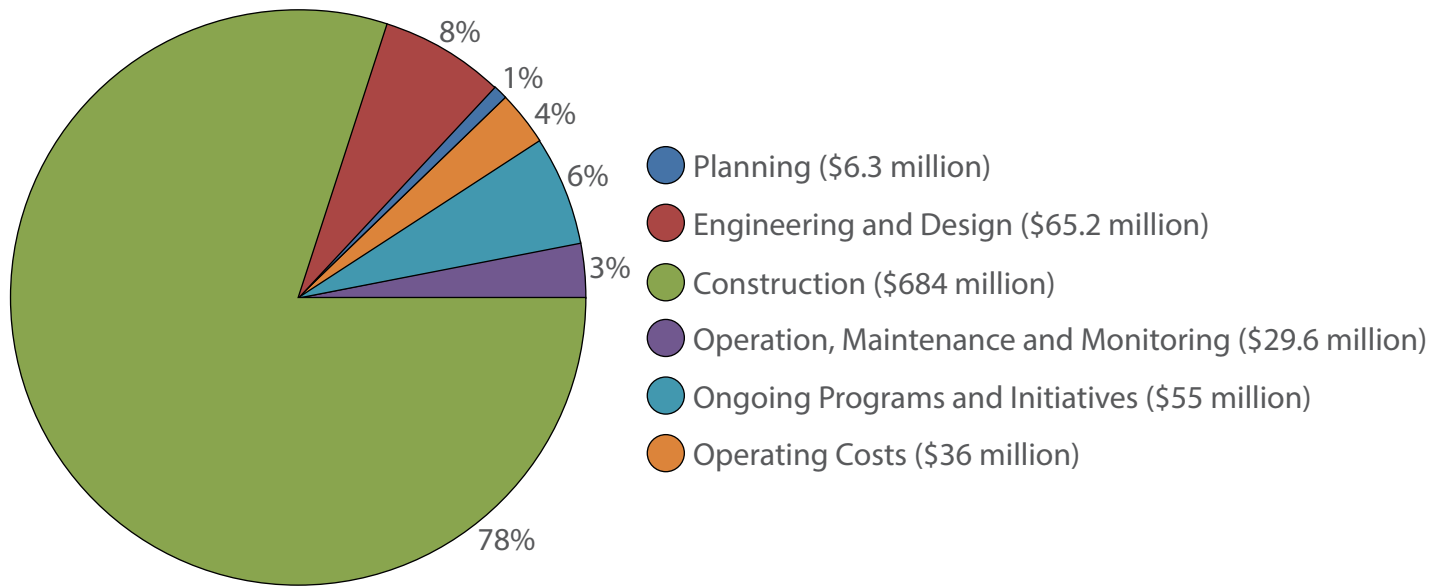
► **Figure 4-2: Projected FY 2020 Expenditures by Project Phase**



Notes

- Construction includes Beneficial Use (\$2 million)
- Engineering and Design and Construction include CWPPRA adjustment for outlying years (see Table 4-2 for explanation)
- Total excludes HSDRRS payback (\$98.4 million)

TOTAL Expenditures
\$931 million

► **Figure 4-3: Projected FY 2021 Expenditures by Project Phase****Notes**

- Construction includes Beneficial Use (\$2 million)
- Engineering and Design and Construction include CWPPRA adjustment for outlying years (see Table 4-2 for explanation)
- Total excludes HSDRRS payback (\$98.4 million)

TOTAL Expenditures
\$876 million





Section 5

Appendices

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Appendix A

Ongoing Protection and Restoration Project Summaries

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Diverted	Miles of Levee Restored	Construction Completion	Total Budget	Project Description	Planning Unit
BEIR	Barataria Island and Metairie Island Restoration	BA-0040	BH	NIA	PLAQUEMINES	608	N/A	2013	\$60,039,184	The goal of this project is to restore wetlands from the Mississippi River to reduce surge and marsh habitat on Barataria Island. Project was completed under CERP/LEA. The project was completed under CERP/LEA. The project was completed under CERP/LEA.	2
BEIR	Shell Island East	BA-0110	BH	NIA	PLAQUEMINES	628	N/A	2014	\$47,079,280	The purpose of this project is to restore the integrity of Shell Island, which was destroyed by a large oil spill in 1980. The project was completed under CERP/LEA. The project was completed under CERP/LEA. The project was completed under CERP/LEA.	2
BEIR	Emergency Barrier Barms	NA	OT	NIA	PLAQUEMINES, SAINT BERNARD	1417	N/A	2011	\$261,000,000	In response to the Deepwater Horizon oil spill of 2010, the State of Louisiana constructed approximately 16 miles of sand berms along several sectors of the State's barrier islands both east and west of the Mississippi River. The objective of this project was to provide a barrier to oil and maintain the integrity of the oil spill to thousands of acres of fragile barrier islands and wetlands in coastal Louisiana. Approximately 16 miles of barrier berms were constructed along existing and new barrier islands in the Chandeleur Islands (Roch 44, 47, 000 LF), Shell Island (Roch 44, 47, 000 LF), Pelican Island (Roch 44, 47, 000 LF), and Grand Isle (Roch 44, 47, 000 LF). The project was completed under CERP/LEA. The project was completed under CERP/LEA. The project was completed under CERP/LEA.	1, 2
COB3	Lafite A-10 Levee Repair	BA-0082	HF	HUD	JEFFERSON	N/A	4	Pending	\$930,000	This project will repair damages to the existing levee in the Lafite Basin Area. This damage was caused by heavy equipment and vehicles used on the levee for food fighting activities during the 2005 hurricane season. This project will provide for a 4 inch lift on approximately a 5 mile stretch of levee.	2
COB3	Rouffort Wetland A-1000 Project	BA-0083	HF	HUD	JEFFERSON	334	N/A	Inactive	\$1,893,769	The Rouffort Wetland A-1000 Project is currently being managed by the Louisiana Department of Wildlife and Fisheries. The project was completed under CERP/LEA. The project was completed under CERP/LEA. The project was completed under CERP/LEA.	2
COB3	Barou Labouche Fresh Water District - Walker S. Lemarr Memorial Pump Station	BA-0084	FD	HUD	ASCENSION	N/A	N/A	2014	\$3,194,355	This project will replace two of the existing pumps and motors at the Walker S. Lemarr Pump Station. This project will also install an emergency generator to operate the pump station during power outages.	2, 3A
COB3	Maconville Bulkhead	FO-0087	SP	HUD	ST TAMMANY	N/A	0.1	2014	\$2,144,266	This project will provide a construction of improvements to the existing bulkhead along the shore of Lake Pontchartrain and the Terrebonne River at the M. Maconville Marina.	1
COB3	St. Tammany Parish Watered Management Study	FO-0151	HF	HUD	ST TAMMANY	N/A	N/A	N/A	\$1,363,233	This project involves a planning study to evaluate the feasibility of watershed management measures in St. Tammany Parish.	1
COM3	Faloud Canal Road Levee	TE-0063	FD	HUD	TERREBOUNE	N/A	4.4	2017	\$24,803,191	This project will replace, modify or repair existing water control structures, dredge 13,000 cubic yards of water channels, and construct 3 miles of levee to accommodate flow under the water control structures and levee to the water control structures. The project will also construct area ditches to levels that are favorable for fish and intermediate marshes and to improve the efficiency of freshwater flow within the basin area by reconstructing the historical north-south flow.	3A
COM3	Cut Off Point Aux Chene Levee	TE-0078	HF	HUD	LAFOURCHE	N/A	8	Pending	\$6,468,157	This project will be in the existing levee system. The 2.5 mile levee will be constructed along Grand Bayou and be into the existing levee system on each end.	3A
COM3	Franklin Ecological Simulacrum (Phase 1)	TY-0052-1	HF	HUD	ST MARY	N/A	0.2	2012	\$4,591,380	This project involves the construction of a shiftable large structure on Franklin Canal to prevent storm surge from inundating the town of Franklin.	3B
COM3	Franklin Ecological Simulacrum (Phase 2)	TY-0052-2	HF	HUD	ST MARY	N/A	0.2	2015	\$2,148,666	This project will construct a pump station adjacent to the shiftable large structure on Franklin Canal (constructed in Phase 1 of the project) to prevent storm surge from inundating the town of Franklin.	3B
COM3	Flood Control Structure at Bottom Canal (Dahouville)	TY-0058	HF	HUD	VERMILION	N/A	N/A	Deauthorized	\$5,800,000	This project involves a flood control structure at the intersection of Bottom Canal and the GOMV, which is located in the area of a flood control structure at the intersection of Bottom Canal and the GOMV, which is located in the area of a flood control structure at the intersection of Bottom Canal and the GOMV.	3B
COM3	Flood Ridge Channel Temporary Flood Control Project	TY-0060	TE	HUD	VERMILION	40	N/A	Pending	\$2,878,162	This project will construct approximately 95,000 linear feet of marsh berms south side of Prairie Island in Vermilion Parish.	4
COM3	Barou Tigris Flood Control Project	TY-0067	HF	HUD	VERMILION	N/A	0.1	Pending	\$6,343,882	This project involves the implementation of flood control measures in Bayou Tigre.	4
CIAP	Morgan City Industrial Road	AT-0005	OT	USFWS	ST MARY	N/A	N/A	2015	\$1,247,000	The project is a road alignment that begins at the First Street Floodgate in Morgan City, LA. The alignment will proceed along the projected site of the floodgate to a distance of 1857 feet. And at the Port of Morgan City's north gate. The project will include the truck yards, through the residential neighborhoods by including the truck yards, through the proposed right-of-way road. The preliminary project benefits to provide more road access to the industrial facilities and the medium through the proposed new road, and decrease the traffic in the residential area.	3B
CIAP	Atchafalaya Long Distance Sediment Project	AT-0015	OT, MC	USFWS	TERREBOUNE	N/A	N/A	N/A	\$1,500,800	CIAP funds awarded to this project are for the purpose of advancing the design of a sediment regime which will be used to reduce sediment in the Atchafalaya River.	3A
CIAP	Lake de la Bayou Thierree Protection (Phase II)	BA-0015-X2	SP	USFWS	ST CHARLES	844	N/A	2009	\$2,300,000	This project involves the construction of approximately 7,600 linear feet of shoreline protection near the northwest shore of Lake de la Bayou Thierree.	2
CIAP	Elle Ouvre Terre	BA-0020	BH	USFWS	PLAQUEMINES	603	N/A	2010	\$75,426,247	Shoreline protection project to restore 28 miles and 1,000 acres of barrier islands and 450 acres of marsh in Orleans. 3.3 million cubic yards of sediment material and resurfacing the island. The project was designed under the CERP/LEA program and constructed under the CERP/LEA program.	2
CIAP	Gardens Land Dredge	BA-0036	MC	USFWS	JEFFERSON	363	N/A	2010	\$18,000,300	The objective of this project is to create and/or restore 1,200 acres of marsh in conjunction with CERP/LEA project BA-16.	2
CIAP	Lake de la Bayou Thierree Protection (Phase I)	BA-0037-IB	OT, MC	USFWS	JEFFERSON	371	N/A	2015	\$66,094,373	The goal of this project is to use material dredged from the Mississippi River and transported via new permanent levees across the Barataria Delta to create marsh and/or a ridge.	2
CIAP	Camillea Headwaters	BA-0045	BH	USFWS	LAFOURCHE	738	N/A	2014	\$70,079,580	The proposed project will restore and protect marsh and dune habitat across the Camillea Headwaters through the direct placement of sediment (located 60 miles south of New Orleans in lower Lafourche Parish between Levee and Port Fourchon). The project involves the construction of a 5 mile long, two lane elevated highway (two, 12 ft lanes and two, 8 ft shoulders). The Phase IA project consists of the Phase IB and Phase IC consists of the Phase ID and Phase IE consists of the Phase IF and Phase IF consists of the Phase IG and Phase IG consists of the Phase IH and Phase IH consists of the Phase II and Phase II consists of the Phase III and Phase III consists of the Phase IV and Phase IV consists of the Phase V and Phase V consists of the Phase VI and Phase VI consists of the Phase VII and Phase VII consists of the Phase VIII and Phase VIII consists of the Phase IX and Phase IX consists of the Phase X and Phase X consists of the Phase XI and Phase XI consists of the Phase XII and Phase XII consists of the Phase XIII and Phase XIII consists of the Phase XIV and Phase XIV consists of the Phase XV and Phase XV consists of the Phase XVI and Phase XVI consists of the Phase XVII and Phase XVII consists of the Phase XVIII and Phase XVIII consists of the Phase XIX and Phase XIX consists of the Phase XX and Phase XX consists of the Phase XXI and Phase XXI consists of the Phase XXII and Phase XXII consists of the Phase XXIII and Phase XXIII consists of the Phase XXIV and Phase XXIV consists of the Phase XXV and Phase XXV consists of the Phase XXVI and Phase XXVI consists of the Phase XXVII and Phase XXVII consists of the Phase XXVIII and Phase XXVIII consists of the Phase XXIX and Phase XXIX consists of the Phase XXX and Phase XXX consists of the Phase XXXI and Phase XXXI consists of the Phase XXXII and Phase XXXII consists of the Phase XXXIII and Phase XXXIII consists of the Phase XXXIV and Phase XXXIV consists of the Phase XXXV and Phase XXXV consists of the Phase XXXVI and Phase XXXVI consists of the Phase XXXVII and Phase XXXVII consists of the Phase XXXVIII and Phase XXXVIII consists of the Phase XXXIX and Phase XXXIX consists of the Phase XL and Phase XL consists of the Phase XLI and Phase XLI consists of the Phase XLII and Phase XLII consists of the Phase XL	

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flanking Unit
CIPAP	Buoh Canal and Bayou Terrebonne (LA 3542420)	DAIR-2513-0211	BP	USFWS	TERREBOUNNE	4300	N/A	2007	\$3,100,000	This project reconstructed the south bank of Buoh Canal using material dredged from the canal. The restored bank-line was then armored with gabion stone and armored with stone rip-rap. The rebuilt bank-line will help to diminish storm surge as well as reduce sediment intrusion. The project was funded by the CIPAP of 2001.	3A
CIPAP	Performance Evaluation - Barataria Land Bridge Biological Refugia	LA-0012-2	OT	USFWS	JEFFERSON	N/A	N/A	N/A	\$432,618	This research study will be conducted on the Barataria Land Bridge Dedicated Dredging Project (BLA-36) and will assess the effect of dredged sediment inputs on soil-vegetation-hydrologic dynamics within delineated interior brackish marshes.	2
CIPAP	Performance Evaluation - Freshwater Bayou	LA-0012-3	OT	USFWS	VERMILION	N/A	N/A	N/A	\$286,029	This study focuses on the expected vertical elevation change of the dredge dunn 18 due to immediate and long term sediment and subsidence. Work performed involving previous analysis performed to help improve our ability to predict sediment and subsidence, researching new methods, models, and techniques that could improve how CIPRA design teams predict sediment and subsidence. Additionally, field samples and construction monitoring shall be performed to verify the accuracy of the sediment and subsidence analyses performed during project design.	3A
CIPAP	CIPAP Performance Evaluation - Barataria Island Shores	LA-0012-5	OT	USFWS	JEFFERSON, LAFOURCHE	N/A	N/A	N/A	\$550,000	Evaluation of Tidal Pass Morphology For Rehabilitation at East Grand Terre and Development of Barrier Island Concretization	2
CIPAP	CIPAP Performance Evaluation - Barataria Marsh Succession	LA-0012-6	OT	USFWS	JEFFERSON, LAFOURCHE	N/A	N/A	N/A	N/A	Research to be conducted on the Camanche Headland in order to quantify the amount of consolidation in the substrate underlying barrier islands resulting from subsidence of sand for island rehabilitation.	2
CIPAP	CIPAP Performance Evaluation - Barataria Marsh Succession	LA-0012-7	OT	USFWS	COASTWIDE	N/A	N/A	N/A	\$813,512	The Barataria Marsh Succession (BAMS) was selected to understand the evolution of barrier islands for restoration projects inshore, nearshore, and offshore over time, with a particular focus on the filling (rates and types) of sediment and gradient of the slopes as well as potential drainage impacts. The study involves the collection of geophysical, geotechnical and water quality data from several barrier areas to understand not only the above mentioned but also the important connections between them of cut of borrow area.	COASTWIDE
CIPAP	Coastal Forest Conservation Initiative	LA-0013	PP, OT	USFWS	COASTWIDE	40000	N/A	N/A	\$20,166,136	A program to preserve existing coastal forest via purchase of fee title or conservation servitudes from willing land owners.	COASTWIDE
CIPAP	Rockefeller Shoreline Protection Demo (CIPAP)	ME-0018-EE	BP	USFWS	CAMERON	23	N/A	2009	\$8,800,000	The project involves the construction of approximately 37,800 linear feet of shoreline protection on the south shore of Grand Lake from the support canal to the support canal.	4
CIPAP	Grand Lake Shoreline Protection (CIPAP)	ME-0021-EE	BP	USFWS	CAMERON	495	N/A	2013	\$8,729,519	The project involves the construction of approximately 37,800 linear feet of shoreline protection on the south shore of Grand Lake from the support canal to the support canal.	4
CIPAP	Mississippi River Delta Strategic Planning - SPM Expansion	MR-16-SSPM	OT	USFWS	EAST BATON ROUGE	N/A	N/A	2017	\$13,620,200	This project involves the construction of a new expanded Small Scale Physical Model (SSPM) capable of modeling smaller flows and with an increased area of coverage in comparison to the previous SSPM. The project will also include the construction of a new facility to house the model as well as facilitate the use of the model for public outreach and education. The project will be a valuable educational and research tool to provide insight and qualitative understanding of critical aspects of the impacts of major discharges of water and sediments, storm conditions, and navigation impacts.	1, 2, 3A
CIPAP	Voigt Division	PO-0025-EE	FD	USFWS	ST BERNARD	12000	N/A	N/A	\$1,170,882	This project involves the diversion of freshwater from the Mississippi River into Lake Borgne to sustain Mississippi Sound, Central Wetlands, and Bilal Marsh areas. The feasibility study for this project is being done as part of the MROO Ecosystem Restoration F.S.	1
CIPAP	Orleans Lake and Bayou BP II	PO-0036-EE	BP	USFWS	ORLEANS	140	N/A	2013	\$20,860,200	This project provides shoreline protection on the north-west rim of Lake Borgne west of Algiers Point.	1
CIPAP	East Lake Shoreline Protection	PO-0043	BP	USFWS	ST CHARLES	Not Available	N/A	2015	\$3,553,616	Through various funding mechanisms, including CIPRA and CIPAP, all but approximately 16,300 linear feet of the East Lake shoreline has been protected. Saint Charles Parish has acquired \$1,753,916 of CIPAP funding in contract 1,400 linear feet of shoreline protection (PO-43) East Lake shoreline protection. The State has contributed additional \$2,000,000 in CIPAP funding to construct shoreline protection for the most critical areas.	1
CIPAP	Central Wetlands Demonstration	PO-0073	HR	USFWS	ST BERNARD	10-20	N/A	2016	\$3,400,000	This demonstration project investigates the beneficial use of smart as an alternative to shore to boat effluent at the DWBNO C&L at Bayou St. Bernard. The smart as will be used to discharge effluent from a C&L into a wetland area.	1
CIPAP	Central Wetlands - Riverton	PO-0073-1	HR	USFWS	ST BERNARD	346	N/A	2015	\$2,800,000	This project involves the discharge of effluent from a C&L into a wetland area to be discharged into the Central Wetlands. This would allow vegetation to prosper once again in the area, and would also save St. Bernard Parish the cost of running a sewer line from the C&L to the wetland area.	1
CIPAP	Central Wetlands - EBSTP-10 A2	PO-0073-2	HR	USFWS	ST BERNARD, ORLEANS	473	N/A	Not yet	\$4,400,000	This project involves the discharge of effluent from a C&L into a wetland area to be discharged into the Central Wetlands. This would allow vegetation to prosper once again in the area, and would also save St. Bernard Parish the cost of running a sewer line from the C&L to the wetland area.	1
CIPAP	Central Wetlands Demonstration Expansion	PO-0073-3	HR	USFWS	ORLEANS	17.2	N/A	2016	\$4,400,000	The Central Wetlands Demonstration Expansion project would restore up to 17.2 acres of critical wetlands in the area designated A-1 along with the assembly of treated wastewater effluent and/or benefits in use of subgrants from the East Lake Watershed Treatment Plant, other sediment from SWMCO operations. Once the call has been completed, the wetland is to provide an ecological benefit with indigenous plant life from the wetland area to be restored. The wetland is to provide an ecological benefit to the wetland area to be restored.	1
CIPAP	Living Shoreline	PO-0148	BP	USFWS	ST BERNARD, JEFFERSON, ORLEANS	5340	N/A	2017	\$26,500,200	The primary project involves the construction of bio-engineered oyster reefs along coastal high marsh in St. Bernard Parish. The mid-channel wetlands will take place from the mouth of Bayou La Loutre around Lydia Point and Palmyra Point extending around the southern shore of Treasure Bay. Other related Living Shoreline projects are in Plaquemine Parish and Jefferson Parish.	1, 2
CIPAP	Rainey Audubon Wildlife Sanctuary Earthbank Terraces	RANEY	MC	USFWS	VERMILION	648	N/A	2005	\$951,889	The project consists of constructing approximately 24,000 linear feet of terraces. The terraces were created by designing in shallow openwater areas and piling the soil on one side of the borrow area. An additional \$191,763 was contributed from the CIPAP of 2001.	3B
CIPAP	GNWW Bank Rehabilitation - Port Road over Critical Areas of Terrebonne (CIPAP)	TE-0043-EE	BP	USFWS	TERREBOUNNE	1,160	N/A	2011	\$7,274,476	The project objective is to reduce critical heights of deteriorated channel banks and stabilize marsh selected critical heights of deteriorated channel banks with hard shoreline stabilization materials.	3B
CIPAP	Freshwater Bayou Bank Stabilization	TV-0011-B-ES	BP	USFWS	VERMILION	223	N/A	2014	\$13,560,304	The goal of the project is to stop erosion along the bank of Freshwater Bayou Canal and to protect the interior wetlands from saltwater intrusion, increased soil exchange and water reduced erosion. This will be achieved by constructing a rock one along critical areas of the bank and stabilizing the bank of the canal.	3B
CIPAP	Port of Barataria Bridge Replacement - Port Road over Commercial Canal	TV-0028	OT	USFWS	IBERIA	N/A	N/A	2013	\$615,792	This project involves the replacement of the bridge on Port Road over Commercial Canal at the Port of Barataria. The Port of Barataria handles a substantial amount of C&L produced products and the large equipment used in transporting these products take a major toll on the port's bridges and roads.	3B
CIPAP	Port of Barataria Bridge Replacement - David Cubot	TV-0030	OT	USFWS	IBERIA	N/A	N/A	2013	\$1,658,413	This project involves the replacement of the bridge on Port Road over Commercial Canal at the Port of Barataria. The Port of Barataria handles a substantial amount of C&L produced products and the large equipment used in transporting these products take a major toll on the port's bridges and roads.	3B
CIPAP	Acadiana Regional Airport Direct Improvements - Admiral Doyle Drive	TV-0031	OT	USFWS	IDICHA	N/A	N/A	2016	\$1,114,542	This project involves the replacement of the bridge on Port Road over Commercial Canal at the Port of Barataria. The Port of Barataria handles a substantial amount of C&L produced products and the large equipment used in transporting these products take a major toll on the port's bridges and roads.	3D

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPLR Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Restored	Miles of Levee Restored	Construction Completion	Total Budget	Project Description	Planning Unit
CNPRA	Atchafalaya Sediment Delivery	AT-0002	SD	NMFS	ST MARY	2222	N/A	1999	\$2,532,147	The objective of this project is to enhance natural delta growth by re-opening Natchez Channel and Cadeau Pass. Natchez Channel was reconnected with a 120-foot deep, 1,000-foot long channel and Cadeau Pass with a 116-foot deep, 1,000-foot long channel. Material dredged (70,025 cubic yards) as a result of construction was strategically placed at elevations mimicking natural delta lobes.	30
CNPRA	Big Island Marsh	AT-0003	DM	NMFS	ST MARY	1560	N/A	1999	\$7,877,404	The project includes creating a new wetland delta lobe behind Big Island to enhance the protection of land beyond the west bank of the Atchafalaya River. Construction included dredging of a main stem and two branch channels designed to mimic natural channel characteristics. Channel materials were strategically placed at elevations mimicking natural delta lobes. No opening of channels is planned until sediment transport and routing is proven.	30
CNPRA	Cadeau Pass Channel Sediment Delivery (Deauthorized)	AT-0004	SD	NMFS	ST MARY	638	N/A	Deauthorized	\$1,717,683	This project envisaged dredging a system of distributary channels to create 500 acres of marsh through sediment placement and natural accretion.	30
CNPRA	OWNY Confined Canal (Deauthorized)	BA-0002	HR	NMFS	LAFOURCHE	175	N/A	2000	\$12,896,350	The project includes the construction of effluent conduits including canal pipe, rock weirs, flood crest weirs with soil bank, one variable crest weir, and the rebuilding of low overflow banks that have eroded away. The western Lafourche Parish is to restore the area to the hydrologic conditions that prevailed before the project.	2
CNPRA	Natchez Canal Management	BA-0003-C	OM	NMFS	JEFFERSON	634	N/A	2000	\$2,265,472	The project manages the outlet of the existing eight canals by controlling the movement of the diverted waters. The siphons divert sediment-laden water from the Mississippi River into the west bank wetlands to retard sediment accretion and enhance wetland productivity.	2
CNPRA	West Pontchartrain Canal Management (Deauthorized)	BA-0004-C	HR	NMFS	PLAQUEMINES	648	N/A	Deauthorized	\$6,630,516	The project goal is to optimize use of fresh water and sediment supplied by existing siphon by reducing channelized flow and routing the diverted flow to natural marshes. Project was deauthorized in 2015.	2
CNPRA	Lake Salvador Shore Protection Demonstration	BA-0015	SP	NMFS	ST CHARLES	N/A	N/A	1999	\$6,666,606	The objective of this project is to maintain the shoreline along a section of Lake Salvador and help re-establish the natural hydrology of interior marsh. Phase I of the project was conducted to demonstrate the effectiveness of four separate types of submerged breakwaters in a poor soil environment. Phase I of the project included the installation of 6,000 feet of continuous rock structure along the western section of the lake.	2
CNPRA	Fourchon Hydrologic Restoration (Deauthorized)	BA-0018	HR	NMFS	LAFOURCHE	N/A	N/A	Deauthorized	\$7,703	The goal of this project was to restore tidal exchange to 2,400 acres of reponded wetlands. The project was officially deauthorized by the CVPFPA Task Force in July of 1994 at the request of the landowner.	2
CNPRA	Barataria Bay Wetland Restoration	BA-0019	MC	USACE	JEFFERSON	518	N/A	1999	\$1,170,000	The project benefited used orange material to enlarge Queen Bee Island.	2
CNPRA	Jefferson Davis Wetland Protection	BA-0020	HR, SP	NMFS	JEFFERSON	518	N/A	2003, 2012	\$23,886,816	The goal of the project is to restore the natural hydrologic conditions of the area and reduce shoreline erosion. The goal was partly completed by dredging a series of canals and levees. Construction unit 4 consists of 4,180 ft of rock rip rap.	2
CNPRA	Baton Rouge Barataria River Marsh Protection (Deauthorized)	BA-0021	MC	NMFS	JEFFERSON	1065	N/A	Deauthorized	\$20,984	The project was authorized to protect deteriorated intermediate oblique marsh located between Lake St. Charles and the Lake by using dredged material to re-establish the shoreline. Due to an unstable and rapidly eroding site, the project was deemed undesirable and was officially deauthorized by the CVPFPA Task Force in January of 1999.	2
CNPRA	Barataria Canal Ridge Hydrologic Restoration (Deauthorized)	BA-0022	HR	NMFS	LAFOURCHE	737	N/A	Deauthorized	\$371,232	This project was proposed to restore natural hydrologic flow in the marsh by removing breached areas of the Bayou Lacombe ridge through a series of canal closures and two water control structures. This project was officially deauthorized by the CVPFPA Task Force in April, 2003 because of lengthy delays.	2
CNPRA	Barataria Bay Wetland Restoration	BA-0023	SP	NMFS	JEFFERSON	1788	N/A	2000	\$3,304,787	The project objective is to rebuild the west bank of the Dupree Cut to protect the adjacent marsh from unnatural water exchange and subsequent erosion. A rock dike was constructed along 5,400 linear feet of the west bank of the Dupree Cut.	2
CNPRA	Merica Grove Bayou (Deauthorized)	BA-0024	FD	NMFS	PLAQUEMINES	N/A	N/A	Deauthorized	\$481,002	The goal of the project is to reduce subsurface intrusion and to maintain existing marsh. This will be accomplished by diverting water through a siphon from the Mississippi River to adjacent wetlands. This project was officially deauthorized by the CVPFPA Task Force in October, 2007 because a larger diversion was authorized at the same location (see BA-33).	2
CNPRA	Bayou Lacombe Siphon (Deauthorized)	BA-0025-A	FD	EPA	LAFOURCHE	428	N/A	Deauthorized	\$45,922	The goal of the project is to reduce marsh loss adjacent to Bayou Lacombe by introducing sediment and sediment adobe river water through a siphon from the Mississippi River to adjacent wetlands. This project was officially deauthorized by the CVPFPA Task Force in October, 2007 because a larger diversion was authorized at the same location (see BA-33).	2
CNPRA	Mississippi River Into Bayou Lafourche (Deauthorized)	BA-0025-B	FD	EPA	ASCENSION, ASSUMPTION, LAFOURCHE, TERRE BONNE	80080	N/A	Deauthorized	\$9,619,486	The project was authorized to restore natural hydrologic flow in the marsh by removing breached areas of the Bayou Lacombe ridge through a series of canal closures and two water control structures. This project was officially deauthorized by the CVPFPA Task Force in April, 2003 because of lengthy delays.	2
CNPRA	Barataria Bay Wetland Restoration	BA-0026	SP	NMFS	JEFFERSON	217	N/A	2001	\$5,234,477	The objective of this project is to protect the banks of the Mississippi River from erosion and to protect the adjacent marsh from subsurface intrusion. The project consists of 17,000 (3.3 miles) of levees constructed with dredged material from the Mississippi River and 17,000 (3.3 miles) of rock armor.	2
CNPRA	Barataria Basin Landbridge Shoreline Protection, Phase 1 and 2	BA-0027	SP	NMFS	JEFFERSON	1304	N/A	2009	\$31,288,623	The objective of the project is to select a cost-effective erosion control technique to stabilize the erosion on the south-southwestern shore of Bayou Perdre and the southwestern shore of Bayou Perdre. The length of protection is estimated to be approximately 71,000 feet.	2
CNPRA	Barataria Basin Landbridge Shoreline Protection, Phase 2	BA-0027-C	SP	NMFS	JEFFERSON, LAFOURCHE	5587	N/A	1999, 2000, 2017	\$46,231,597	The project helped the restoration of different shoreline protection types, such as, concrete pile wall, rock and riprap. These projects have a combined cost of \$4,000,000 for shoreline protection.	2
CNPRA	Barataria Basin Landbridge Shoreline Protection, Phase 4	BA-0027-D	SP	NMFS	JEFFERSON	589	N/A	2009	\$17,709,216	This project consisted of 31,450 feet of shoreline rock dike with a lightweight aggregate core or concrete sheetpile and will incorporate fish traps and openings at historic natural channels to eliminate shoreline erosion and deterioration of the Barataria landbridge.	2
CNPRA	Vegetative Plantings of Cadeau Pass (Deauthorized)	BA-0028	VP	NMFS	JEFFERSON	127	N/A	2001	\$436,314	This project involved the installation of vegetative plantings on previously constructed marsh and dune platform.	2
CNPRA	LA Highway 1 Marsh Creation (Deauthorized)	BA-0029	MC	EPA	LAFOURCHE	148	N/A	Deauthorized	\$250,257	The objective of this project was to create marsh habitat in a large open water area adjacent to Louisiana Highway 1 using dredged material from two proposed borrow areas. This project was officially deauthorized by the CVPFPA Task Force in February of 2005 because of the high cost of the project.	2
CNPRA	East of Grand Terre Island (Deauthorized)	BA-0030	MC	NMFS	JEFFERSON	403	N/A	Transferred	\$2,211,729	The goal of the project is to stabilize and broaden 1,515 acres of barrier island habitat and address the island's susceptibility. Dredged material will be used to create dune and marsh habitat on Grand Terre Island. This project was constructed using CAV 2007.	2
CNPRA	Delta Islands Overlook at Myrtle Grove (Transferred)	BA-0033	SD	USACE	JEFFERSON, PLAQUEMINES	8691	N/A	Transferred	\$327,422	The objective of this project is to divert Mississippi River water and sediment for the creation of new emergent wetlands. The project will involve installation of gated bayou channels on the west bank of the Mississippi River in the vicinity of Myrtle Grove, designed to divert water from the Mississippi River to create marsh in the vicinity of Bayou Lacombe, the Barataria Bay Wetland, and the Wilkerson Canal, or a combination of these actions. This project was transferred to the LOA Program.	2
CNPRA	Mississippi River Rehabilitation Project (Transferred)	BA-0034	FD	EPA	ST JOHN THE BAPTIST, ST JAMES, LAFOURCHE, ST JOHN THE BAPTIST, ST JAMES, LAFOURCHE	5134	N/A	Transferred	\$17,066,769	The goal of the project is to restore the natural hydrologic regime and add nutrients to adjacent swampy areas. The project would utilize a hydrologic diversification from the Mississippi River to northward Bayou Lafourche wetlands with dredging of spoil banks and placement of culverts under LA Highway 20. The scope of the project was changed and the revised project was re-numbered BA-34-2.	2
CNPRA	Hydrologic Restoration and Vegetative Plantings in the Lake des Amants Swamp	BA-0034-2	HR, VP	USFWS	LAFOURCHE	5134	N/A	Pending	\$14,355,710	The goal of this project is to restore the natural hydrologic regime and add nutrients to adjacent swampy areas. The project would utilize a hydrologic diversification from the Mississippi River to northward Bayou Lafourche wetlands with dredging of spoil banks and placement of culverts under LA Highway 20. The scope of the project was changed and the revised project was re-numbered BA-34-2.	2
CNPRA	East of Grand Terre Island (Deauthorized)	BA-0036	HR	NMFS	PLAQUEMINES	251	N/A	2009	\$46,414,520	This project involved the installation of a dike and marsh platform on the north side of the Gulf of Mexico to allow wet to Bayou Lafourche and avoid damage to the dike.	2
CNPRA	Dike and Cratering on the Barataria Basin Landbridge	BA-0038	MC	USFWS	JEFFERSON	2800	N/A	2010	\$3,281,393	Approximately 6,583,000 cubic yards of material was placed in a large contained marsh creation area to construct approximately 1,213 acres of intertidal marsh at a final elevation of +2.5' NAVD 88. Approximately 3,911,000 cubic yards of material was placed in adjoining marsh areas to create approximately 1,520 acres of marsh.	2
CNPRA	Little Lake Shoreline Protection/Channel Clogging Near Round Lake	BA-0037	MM, SP	NMFS	LAFOURCHE	713	N/A	2007	\$44,931,412	The project is designed to protect a large wetland, which currently experiences high rates of shoreline erosion. The project protects approximately 21,000 feet of Lake Shoreline, create 400 acres of planted wetlands, and construct an additional 532 acres of riprapped, sediment marsh.	2
CNPRA	Pelican Island and Pass La Mer to Chandeleur Pass Restoration	BA-0038	HR, VP	NMFS	PLAQUEMINES	1117	N/A	2012	\$52,893,395	The objectives of the project are to create barrier island habitat, enhance storm-related surge and wave protection, prevent overtopping of dune dike, and increase the volume of sand within the active barrier island. This project was first authorized on the den PPL as the Barrier Island Restoration Channel Term to St. Pass (BA-32). Construction of the Pass La Mer to Chandeleur Pass Restoration segment was completed in 2012.	2

ONGOING PROTECTION AND RESTORATION SUMMARIES

CYPR Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Restored	Construction Completion	Total Budget	Project Description	Flanking Unit
CWPRA	Mississippi River Segment Delivery System - Bayou du Large	EA-0039	MC	EPA	JEFFERSON, PLAQUEMINES	577	N/A	2010	\$31,531,808	The goal of this project is to create/recreate 403 acres of trachin marsh by allowing via pipeline, dredged material from the Mississippi River to an adjacent area within the Barataria Basin, and planting marsh native vegetation.	2
CWPRA	Bayou du Large Marsh Creation (Transferred)	EA-0040	BH	NMFS	PLAQUEMINES	234	N/A	Transferred	\$40,851,272	The goal of this project was to repair, enhance, and total habitat in a marsh area, enhance the existing shoreline with sand, and increase the marsh with back barrier marsh creation to increase longevity. The project was transferred to the Bern to Barrier Program for construction.	2
CWPRA	South Shore of the Port of Thibodaux Protection and Marsh Creation	EA-0041	SP, MC	NRCS	JEFFERSON	211	N/A	2012	\$21,639,575	This project involves the construction of approximately 1,000 feet of concrete pile and gravel wall and 10,800 feet of rock revetment along the south shore of the Port of Thibodaux. Dredged material was used to create approximately 74 acres of marsh, and to create an additional 107 acres of marsh, within the triangular area bounded by the south shore of the Port, the Barataria Bay, the Gulf of Mexico, and the Bayou du Large.	2
CWPRA	Port of Thibodaux Marsh Creation	EA-0042	TE, SP, MC	USFWS	PLAQUEMINES	438	N/A	2015	\$40,538,494	The goal of this project was to create approximately 438 acres of wetlands, restore and enhance 87 acres of marsh, and create 107 acres of marsh along the south shore of the Port of Thibodaux.	2
CWPRA	Port of Thibodaux Marsh Creation	EA-0043	MC	NRCS	PLAQUEMINES	203	N/A	2015, Transferred	\$15,871,708	The goal of this project is to create/recreate marsh along the south shore of the Port of Thibodaux. The project was transferred to the Bern to Barrier Program for construction.	2
CWPRA	Port of Thibodaux Marsh Creation	EA-0044	MC	NMFS	JEFFERSON	312	N/A	2015	\$39,324,846	The goal of this project is to create/recreate marsh along the south shore of the Port of Thibodaux. The project was transferred to the Bern to Barrier Program for construction.	2
CWPRA	Grand Land Marsh and Ridge Restoration	EA-0050	BH	NMFS	PLAQUEMINES	592	N/A	2015	\$41,972,795	This project will create 200 acres of marsh, restore about 140 acres of marsh, and build about 20,000 feet of ridge.	2
CWPRA	Cheniere Houquette Marsh Restoration (Transferred)	EA-0076	BH	NMFS	PLAQUEMINES	398	N/A	Transferred	\$51,145,769	The project goal is to maintain shoreline integrity, and create and restore saline marsh on Cheniere Houquette. The project involves the construction of a concrete wall to create a barrier between the marsh and the Gulf of Mexico. The project was transferred to the Bern to Barrier Program for construction.	2
CWPRA	Northwest Turtle Lake Marsh Creation	EA-0125	MC	USFWS	JEFFERSON	402	N/A	Pending	\$34,440,757	This project involves the creation of approximately 402 acres of marsh and marsh restoration along the north shore of Turtle Lake. The project will create 402 acres of marsh and restore 402 acres of marsh.	2
CWPRA	Bayou du Large Marsh Creation	BA-0164	MC	EPA	PLAQUEMINES, JEFFERSON	302	N/A	Pending	\$39,528,163	This project involves the creation of approximately 302 acres of back barrier marsh and restoration of 130 acres of emergent marsh along the south shore of the Port of Thibodaux. The project was transferred to the Bern to Barrier Program for construction.	1
CWPRA	Bayou du Large Marsh Creation	BA-0171	MC	EPA	LACOURCHIE	428	N/A	Pending	\$72,204,894	The goal of this project is to create approximately 342 acres of marsh habitat in the open water area, and restore marsh along the south shore of the Port of Thibodaux. The project was transferred to the Bern to Barrier Program for construction.	2
CWPRA	Bayou du Large Marsh Creation	BA-0173	MC	USFWS	PLAQUEMINES	264	N/A	Pending	\$30,311,402	In addition to having one of the highest shoreline retreat rates in Louisiana, Cameronde Headwaters has suffered significant shoreline losses due to recent hurricanes. As the beach and dune continue to migrate landward, overwash sediment is lost and new formed riparian areas. Cameronde Headwaters restoration threatens thousands of acres of wetlands and critical infrastructure to the north, including Gulf of Mexico, LA Highway 1, and the town of Lake Charles. The project will create 264 acres of marsh and restore 264 acres of marsh.	2
CWPRA	Cameronde Headwaters Marsh Restoration 2	BA-0193	BH	EPA	JEFFERSON, LACOURCHIE	444	N/A	Pending	\$25,377,805	The project will create 444 acres of marsh and restore 444 acres of marsh. The project will create 444 acres of marsh and restore 444 acres of marsh.	2
CWPRA	East Levee Marsh Creation and Restoration	BA-0194	MC	NOAA	LACOURCHIE	487	N/A	Pending	\$14,380,876	The project goal is to create approximately 398 acres and restore 124 acres of saline marsh east of Levee.	2
CWPRA	Bayou du Large Marsh Creation and Restoration	BA-0195	MC	NRCS	PLAQUEMINES, JEFFERSON	517	N/A	Pending	\$32,545,828	The goal of this project is to create approximately 251 acres of marsh and restore approximately 266 acres of marsh (517 acres total) with dredged material from the Bayou du Large.	2
CWPRA	Cameron Diversion Outlet Management	B5-0003-A	OM	NRCS	PLAQUEMINES	802	N/A	2002	\$4,536,000	The primary objective of this project is to enhance a marsh by increasing the collection of freshwater, nutrients, and sediments provided by the Mississippi River through the Cameron Diversion Outlet.	1
CWPRA	Whitlock Outlet Management (Deauthorized)	B5-0004-A	OM	NRCS	PLAQUEMINES	N/A	N/A	Deauthorized	\$12,862	This project was designed to create the flow of Mississippi River water and sediment into the Cameron Diversion Outlet. Because of the failure to secure funding, the project was only deauthorized by the CWPRA Task Force in January of 1995. This project was transferred to the Bern to Barrier Program.	1
CWPRA	Grand Bay Causeway (Deauthorized)	B5-0007	SD	USACE	PLAQUEMINES	N/A	N/A	Deauthorized	\$45,747	Project goals included construction of a rock-and opening through the levee at the head of the Junction Canal in order to establish a pathway for freshwater and sediment into Grand Bay and the adjacent marshes to create, restore, and enhance wetlands in the area. The project was only deauthorized by the CWPRA Task Force in July of 1998 because of funding issues.	1
CWPRA	Upper Oak River Freshwater System (Deauthorized) Phase 1	B5-0009	FD	NRCS	PLAQUEMINES	N/A	N/A	Deauthorized	\$58,478	The primary goal of this project was to reverse the trend of minor marsh deterioration in the project area due to saltwater intrusion through installation of a freshwater siphon and canal channel. These strategies would have provided freshwater, sediments, and sediment to enhance marsh health. The project was only deauthorized by the CWPRA Task Force in January of 2002 because of funding issues.	1
CWPRA	Delta Building Diversion North of Fort St. Philip (Deauthorized)	B5-0010	SD	USACE	PLAQUEMINES	543	N/A	Deauthorized	\$1,78,640	A diversion channel will be constructed along the left side of the bank of the Mississippi River up to the head of the Canal. The channel will be constructed north through an open water area and will be used to divert water into the Mississippi River.	1
CWPRA	Delta Management at Fort St. Philip	B5-0011	SNF	USFWS	PLAQUEMINES	287	N/A	2005	\$3,199,148	The idea of the project is to enhance the delta-building process occurring due to the conversion of Fort St. Philip. The artificial construction of the levee will be used to enhance the delta-building process occurring due to the conversion of Fort St. Philip. The artificial construction of the levee will be used to enhance the delta-building process occurring due to the conversion of Fort St. Philip.	1
CWPRA	Delta Management at Fort St. Philip	B5-0012	OM, FD	NRCS	PLAQUEMINES	188	N/A	Deauthorized	\$1,595,677	The goal of this project was to promote utilization of freshwater, sediments, and nutrients from the Mississippi River by renewing operation of the existing siphon and adding another. The project was deauthorized by the CWPRA Task Force in 2013.	1
CWPRA	Bayou du Large Marsh Creation (Transferred)	B5-0013	FD	EPA	PLAQUEMINES	628	N/A	Transferred	\$1,509	The goal of this project was to create approximately 620 acres of new marsh, increase the percent cover of aquatic vegetation, increase the area of shallow open water habitat, and decrease mean salinity in the project area. The CWPRA project was transferred to the Bern to Barrier Program.	1
CWPRA	Bayou du Large Marsh Creation (Transferred)	B5-0015	FD	EPA	PLAQUEMINES	648	N/A	Deauthorized	\$556,793	The goal of the project was to reintroduce Mississippi River water into adjacent wetlands through an uncontrolled diversion with a capacity of approximately 10,000 cfs, including natural deltaic growth and tides. The project was deauthorized by the CWPRA Task Force in 2013.	1
CWPRA	South Lake Levee Shoreline and Marsh Restoration	B5-0016	VP, MC	USFWS	PLAQUEMINES	657	N/A	Pending	\$33,716,587	This project involves dredging sediment to create 355 acres of marsh and restore approximately 32,000 feet of the southern Lake Levee structure.	1
CWPRA	Bayou du Large Marsh Creation (Transferred)	B5-0018	FD	EPA	PLAQUEMINES	1613	N/A	Deauthorized	\$22,573,208	The goal of the project was to create and sustain marsh through a marsh restoration project. The project was transferred to the Bern to Barrier Program for construction.	1
CWPRA	Tenacity and Marsh Creation South of Bayou du Large	B5-0024	MC, TE	USFWS	PLAQUEMINES	303	N/A	Pending	\$22,774,368	The project involves the construction of approximately 55,000 feet of berm of berms of 27 acres with in-bank materials to reduce berm and stability and a silt trap suspended sediment. Sediments will be hydraulically dredged from Lake Levee and pumped via pipeline to create and restore approximately 314 acres of marsh in the project area.	2
CWPRA	Cameron-Croche Maintenance	C5-0004-A	H8	NRCS	CAMERON	2602	N/A	1997, 2011	\$4,444,271	The project area falls within the Cameron-Croche watershed management area, which has been adversely impacted by saltwater intrusion and loss of sediments due to channelization and water diversion of the Calcasieu River. The project provides maintenance for the existing 15 miles of levee and major structures which make up the Cameron-Croche Watershed Project.	4
CWPRA	Brown Lake Wetlands Restoration (Deauthorized)	C5-0009	MW	NRCS	CALCASIEU, CAMERON	916	N/A	Deauthorized	\$1,897,828	The project involves the restoration of the natural hydrology of the Brown Lake area. The project was deauthorized by the CWPRA Task Force.	4
CWPRA	Sweet Lake Wetlands Hydrologic Restoration	C5-0011-B	SP	NRCS	CAMERON	247	N/A	2002	\$3,259,152	The project objectives are to re-establish the shoreline hydrologic boundary between Sweet Lake and the Gulf Intracoastal Waterway (GIWW), to reduce lake turbidity and total exchange, and to halt erosion and riprap sediment needed to rebuild marsh along the northern and northeastern shorelines of Sweet Lake. This project includes construction of rock embankments on the GIWW to close off the area, vegetation plantings to reduce erosion, and construction of sediment terraces to enhance marsh with vegetation plantings in open water areas to promote revegetation.	4
CWPRA	Cameron-Croche Flap	C5-0017	H8	USFWS	CAMERON	885	N/A	1997	\$418,539	The project goal is to restore natural water circulation patterns within the Cameron-Croche Watershed. The objective will be to increase marsh area and water circulation within the watershed from Calcasieu Lake. The project consisted of the installation of two structures to the GIWW to restore natural water circulation.	4

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flanking Unit
CNP PRA	Sabine National Wildlife Refuge Erosion Protection	CS-0018	BP	USFWS	CAMERON	6542	N/A	1995	\$1,402,466	The goal of this project is to protect 13,000 acres of wetlands from deterioration associated with the salt water intrusion of the Sabine River. The original design was to construct 5.5 miles of oyster levee. This project was redesigned to include 1,000 feet of levee reconstruction and 5.5 miles of rock armor. Vegetation plantings were used to reduce erosion from boat traffic.	4
CNP PRA	West Hackberry Vegetative Planting Demonstration	CS-0019	VP	NRCS	CAMERON	N/A	N/A	1994	\$216,250	The goal of this demonstration project is to reduce maintenance from riparian water value energy using vegetation plantings consisting of Louisiana loblolly (G. tomentosa) and cypress (Taxodium distichum). In addition, wave-drying may have been used to protect the vegetation.	4
CNP PRA	East Mud Lake Marsh Management	CS-0020	MW	NRCS	CAMERON	1520	N/A	1995	\$6,136,241	The project involves the creation of a hydrologic regime conducive to restoration, protection, and enhancement of the Mud Lake area. The project includes the construction of a 1.5-mile-long, 10-foot-deep canal to provide a hydrologic connection between the Mud Lake area and the Gulf of Mexico. The project also includes the construction of a 1.5-mile-long, 10-foot-deep canal to provide a hydrologic connection between the Mud Lake area and the Gulf of Mexico.	4
CNP PRA	Highway 384 Hydrologic Restoration	CS-0021	MW	NRCS	CAMERON	658	N/A	2000	\$1,469,228	The project consists of restoring the natural hydrology of the project area and eliminate undesirable high salinity and severe water fluctuations. The project includes the construction of a 1.5-mile-long, 10-foot-deep canal to provide a hydrologic connection between the Mud Lake area and the Gulf of Mexico.	4
CNP PRA	Clear Marsh Bank Protection	CS-0022	BP	USACE	CALCASIEU	1087	N/A	1987	\$3,166,088	The project is to be located north of the Gulf Intracoastal Waterway (GIWW) approximately 10 miles southwest of Hackberry in Calcasieu Parish, Louisiana. The goal of this project is to extend the rock armored shoreline stabilization by one mile adjacent to the GIWW to prevent continued erosion of the GIWW levee and to prevent the encroachment of the GIWW into the marshes north of the project area.	4
CNP PRA	Replace Sabine Ridge Water Control Structures at Redoubt Creek, West of Calcasieu Canal, and Hog Island Gulf	CS-0023	MW	USFWS	CAMERON	953	N/A	2001	\$5,109,399	This project involves the replacement of existing structures at Sabine National Wildlife Refuge with structures that have substantially greater discharge potential and greater management flexibility.	4
CNP PRA	Pony Ridge Shore Protection	CS-0024	BP	NRCS	CALCASIEU	1203	N/A	1999	\$2,369,690	The project reduces total erosion wave action from boats, and other excessive energy impacts on interior marshes and the possibility of seawater intrusion by filling rip-rap along one area on the northern spot bank of the GIWW from Pony Ridge to Union Drainage Canal.	4
CNP PRA	Ponded Terraces Demonstration	CS-0025	SNT	NRCS	CAMERON	N/A	N/A	2000	\$325,641	The objective of the demonstration project is to develop and demonstrate a non-structural procedure for constructing earthen terraces in shallow open water areas. Thirty-eight earthen terraces served as wave-drying, sediment trapping structures and provided a medium base for the establishment of emergent vegetation.	4
CNP PRA	Composite Demonstration (Deauthorized)	CS-0026	MC	EPA	CAMERON	N/A	N/A	Deauthorized	\$255,390	The project was authorized to evaluate the effectiveness of using two techniques as comparable materials, using compact amended material in providing a growth medium for emergent vegetation, and determining sediment rates of the compact amended materials and test terraces. The project was deauthorized for the CIPRA program in January 2007.	4
CNP PRA	Black Bayou Hydrologic Restoration	CS-0027	HR	NMFS	CALCASIEU, CAMERON	3594	N/A	2003	\$6,370,384	The project goal is to reduce wetland loss resulting from hydrologic changes including reduced freshwater inflow, increased magnitude and duration of tidal fluctuations, increased salinity, higher water levels, and excessive water eutrophication. This project included the construction of spot levees, weirs, plugs, and culverts designed to allow freshwater inflow to the wetlands and to reduce the construction of a hydrologic head that the water's freshwater retention time and reduce its salinity intrusion.	4
CNP PRA	Sabine Ridge Marsh Creation, Cycles 4-5	CS-0029-4-5	MC	USACE	CAMERON	468	N/A	2015	\$11,030,049	The Sabine Ridge Marsh Creation Cycles 4-5 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River into the marsh area to create a marsh area within the Sabine National Wildlife Refuge.	4
CNP PRA	Sabine Ridge Marsh Creation, Cycles 1-3	CS-0029-1-3	MC	USACE	CAMERON	662	N/A	2003, 2010	\$24,827,399	The Sabine Ridge Marsh Creation Cycles 1-3 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River into the marsh area to create a marsh area within the Sabine National Wildlife Refuge.	4
CNP PRA	Black Bayou Culverts and Hydrologic Restoration	CS-0029	HR	NRCS	CALCASIEU	548	N/A	2007	\$16,999,259	The project involves the construction of 1000 culverts (10 ft x 10 ft) with top gages in the embankment of Highway 384 in Cameron Parish.	4
CNP PRA	Holly Beach Sand Management	CS-0030	BP	NRCS	CALCASIEU	1132	N/A	2001	\$2,356,216	The project consists of installing rock along the bank of the GIWW to prevent further erosion.	4
CNP PRA	East Sabine Lake Hydrologic Restoration CUI	CS-0031	BP	NRCS	CAMERON	338	N/A	2003	\$14,130,233	The purpose of the project is to protect wetlands and a wetlands by reducing and controlling the effects and functionally of the widening of the Sabine River. The objective was accomplished through beach nourishment, installation of sand fencing, vegetation plantings, and monitoring of the riverine response. This project was originally authorized in the 8th FPA, as a complex project. Holy Beach Project, CS-001.	4
CNP PRA	Cameron-Circle Freshwater Introduction	CS-0049	VP, FO	NRCS	CAMERON	473	N/A	Pending	\$14,027,245	The purpose of the project is to restore the function, value and sustainability to approximately 22,247 acres of marsh and open water by installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Keller Bayou Marsh Creation and Hydrologic Restoration	CS-0053	MC, BP	NRCS	CAMERON	274	N/A	Transferred	\$17,882,765	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Cameron-Circle Wetland and Bayou Marsh Creation and Tanking	CS-0054	MC	USFWS	CAMERON	534	N/A	Pending	\$22,919,397	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Cameron Meadows Marsh Creation and Tanking	CS-0055	MC, SNT	NMFS	CAMERON	488	N/A	Pending	\$31,031,354	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Cameron Meadows Marsh Creation and Tanking	CS-0056	MC, TE	NMFS	CAMERON	401	N/A	Pending	\$26,935,320	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	No Name Bayou Marsh Creation and Nourishment	CS-0078	MC	NMFS	CAMERON	497	N/A	Pending	\$28,090,745	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Oyster Lake Marsh Creation and Nourishment	CS-0079	MC	NOAA	CALCASIEU	681	N/A	Pending	\$37,542,310	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Nutria Harvest for Wetland Restoration Demonstration	LA-0003-A	OT	USFWS	COASTWIDE	N/A	N/A	2003	\$896,220	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	COASTWIDE
CNP PRA	Coastwide Niche Control Program	LA-0003-B	MW	NRCS	COASTWIDE	14983	N/A	N/A	\$68,789,156	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	COASTWIDE
CNP PRA	Fishing Marsh Creation	LA-0005	OT	NRCS	TERREBOUNE	N/A	N/A	2006	\$1,880,191	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	3A
CNP PRA	Shoreline Protection Demonstration	LA-0006	BP	USACE	VERMILION	0	N/A	2006	\$1,995,000	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Barge Canal Oyster Reef Demonstration	LA-0008	BP	NMFS	CAMERON	4.5	N/A	2012	\$2,116,492	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	4
CNP PRA	Sediment Containment System for Marsh Creation Demonstration	LA-0009	MC	NRCS	ST CHARLES	N/A	N/A	2013	\$2,321,473	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	3A
CNP PRA	Non-tidal Marshes to Shoreline Protection Demo	LA-0016	BP	NRCS	IBERIA, ST PIERRE, LAFOURCE	N/A	N/A	2015	\$6,081,699	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	2, 3B
CNP PRA	Coastwide Planting	LA-0029	VP	NRCS	COASTWIDE	778	N/A	N/A	\$12,689,725	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	COASTWIDE
CNP PRA	Shoreline Protection, Preservation, and Rehabilitation (SPPR) Pilot	LA-0030	BP	NOAA	COASTWIDE	N/A	N/A	N/A	\$2,469,129	The project consists of installing hydrologic conduits and treatment and an auxiliary conveyance structure.	COASTWIDE

ONGOING PROTECTION AND RESTORATION SUMMARIES

CRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Restored	Miles of Wetland Restored	Construction Completion	Total Budget	Project Description	Planning Unit
CWP PRA	Salmon River Propagation Facility	LA-0014	OT	USFWS	COASTWIDE	26	N/A	N/A	\$5,552,740	The goal of this project is to create a wetland propagation facility in Bayou de l'Asse, the previously operated by USFWS, to make wetlands available for sale to landowners in coastal Louisiana.	COASTWIDE
CWP PRA	Freshwater Bayou Wetland Protection	NE-0004	SP	NRCS	VERMILION	14,381	N/A	1993	\$9,871,120	Project features include the installation of 10,000 feet of rock breakwater (10'-high) along the west shoreline of Freshwater Bayou Canal, where needed, to protect this shoreline from further erosion, and the installation of gated water control structures on the Adams and Adams Canal to reduce ponding in the area known as the Freshwater Bayou Wetlands. The project has been extended for another 20 years.	4
CWP PRA	Deepwater Vegetative Plantings Demonstration (Deauthorized)	NE-0008	VP	NRCS	VERMILION	102	N/A	1994, Deauthorized	\$52,147	This demonstration project's purpose was to investigate the ability of vegetation plantings of smooth cordgrass (Spartina alterniflora) to stabilize a newly accreted marsh, thereby establishing vegetation buffer between the Gulf of Mexico and coastal wetlands. This project was officially deauthorized by the CWP/PRA Task Force in February 1998 because no plants remained.	4
CWP PRA	Caribbean Prairie National Wildlife Refuge Shoreline Protection	NE-0009	SP	USFWS	CAMERON	648	N/A	1994	\$1,727,123	This project protects the emergent wetlands of the Cameron Prairie National Wildlife Refuge adjacent to the GOMR, enhances the wetland's hydrologic function, and provides a buffer between the wetlands and the Gulf of Mexico. The project was extended for another 20 years.	4
CWP PRA	Humble Canal Hydrologic Restoration	NE-0011	HR	NRCS	CAMERON	378	N/A	2003	\$1,500,812	The project consists of restoring the existing Humble Canal structure to reduce water management operations to the area.	4
CWP PRA	Southeast Shore White Lake Demonstration (Deauthorized)	NE-0012	SP	NRCS	IBERIA	N/A	N/A	1996, Deauthorized	\$41,777	The objective of the demonstration project was to stabilize one mile of the White Lake shoreline and prevent breaching into Deep Lake. The project was officially deauthorized by the CWP/PRA Task Force in October of 1998 and is no longer underway.	4
CWP PRA	Freshwater Bayou Bank Stabilization	NE-0013	SP	NRCS	VERMILION	511	N/A	1999	\$6,913,257	The goal of this project is to stop erosion along the bank of Freshwater Bayou Canal and to protect the adjacent wetlands from saltwater intrusion, increased silt, exchange and water-induced erosion. This was achieved by constructing a rock-dike along a critical area of the eastern and western banks of the canal. The project was extended for another 20 years.	4
CWP PRA	Pecan Island Terracing	NE-0014	TE	NRCS	VERMILION	437	N/A	2003	\$2,790,864	The goal of this project is to convert areas of open water back to vegetated marsh. Project features included the construction of a dike to reduce water area. Terracing was conducted in a segmented dike formation and placed with smooth cordgrass.	4
CWP PRA	Freshwater Introduction South of Highway 82	NE-0016	HR	USFWS	IBERIA	298	N/A	2005	\$6,342,505	The purpose of this project was to move freshwater from White Lake across LA Hwy 82 to target marshes and marsh restoration through erosion control.	4
CWP PRA	Little Pean Bayou Hydrologic Restoration (Deauthorized)	NE-0017	HR	NRCS	CAMERON	144	N/A	Deauthorized	\$1,302,712	The purpose of the project was to introduce fresh water into brush marsh habitat south of LA Highway 82 through use of water control structures and Commerce canals. The project was subsequently deauthorized by the CWP/PRA Task Force.	4
CWP PRA	Rockefeller Refuge Outflow Restoration	NE-0018	SP	NRCS	CAMERON	563	N/A	Pending	\$26,776,463	The purpose of this project is to construct a continuous near shore breakwater along the Gulf of Mexico shoreline, approximately 50,681 feet from South Pass to Joseph Harbor.	4
CWP PRA	Grand White Lakes Landbridge Protection	NE-0019	SP	USFWS	CAMERON	213	N/A	2004	\$3,536,130	The purpose of this project was to prevent the coalescence of Grand and White Lakes through the installation of 11,000 feet of third point breakwater and construction of two dikes to create a landbridge between the two lakes.	4
CWP PRA	South Grand Channel Hydrologic Restoration	NE-0020	HR, MC	USFWS	VERMILION	448	N/A	Pending	\$23,873,346	Project features include the installation of a light structure on Freshwater Bayou and the installation of a dike to protect the area from saltwater intrusion. The project was extended for another 20 years.	4
CWP PRA	Grand Lake Shoreline Protection, Two Point Protection	NE-0021	SP	NRCS	CAMERON	495	N/A	Pending	\$11,305,516	The project involves the construction of a rock dike to protect the south shoreline of Grand Lake from Catfish Lake to Two Point and perform long-term O&M on this dike as well as a separate portion from Superior Canal to Catfish Lake (tentatively using C&P 2007 funds).	4
CWP PRA	South White Lake Shoreline Protection	NE-0022	SP	USACE	VERMILION	844	N/A	2008	\$19,873,861	This project involved the construction of a rock dike along the south shoreline of White Lake to reduce erosion and maintain shoreline integrity.	4
CWP PRA	South Park Island Freshwater Introduction (Deauthorized)	NE-0023	FD	NRCS	CAMERON	88	N/A	Deauthorized	\$4,438,693	The purpose of the project was to introduce freshwater from the lakes section north, under Hwy. 82 and into the lakes section south of Hwy. 82. The project was officially deauthorized by the CWP/PRA Task Force in January of 2011.	4
CWP PRA	Southeast Louisiana Outflow Restoration	NE-0024	OT	USACE	IBERIA	888	N/A	Pending/On Hold	\$17,144,234	The goal of the project is to construct 43,900 linear feet of dike shoreline with adjacent berms, levees and Big and Little Lakes, and create approximately 41,200 acres of marsh platform, mud flat and shallow water, extending approximately 284 feet seaward. The project also included the design of a dike structure to be constructed by the USACE.	4
CWP PRA	Freshwater Bayou Marsh Creation	NE-0031	MC	NRCS	VERMILION	401	N/A	Pending	\$26,756,528	The purpose of this project is to create and/or maintain about 430 acres of marsh near Freshwater Bayou north of intersection with Humble Canal.	4
CWP PRA	South Grand Channel Marsh Creation - Beaver Tract	NE-0032	MC	NRCS	CAMERON	393	N/A	Pending	\$26,891,833	The purpose of the project is to create new wetland habitat, restore degraded marsh, and reduce water erosion. Material dredged from the Gulf of Mexico will be utilized to create and/or maintain approximately 430 acres of marsh. Restoration levels will be degraded and approximately 11,756 linear feet of dike levee will be constructed by installing marsh buggies on the marsh platform for erosion control.	4
CWP PRA	West Bay Sediment Diversion	MR-0003	SD	USACE	PLAQUEMINES	98071	N/A	2003	\$50,863,503	The project consists of a channel to be created for large and uncontrolled diversion of sediments from the Mississippi River. The diversion channel was designed to be constructed in two phases. (1) Initial construction of an interim channel to accommodate a discharge of 20,000 cubic feet per second (cfs) at the 50% duration stages in the flow and marsh development areas, and (2) Modification of the interim diversion channel design to accommodate full-scale diversion of 50,000 cfs at the 50% duration stage on the river after a period of sediment monitoring of diversion operations.	2
CWP PRA	Channel Armor Gap Closure	MR-0006	SD	USACE	PLAQUEMINES	2097	N/A	1997	\$888,985	The project consists of deepening the inlet of the existing 158 foot wide gap in the Mississippi River channel bank armor. The existing river was lowered to 4.0 feet MVD. In addition, an existing armor channel leading from the armor gap to the open water area was deepened. Approximately 125,000 cubic yards of material were excavated from the total channel and a dike was constructed.	1
CWP PRA	Paso a Loutre Channel (Deauthorized)	MR-0007	SD	USACE	PLAQUEMINES	1040	N/A	Deauthorized	\$118,935	The objective of this project was to create and/or maintain marsh in the Mississippi River Delta. The work to be accomplished through construction of a levee on the left and right bank of the Mississippi River Delta, from the mouth of the river to the Gulf of Mexico, was officially deauthorized by the CWP/PRA Task Force in June of 1999 due to high costs attributed to restoring undergrounded, affected in the area.	1
CWP PRA	Beneficial Use of Support Drilling Material (Deauthorized)	MR-0008	DM	USACE	PLAQUEMINES	N/A	N/A	Deauthorized	\$40,309	The goal of this project was to utilize dredged material from a hopper dredge to create emergent vegetated marsh in an area that is currently a shallow open-water pond. Due to design problems, the project was officially deauthorized by the CWP/PRA Task Force in September of 2000.	2
CWP PRA	Delta Wide Crevasse	MR-0009	SD	NRCS	PLAQUEMINES	2386	N/A	1999	\$4,728,218	The objective of this project is to provide low formation of emergent freshwater and intermediate marsh in shallow, open water areas of the Paso a Loutre Management Area and the Delta National Wildlife Refuge by either clearing existing spurs or creating new spurs.	1
CWP PRA	Outbank Maintenance - Creeping Operations for Marsh Creation in the Mississippi River Delta Demonstration	MR-0010	DM	USACE	PLAQUEMINES	N/A	N/A	2002	\$1,909,420	This project demonstrated the beneficial use of dredged material from routine maintenance of the Mississippi River Navigation Channel by using a dike and hydraulic dredge to create and restore adjacent marsh. Approximately 40 acres of denuded marsh that had been converted to shallow open water were reseeded with approximately 222,800 tube yards of dredged material.	2
CWP PRA	Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites (Deauthorized)	MR-0011	FD	USACE	ST BERNARD	N/A	N/A	Deauthorized	\$83,556	This demonstration project was intended to show the effectiveness of using a hydraulic pipeline dredge to provide increased sediment through a diversion structure or spur. Monitoring of the project will determine not only the effectiveness of the sediment input concentrations, but also the subsequent effects in the outfall area. The project was subsequently deauthorized by the CWP/PRA Task Force.	1
CWP PRA	Mississippi River Sediment Trap (Deauthorized)	MR-0012	MC	USACE	PLAQUEMINES	1190	N/A	Deauthorized	\$354,790	This project was reauthorized on the 12th FPL to create emergent wetlands through the beneficial use of material dredged from a sediment trap located between miles 5 and 11 above Head of Passes in the Mississippi River. The proposed sediment trap was located at mile 11. The project was extended for another 20 years.	1, 2
CWP PRA	Bayou de l'Asse Marsh Creation (Deauthorized)	MR-0013	SD	USACE	PLAQUEMINES	4580	N/A	Deauthorized	\$976,580	The objective of this project was to create vegetated wetlands in shallow open water areas in Bayou de l'Asse. The project would divert sediment from the Mississippi River into the Bayou de l'Asse. The project was officially deauthorized by the CWP/PRA Task Force in 2009 due to the high cost to implement the project.	1

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flanking Unit
CWP/PRA	Lower Bayou LaCade Hydrologic Restoration (Causalized)	TE-0019	MC	NMFS	TERREBOINNE	N/A	N/A	Dead/unused	\$59,625	The project would have reduced marsh loss rates and improved fish and wildlife habitat quality by restoring natural north-south water exchange with adjacent water bodies and by reducing flow through the numerous dike/canal in the area. Because of problems with bridge/canal and dikes, the project was Causalized by the CWP/PRA Task Force in 1995.	3A
CWP/PRA	Isles Duvenois Restoration East Island	TE-0020	BH	EPA	TERREBOINNE	448	N/A	1999	\$8,462,416	The project consisted of sand placement along the shoreline of East Island to create a new beach line. Approximately 3.9 million cubic yards of sand were dredged from Lake Pontchartrain and placed on East Island. The sand was then hydraulically placed to create an elevated marsh platform. Sand fences and vegetation were also installed to stabilize the sand and minimize wind-driven erosion.	3A
CWP/PRA	Port au Loup Canal Plugs	TE-0022	VP, MC	NMFS	TERREBOINNE	375	N/A	1997	\$5,444,367	This project is intended to reduce subsidence intrusion into the Port au Loup area by installing a barrier across the canal. The barrier will be constructed in two phases. Phase I, completed in 1997, involved the piling of major natural gas/oil pipeline casings on the southern half of the island. Under Phase II, a rock structure stabilization structure was constructed in 2000 along a thin strip of beach separating the Port au Loup area from the main body of the lake.	3B
CWP/PRA	West Gate Pass Headland Restoration	TE-0023	SP	USACE	LAFourche	474	N/A	1990	\$6,726,754	The project consisted of installing a rock structure to stabilize the headland of West Gate Pass. A water control structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	Isles Duvenois Restoration Terre Island	TE-0024	BH, MC	EPA	TERREBOINNE	776	N/A	1999	\$10,774,374	The project consisted of installing a rock structure to stabilize the shoreline of Terre Island. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	East Timberlake Island Sediment Restoration	TE-0025	BH	NMFS	TERREBOINNE	1913	N/A	2001	\$3,720,721	The objective of the project is to stabilize and increase the life expectancy of East Timberlake Island. The project called for the mining of 2.7 million cubic yards of sediment and placement of the material in three embankments along the shoreline of East Timberlake Island. The project also included aerial seeding of the dune platform, installation of sand fencing, and dune vegetation plantings.	3A
CWP/PRA	Lake Chapelle Sediment Restoration and Hydrologic Restoration, Port au Loup Canal	TE-0026	MC	NMFS	TERREBOINNE	509	N/A	1999	\$6,010,133	The objective of the project is to restore the marshes west of Lake Chapelle. The project consisted of installing a rock structure to stabilize the shoreline of Lake Chapelle. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3B
CWP/PRA	Whiskey Island Restoration	TE-0027	BH, MC	EPA	TERREBOINNE	657	N/A	2000	\$7,104,506	The project consisted of installing a rock structure to stabilize the shoreline of Whiskey Island. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	Brady Canal Hydrologic Restoration	TE-0028	HR	NRCS	TERREBOINNE	297	N/A	2000	\$7,993,752	The project consisted of installing a rock structure to stabilize the shoreline of Brady Canal. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3B
CWP/PRA	Raccoon Island Bivalve Culture Demonstration	TE-0029	BH	NRCS	TERREBOINNE	N/A	N/A	1997	\$1,364,368	The project consisted of installing a rock structure to stabilize the shoreline of Raccoon Island. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	East Timberlake Island Sediment Restoration	TE-0030	BH	NMFS	TERREBOINNE	215	N/A	2000	\$7,400,150	The project consisted of installing a rock structure to stabilize the shoreline of East Timberlake Island. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	Forest Marsh Elevation Demonstration (Causalized)	TE-0031	SP	NRCS	TERREBOINNE	N/A	N/A	Dead/unused	\$136,000	The project consisted of installing a rock structure to stabilize the shoreline of Forest Marsh. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	North Lake Boulevard Basin Freshwater Introduction and Hydrologic Management	TE-0032-A	FD	USFWS	TERREBOINNE	603	N/A	Pending	\$26,875,359	The project consists of introducing freshwater from the HHC through an enlarged Bayou Pelerin channel across Bayou Grand Calou and through a dike channel.	3A
CWP/PRA	Bayou Bonnet Pump Station (Causalized)	TE-0033	HR	EPA	TERREBOINNE	N/A	N/A	Dead/unused	\$1,462	The purpose of the project was to stabilize the shoreline of Bayou Bonnet. The project consisted of installing a rock structure to stabilize the shoreline of Bayou Bonnet. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	Gravelly Basin Natural Resource Park, Bayou LaCade	TE-0034	FD, HR, SP	NRCS	TERREBOINNE	675	N/A	2011	\$17,620,314	The project consisted of installing a rock structure to stabilize the shoreline of Gravelly Basin. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3B
CWP/PRA	Marsh Creation East of the Atchafalaya River / Avoca Island (Causalized)	TE-0035	MC	USACE	ST MARY	434	N/A	Dead/unused	\$60,000	The project consisted of installing a rock structure to stabilize the shoreline of Marsh Creation. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3D
CWP/PRA	The Marsh Fishing Marsh Enhancement Demonstration	TE-0036	MC	NRCS	TERREBOINNE	N/A	N/A	2000	\$538,181	The objective of the project is to reduce the development of thick and continuous floating marsh from a thin mid channel using various combinations of treatments including fertilization, herbicide reduction, and transplanting healthy thick marsh plugs into the thin mid channel. Project monitoring is intended to determine the effects of water movement and sediment availability on these marshes.	3B
CWP/PRA	New Cut Dune and Marsh Restoration	TE-0037	BH, MC	EPA	TERREBOINNE	286	N/A	2000	\$12,860,325	The objective of the project was to close the breach between East and Trinity Islands that was originally created by Hurricane Camille in 1984 and subsequently enlarged by Hurricane Andrew in 1992. The project involved the creation of barrier islands by installing a rock structure to stabilize the shoreline of the eastern barrier island by restoring the barrier and adding sediment into the marsh area.	3A
CWP/PRA	South Lake Decade Freshwater Introduction	TE-0039	SP	NRCS	TERREBOINNE	202	N/A	2011	\$5,223,606	The project involves the construction of a water control structure in the southern part of Lake Decade. The structure increases the amount of Atchafalaya River water and sediment introduced into the marshes south of the lake. In addition, shoreline protection was implemented adjacent to the proposed structure, and a weir in Lake Decade Basin was removed.	3A
CWP/PRA	Timberlake Island Dune and Marsh Restoration	TE-0040	BH, MC	EPA	TERREBOINNE	663	N/A	2004	\$16,662,199	Timberlake Island is migrating rapidly to the west/northwest. Therefore, the western end of Timberlake Island is undergoing lateral migration by sea-building processes at the expense of erosion along the eastern end. The objective of the project is to reduce the sediment of Timberlake Island by the construction of a dike, dunes, and marsh.	3A
CWP/PRA	Macalvey Bank Protection Demonstration	TE-0041	SP	USFWS	TERREBOINNE	N/A	N/A	2003	\$1,732,498	This demonstration project is intended to develop new techniques for protecting and restoring organic soils, which can be easily eroded. The banks and headlands were treated to determine the cost effectiveness of demonstrated approaches. The project involved the installation of a rock structure to stabilize the shoreline of Macalvey Bank. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A, 3B
CWP/PRA	Marsh Elevation Atchafalaya River to Central Terrebonne (Transferred)	TE-0042	HR	USFWS	ST MARY	N/A	N/A	Transferred	N/A	The project is intended to reduce marsh loss through the proposed distribution of marsh headland material in the Gulf of Mexico. The project was transferred to the Louisiana Department of Wildlife and Fisheries.	3A
CWP/PRA	ONWW Bank Restoration of Central Terrebonne	TE-0043	SP	NRCS	TERREBOINNE	345	N/A	2014	\$13,072,245	The project objective is to reduce critical lengths of deteriorated channel banks and stabilize marshes selected at lengths of deteriorated channel banks with hard shoreline stabilization materials. A portion of the project was constructed using CWP 2007 funds and the remainder of the project was constructed under CWP/PRA.	3A
CWP/PRA	North Lake Michoud Landscaping Restoration	TE-0044	SP, MC	USFWS	TERREBOINNE	604	N/A	2000	\$39,004,426	The project is intended to help maintain and restore the landscape (Lake Michoud north shore and the Grand Bayou La Poudre River), which provides a hydrologic barrier between marsh and low-lying habitats. Project features include marsh creation, the planting of smooth cordgrass (Spartina alterniflora) on the shoreline, the construction of various plugs, and repairing a five-foot weir.	3A
CWP/PRA	Timberlake Bay Shore Protection Demonstration	TE-0045	SP	USFWS	TERREBOINNE	0	N/A	2007	\$2,718,768	The project is intended to evaluate several different shoreline protection methods, including concrete mounds, artificial oyster reefs and A-armor, and rock armor.	3A
CWP/PRA	West Lake Boulevard Shoreline Protection and Marsh Creation	TE-0046	SP	USFWS	TERREBOINNE	145	N/A	2008	\$17,993,813	The purpose of the project is to create and maintain about 200 acres of marsh along the western shoreline of Lake Boulevard to protect the shoreline from erosion due to direct exposure to lake wave energy and to reduce interior marsh risk to subsidence and saltwater intrusion.	3A
CWP/PRA	Ship Shoal Whiskey Wetland Flank Restoration (Native)	TE-0047	BH	EPA	TERREBOINNE	508	N/A	Active	\$1,999,110	The objective of the project is to reduce erosion and stabilize the shoreline of Ship Shoal. The project consisted of installing a rock structure to stabilize the shoreline of Ship Shoal. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A
CWP/PRA	Raccoon Island Bivalve Culture Demonstration and Marsh Creation	TE-0048	BH, MC	NRCS	TERREBOINNE	16	N/A	2007, 2013	\$22,163,793	The purpose of the project is to protect the existing southern shoreline of the island by constructing a more robust headland. Phase B of the project consisted of installing a rock structure to stabilize the shoreline of Raccoon Island. The structure was placed in the headland to reduce erosion and stabilize the shoreline.	3A

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flanking Unit
FEDERAL	Lake Protection Hurricane Mitigation Project	HPL-811	SP	USACE	ST. JOHN THE BAPTIST	608	N/A	1995	\$2,222,892	This project consisted of a near-shore, segmented breakwater system in Lake Fortchartrain parallel to the shore of the M and the W levee management area. The project specifically mitigated for damages resulting from construction of the Lake Fortchartrain Hurricane Protection Project.	1
FEDERAL	MIRJO Ecosystem Restoration	PO-0065	VP, FO, MM, SP, MC	USACE	ST. BERNARD, ORLEANS	62780	N/A	Pending	\$2,900,000,000	This project involves an suite of restoration measures that are collectively intended to restore some of the ecosystem damaged by construction of MIRJO.	1
FEDERAL	Lost Lake Vegetation Project	TE-0382	VP	USFWS	TERREBOINE	N/A	N/A	2011	\$191,000	This coastal vegetative planting project is for erosion control and habitat restoration in the Lost Lake area of southwestern Terrebonne Parish.	3A
FEMA	Houma Navigation Canal Levee Maintenance	DCR-01557	SP	FEMA	TERREBOINE	4000	N/A	1995	\$210,165	This FEMA project involved the repair of segments of the western bank of the Houma Navigation Canal damaged by Hurricane Andrew in 1992.	3A
FEMA	Wine Island	DCR-01558	DM	FEMA	TERREBOINE	25	N/A	1995	\$253,579	This FEMA project was a cooperative venture with the USACE in the benefice of damaged material from a scheduled Houma Navigation Canal maintenance dredging project. The island was repaired by pre-Hurricane Andrew cordons and planted with vegetation to stabilize the island.	3A
FEMA	Troular Island Repairs	DCR-01559	DI	FEMA	TERREBOINE	70	N/A	1995	\$551,653	This FEMA project closed a major break created by Hurricane Andrew and provided a 300-foot-wide elevated marsh platform to stabilize the island. Vegetation was also planted to stabilize the sand.	3A
FEMA	East Island Riprap Protection	DCR-01560	DM	FEMA	TERREBOINE	25	N/A	1995	\$633,179	This FEMA project constructed an elevated marsh platform in an area of a Terrebonne Parish project destroyed by Hurricane Andrew in 1992. Vegetation was also planted to stabilize the sand.	3A
FEMA	Lafayette Wetlands	DCR-01788	SP	FEMA	ST. CHARLES	N/A	N/A	2000	\$43,315	A 700-foot section of a Christmas tree brush force was repaired. This project was damaged by Hurricane Georges, Hurricane Earl, and "re-plant of storm force in 1998.	1
FEMA	Troular Island	DCR-01784	DI	FEMA	TERREBOINE	N/A	N/A	2000	\$191,284	This FEMA project repaired sand fencing on Troular Island that was destroyed during a series of tropical storms and hurricanes in the fall of 1998.	3A
FEMA	F along Canal	DCR-01785	SP	FEMA	TERREBOINE	N/A	N/A	2000	\$10,761	This FEMA project replaced two ailes on water control structures damaged during tropical storms and hurricanes in the fall of 1998. The structure of the new floodgate was completed by Terrebonne Parish and Government.	3A
FEMA	East Island	DCR-01786	VP	FEMA	TERREBOINE	N/A	N/A	2000	\$188,413	This FEMA project involved the planting of marsh vegetation on the shore and east end of East Island. This area is part of a larger project to stabilize the island and protect the adjacent levee. The project was completed by the USACE and FEMA. The project was completed in April 2005.	3A
FEMA	Idle Corriens (W Lake or Island)	DCR-01787	VP	FEMA	TERREBOINE	1299	N/A	2000	\$591,666	This FEMA project involved the installation of sand fencing and the planting of vegetation to repair areas of NW Lake Island damaged by tropical storms and hurricanes during the fall of 1998. This area is part of a CWP/PPA project area and CWP/PPA funds were combined with the FEMA funds for the project.	3A
FEMA	Marsh Island Repairs	PWA-1446	MM	FEMA	IBERIA	N/A	N/A	2005	\$995,881	This FEMA project consisted of repairs to areas of shore diking, shore dikes, and minor repair of navigation aids on the Marsh Island Hydrologic Restoration (IV-14) project damaged during Hurricane Lili in 2002. The project also included minor maintenance work paid for by CWP/PPA.	3D
FEMA	Cote Blanche Repairs	PWA-1806	H8	FEMA	ST. MARY	N/A	N/A	2005	\$44,092	This FEMA project consisted of repairs to areas of shore diking, shore dikes, and minor repair of navigation aids on the Cote Blanche Hydrologic Restoration (IV-64) project damaged during Hurricane Lili in 2002. The project also included minor maintenance work paid for by CWP/PPA.	3D
FEMA	Cameron Crook Structures	PWA-4357	H8	FEMA	CAMERON	N/A	N/A	2007	\$325,700	This FEMA project consisted of repairs to two structures of the Cameron-Crook Maintenance (CS-044) project that were damaged by Hurricane Rita in 2005. These structures are located at Grand, Picot, Lambert, No Name, and M. and M. Bayou.	4
FEMA	Hole Beach Sand Fencing	PWA-4403	SP	FEMA	CAMERON	N/A	N/A	2005	\$218,473	This FEMA project consisted of the replacement of 46,000 linear feet of sand fencing on the Hole Beach Sand Management (CS-31) project that was destroyed by Hurricane Rita in 2005.	4
FEMA	Hopkins Hydrologic Structure	PWA-9743	H8	FEMA	ST. BERNARD	N/A	N/A	2007	\$44,000	This FEMA project consisted of repairs to the water control structure of the Hopkins Hydrologic Restoration (PO-20) project that was damaged by Hurricane Katrina in 2005. Repairs were made to damaged fencing, railings, and displaced riprap, and a bid portable hydraulic structure is being replaced.	1
FEMA	Lake Protection Debris Removal	N/A	N/A	N/A	JEFFERSON, ORLEANS, ST. JOHN THE BAPTIST, ST. TAMMANY, TANGIPAHOLA	N/A	N/A	2013	\$10,000,000	The goal of this project was to remove debris from approximately 750 square miles of Lake Fortchartrain.	1
FEMA	Mortgage NY Islands	PWA-1729	MM	FEMA	TERREBOINE	N/A	N/A	2005	\$1,893,862	This FEMA project repaired damage to the Mortgage Island (TE-01) project that occurred during Hurricane Lili in 2002. The project consisted of reinforcing and reconstructing 17,000 linear feet of an existing earthen levee using old stone masonry.	3A
HSDRRS	West Bank and Vieux	EA-0566	HP	USACE	ST. CHARLES, JEFFERSON, PLAQUEMINES	N/A	71	Pending	\$3,152,000,000	The project is currently designed to provide 100 Year protection levels to the project area through the construction of levees to the 2011 protection levels and 100 Year earthen structures to the 100 Year protection levels.	2
HSDRRS	New Orleans to Venice	EA-0567	HP	USACE	PLAQUEMINES	N/A	58	Pending	\$1,301,523,766	The 100 Year project consists of 24 areas of work covered by projects MOY 1-2, MOY 5-16, MOY 17-19, 4 to 6, MOY 20, and T. and T. System (TF-01) Continuing Projects F13-15, F17, and F24 that includes the action of the Plaquemines Parish Hurricane Protection System.	1,2
HSDRRS	Grand Lake and Vieux	EA-0573	SP	USACE	JEFFERSON	N/A	Not Available	Pending	\$25,000,000	The Grand Lake and Vieux Hurricane Protection Project consists of a 7.5 mile vegetated sand dune extending the length of Grand Lake's Gulf shore, a jettie to stabilize the wetland and of the island at Camargo Park, and an offshore breakwater system.	2
HSDRRS	Storm Proofing of Interior Pumping Stations	BA-0574	FP	USACE	JEFFERSON, CREANS	N/A	N/A	2014	\$240,000,000	This project involves the installation of various improvement features to the interior pump stations of Orleans and Jefferson Parish under the Hurricane and Storm Damage Risk Reduction System (HSDRRS).	2
HSDRRS	Wetlands Migration NW/	BA-0708	MC	USACE	JEFFERSON, LAFOURCHE	1318	N/A	Pending	\$176,000,000	This USACE project involves the implementation of various restoration measures to mitigate wetland impacts associated with the construction of the new levee and Vieux (Vieux) project.	2, 3A
HSDRRS	Risk Reduction - Davina Basin Landbridge	BA-0748	MC, HP	USACE	JEFFERSON	223	N/A	Pending	\$10,100,000	This project is being led by USACE and is 100% federally funded with \$10.1 Million allocated by the U.S. 4th Supplemental Appropriations Act for Hurricane Risk Reduction project. It provides for about 101 acres of marsh creation and 122 acres of marsh restoration on the south shore of the Bay.	2
HSDRRS	Previously Authorized Mitigation NW/	BA-0744	MM, VP, PP	USACE	JEFFERSON, ST. CHARLES	1130	N/A	Pending	\$11,000,000	This project is being led by USACE and is 100% federally funded with approximately \$79.8 Million allocated. It provides for about 1,130 acres of mitigation, including 1) acquisition, improvement, and management of approximately 128 acres of BLH wetland habitat adjacent to Bayou Segre State Park, 2) acquisition of approximately 970 acres of high value wooded wetlands in St. Charles Parish, and 3) acquisition, improvement, and management of approximately 350 acres of high quality wooded lands in St. Charles Parish.	2
HSDRRS	Plaquemines TFL Mitigation - Brallembe to St. Andrew - Bay	BA-0756	MC	USACE	PLAQUEMINES	24	N/A	Pending	\$2,000,000	This project is being led by USACE and is 100% federally funded with approximately \$2.1 Million allocated. It provides for the creation of approximately 24 acres of marsh. Additionally, Plaquemines Parish will be contributing a neighboring local project of 16 acres of marsh creation to this project with supplemental funding for a total of 40 acres.	1
HSDRRS	New Orleans to Venice Mitigation - Plaquemines North	BA-0758	MC	USACE	PLAQUEMINES	342	N/A	Pending	\$14,500,000	This project is being led by USACE and is 100% federally funded with approximately \$14.5 Million allocated. It provides for about 180 acres of mitigation, which includes approximately 50 acres of BLH wetland creation, 60 acres of barrier, 60 acres of riparian marsh, and 20 acres of brackish marsh.	2, 1
HSDRRS	New Orleans to Venice Mitigation - Federal	BA-0759	MC	USACE	PLAQUEMINES	418	N/A	Pending	\$30,000,000	This project is being led by USACE and is 100% federally funded with approximately \$30.0 Million allocated. It provides for about 730 acres of mitigation, including 1) acquisition, improvement, and management of approximately 140 acres of riparian marsh, 70 acres of brackish marsh, 18 acres of brackish marsh, and 200 acres of riparian marsh.	2, 1
HSDRRS	Risk Reduction Via Modification to the Cameron Freshwater Diversion	BS-0083-B	FO, FO, HP	USACE	PLAQUEMINES	65	N/A	Pending/On Hold	\$10,100,000	This project is being led by USACE and is 100% federally funded with \$10.1 Million allocated by the U.S. 4th Supplemental Appropriations Act for Hurricane Risk Reduction project. It provides for restoring wetlands from the Cameron Diversion into the 40-Acre Canal to enhance the movement of fresh, saltwater-laden water into the marsh north of Lake Lavey in order to halt and reverse marsh deterioration. This project was originally included as a project under CWP/PPA, BE-16 but removed to allow USACE to fund it as a WAFB CWP/PPA project.	1

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPLA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Estimated	Miles of Wetland Restored	Construction Completion	Total Budget	Project Description	Planning Unit
HSDRRS	Lake Protection & Vitrification, Lake Bienville Barge Barrier LPV-BENC-02	FO-0955	HF	USACE	ST BERTRAND, ORLEANS	N/A	2	2013	\$1,134,000,000	This project involves the construction of a hurricane surge barrier across the tip of Lake Bienville connecting the MRDC levees south of Bayou Bienvenue with the OVVW levees East of Microcut Canal with floodgates at Bayou Bienvenue and OHNV.	1
HSDRRS	BEA	FO-0957	OT	USACE	JEFFERSON, ORLEANS	N/A	N/A	Pending	\$1,173,874,586	This project consists of drainage and pump station projects within Jefferson Parish and Orleans Parish, on both the east bank and west bank of the Mississippi River.	1,2
HSDRRS	Permanent Closure of Canals and Pumps	FO-0960	HF	USACE	ORLEANS, JEFFERSON	N/A	0.34	Pending	\$614,600,000	This project, authorized under Public Law 109-234, includes the design and construction of a permanent protection system by the artificial canals along 17th Street, Creoles Avenue, and Lousion Avenue and install pumps and closure structures along near the lakefront.	1
HSDRRS	West of Lake Pontchartrain	FO-0962	HF	USACE	ST JOHN THE BAPTIST, CHARLES, ST. JAMES, ASCENSION	N/A	22	Pending	\$409,004,586	This project involves the assessment of future sea level rise and storm reduction measures in a study area bounded by the Ernest Carré Spillway to the east, The Mississippi River to the south, Lakes Pontchartrain and Maurepas to the north, and the St. James Parish Ascension Parish Bay to the west.	1
HSDRRS	Lake Pontchartrain and Vicinity	FO-0963	HF	USACE	ST CHARLES, JEFFERSON	N/A	1.29	2010	\$3,852,000,000	Lake Pontchartrain and Vicinity (LCPV) is the hurricane protection program that involves approximately 30 hurricane protection projects in East Jefferson and St. Charles Parishes.	1
HSDRRS	Lake Pontchartrain & Vicinity, Bastrop Lock LPV-BENC-01	FO-0964	HF	USACE	ORLEANS	N/A	0.5	2012	\$157,156,414	Lake Pontchartrain is a gulf closure structure across the Industrial Canal approximately 100 ft South of the Ted Hickey Bridge at Lake Pontchartrain to work in conjunction with the IHNC Surge Barrier.	1
HSDRRS	HSDRRS Magnolia-LPV	FO-0721	MC	USACE	ST TAMMANY, ORLEANS	1,009	N/A	Pending	\$85,000,000	This project involves the implementation of various restoration measures to mitigate wetland impacts associated with the Magnolia Canal.	1
HSDRRS	LPV Task Force Guardian Magnolia Bayou Salvage	FO-0745	HM, VP	USACE	ORLEANS	59	N/A	Pending	\$790,080	This project is being implemented by USACE and is 100% federally funded with approximately \$2.1 million allocated. The project is targeting approximately 147 acres due to emergency levee work that occurred at about 47 acres. It provides for the elimination of non-value trees with spraying and mechanical clearing, and then the regrading of up to 60,000 cubic yards of native soil, including boulders, debris, and other materials.	1
HSDRRS	Previously Authorized Magnolia LPV-MAG-01	FO-0746	MC, SP	USACE	ST JOHN THE BAPTIST	1,229	N/A	7/9/1905	\$32,985,259	This project is being used by USACE and is 100% federally funded with approximately \$2.1 million allocated. It provides for containment dikes with rock and fill levee with geotextile material to match the IHNC Surge Barrier project. The project is intended to create a new and restore erosion.	1
LOUISIANA COASTAL AREA	LCA Small Bayou Lafourche Restoration	BA-0070	FD	USACE	ASSUMPTION, LAFOURCHE	N/A	N/A	Pending/In Hold	\$123,000,000	The project will use a small diversion less than 500 cfs to bypass flow from the Mississippi River into Bayou Lafourche. Project goals include providing freshwater, sediment and nutrients needed to reduce salinity, stimulating plant productivity, and reducing wetland loss between Bayous Lafourche and Terrebonne. Funds from the budget surplus of 2008 will be used for the state's cost-share requirement. Construction cost taken from NOAA 2007 legislation.	3A
LOUISIANA COASTAL AREA	LCA Medium Diversion with Dike and Drilling at Myrtle Grove	BA-0071	FD	USACE	PLAQUEMINES	N/A	N/A	Pending/In Hold	\$278,300,000	Authorized by RMDA 2007 as a sediment diversion between 2,500 and 15,000 cfs. Original modeling effort to estimate potential for nutrient abatement of the VMA, although for a larger sediment diversion to provide inflow of shallow open water through deposition and mud accretion. "S" funded Phase 2 cost taken from RMDA 2007 legislation.	2
LOUISIANA COASTAL AREA	LCA Middle Allen of Davis Pond Diversion	BA-0072	FD	USACE	ST CHARLES, JEFFERSON, PLAQUEMINES, LAFOURCHE	N/A	N/A	Pending/In Hold	\$60,277,895	This modification project is scheduled to study and design the middle Allen of the structure and/or outlet of the diversion to increase wetland restoration outputs within the Barataria Basin.	2
LOUISIANA COASTAL AREA	LCA Modification of Carmichael Diversion	BP-0019	FD	USACE	ST BERTRAND, PLAQUEMINES	N/A	N/A	Pending/In Hold	\$21,000,300	This modification project is scheduled to study and design the middle Allen of the diversion structure and/or outlet of the diversion to increase wetland restoration outputs south of Terrebonne. Funds from the budget surplus of 2008 will be used for the state's cost-share requirement. Construction cost taken from NOAA 2007 legislation.	1
LOUISIANA COASTAL AREA	LCA Medium Diversion at Myrtle Grove	BP-0020	FD	USACE	PLAQUEMINES	N/A	N/A	Pending/In Hold	\$126,080,400	A medium diversion from the Mississippi River into the central river area of the Gulf of Mexico. A combined structure to provide additional wetland, diversions, and the diversion to the area between the Mississippi River and Bayou de l'Est, Louisiana.	1
LOUISIANA COASTAL AREA	LCA Bayou Blain Diversion Shoreline - 2007	LA-0010	MC, BH	USACE	JEFFERSON, PLAQUEMINES, LAFOURCHE	N/A	N/A	Pending/In Hold	\$363,000,000	The purpose of this project is to provide beach/nutrient restoration and marsh creation on Carmichael Headlands and Shell Island.	2
LOUISIANA COASTAL AREA	LCA Beneficial Use Feasibility Study	LA-0019	DM	USACE	COAST GUARD	N/A	N/A	Pending/In Hold	\$100,000,000	This feasibility study will examine increased beneficial use of dredged material from federally authorized navigation channels.	COASTGUARD
LOUISIANA COASTAL AREA	LCA Mississippi River Delta Management Study	MR-0016	OT	USACE	PLAQUEMINES	N/A	N/A	Pending/In Hold	\$74,369,136	This project involves the development of a strategic framework for feasibility evaluation of improved management of fresh water, sediments, and nutrient resources of the Lower Mississippi River, from the Old River Control Structure to Head of Passaic, below Vidalia, La. Delta, Del.	1, 2
LOUISIANA COASTAL AREA	Small Diversion at Hope Canal	FO-0087	FD	USACE	ST JOHN THE BAPTIST	N/A	N/A	Pending/In Hold	\$150,000,000	This project evaluates a small diversion (less than 500 cfs) to bypass sediment and nutrients into the Mississippi Swamp in order to facilitate organic deposition, improve biological productivity, and prevent further deterioration of the swamp. The study is using current data to partial extent required cost analysis for the project. It will divert flow into 2 compartments of the project to estimate the impact of a small diversion of up to 5,000 cfs from the Mississippi River into the filled river through a new control structure to produce a hydrologic, sediment, and nutrient flow to the Gulf of Mexico between the Mississippi River and the Gulf of Mexico.	1
LOUISIANA COASTAL AREA	LCA Small Diversion at Central River	FO-0088	FD	USACE	ST JOHN THE BAPTIST, ASCENSION	N/A	N/A	Pending/In Hold	\$123,140,000	The goal of this project is to establish hydrologic connectivity between the Mississippi River and the Gulf of Mexico. The project was transferred from the LCA program and is being implemented as State project PO-142.	1
LOUISIANA COASTAL AREA	LCA Central River Diversion Feasibility Study	FO-0089	VP, HR	USACE	LYNCHBURGH, ASCENSION	N/A	N/A	Transferred	\$107,760,300	The goal of this project is to establish hydrologic connectivity between the Mississippi River and the Gulf of Mexico. The project was transferred from the LCA program and is being implemented as State project PO-142.	1
LOUISIANA COASTAL AREA	LCA Median Land Bridge Between Calumet Lake and Gulf of Mexico	TE-0067	MC	USACE	TERRE BONNE	N/A	N/A	Pending/In Hold	\$62,600,300	The goal of this project is to prevent connection between the Gulf and Calumet Lake by constructing a dike/protection on the Gulf and Grand Bayou du Lac, marsh creation, and closure of newly opened channels and to minimize subsidence intrusion, prevent Gulf shore erosion and increase wetland influence on marshes to protect area.	3A
LOUISIANA COASTAL AREA	LCA Port-A-Fer	TE-0069	SP	USACE	TERRE BONNE	N/A	N/A	Pending/In Hold	\$40,300,300	The goal of this project is to stabilize Gulf shoreline of Port A/F Fer to prevent direct connection between Gulf and interior water bodies thereby preventing conversion of existing wetlands to marsh habitat.	3A
LOUISIANA COASTAL AREA	LCA Terrebonne Basin Harmer Shoreline Restoration	TE-0070	BH	USACE	TERRE BONNE	N/A	N/A	Pending/In Hold	\$133,300,000	This project provides for the restoration of the Timberlake and Isaac Corniers former island means. The island simulates natural conditions by reducing the current number of breaches, enlarging width, and duration of the island structure (Raccoon Island, East Island, Trade Island, Warr Island, and Timberlake Island, and East and Timberlake Island).	3A
LOUISIANA COASTAL AREA	LCA Grand Bayou Diversion Feasibility Study	TE-0071	HR	USACE	TERRE BONNE	N/A	N/A	Pending/In Hold	\$348,995,500	The project would increase existing Grand Bayou Diversion to central (Lake Bouchouart) and eastern (Grand Bayou) levee structures via the Gulf Intracoastal Waterway (GIWW).	3A
NPWF	Carmichael Headland Beach and Dune Restoration Increment 2	BA-0423	BH	N/A	JEFFERSON, LAFOURCHE	532	N/A	2016	\$147,063,567	This project will restore and protect beach and dune habitat along the Carmichael Headland through the direct placement of approximately 5.4 million cubic yards of sandy material from Ship Shoal into the bayous south of the project. The project is located near Bayou de l'Est, Louisiana, and is approximately 1 mile east of the Louisiana State Capitol. A total of 60 acres of beach and dune habitat will be restored.	2
NPWF	Mid-Barataria Diversion	BA-0153	SD	N/A	PLAQUEMINES	88,030	N/A	Pending	In Development	The IHNC is a large and complex civil works and restoration project. It will, when in operation, would transfer sediment-laden water from the Mississippi River through a six-mile-long, below-surface, sand-filled canal, before entering the Lake de la Charité. The project will restore the natural dike and sedimentation processes along the Mississippi River near Mile 607 east of the town of Thibodaux. The IHNC would be expected to build and maintain to help maintain areas of critical coastal wetlands over a 50-year period, being a key component to the 2012 Master Plan's goal of achieving no net loss of land in the delta.	2
NPWF	Lower Barataria Diversion	BA-0163	SD	N/A	PLAQUEMINES	In Development	N/A	N/A	In Development	The purpose of this project is to transfer sediment from the Mississippi River into the Lower Barataria Basin to maintain dune processes in order to build, sustain, and maintain wetlands. The project is located in the Lower Barataria Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux. The project is located in the Lower Barataria Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux. The project is located in the Lower Barataria Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux.	2
NPWF	Lower Pelier Diversion	BS-0023	SD	N/A	PLAQUEMINES	In Development	N/A	N/A	In Development	The purpose of this project is to transfer sediment from the Mississippi River into the Lower Pelier Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux. The project is located in the Lower Pelier Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux. The project is located in the Lower Pelier Basin in the south of the IHNC, approximately 50 miles east of the town of Thibodaux.	1

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Restored	Construction Completion	Total Budget	Project Description	Flaming Unit
IFWF	Mid Breton Diversion	BS-0030	DI	N/A	PLAQUEMINE	In Development	N/A	Pending	In Development	The purpose of this project is to evaluate a sediment diversion located in the vicinity of White Oak around 75,000 dft.	1
IFWF	Increase Atchafalaya Flow to Eastern Terrebonne	TE-0110	SD	N/A	TERREBONNE	In Development	N/A	Pending	In Development	The purpose of this project is to increase freshwater and sediment flows from the Atchafalaya River in order to build, sustain, and maintain wetlands within the Terrebonne Basin. The project intends to dredge the OHVW east of the Atchafalaya and install a bypass structure at Bayou de la Poudre to increase freshwater and sediment flows from Atchafalaya flow to Terrebonne marshes.	3A, 3B
IFWF	East Tremble Island Restoration	TE-0118	BH	N/A	LAFOURCHE	In Development	N/A	Pending	\$74,000,000	This project will engineer and design a restoration of dune, supralittoral, and intertidal habitat, such that the two presently remaining, severely degraded island segments will be reconnected and the historic island footprint re-established, which will improve bird and fish habitat, help protect oil and gas infrastructure, and provide more secure protection for western Louisiana's marsh.	3A
NRDA	Cheniere Rondele Barrier Island Restoration	BA-0076	BH, MC	NMFS	PLAQUEMINE	408	N/A	Pending	\$38,883,175	The objective of the project is to prevent encroachment of the barrier shoreline by restoring the dune and marsh platform. Project was designed under CIPRA, but was later transferred to NMFS for construction.	2
NRDA	Shall Island West - NRDA	BA-0111	BH	N/A	PLAQUEMINE	347	N/A	Pending	\$111,524,280	This project aims to restore the integrity of the Shell Island West barrier island, reduce wave energies within the bay area, and vegetation production to the marsh and the surrounding area. It will create 328 acres of marsh and 372 acres of dune and beach.	2
NRDA	Lake Hermitage Marsh Creation - Increment 2	BA-0141	MC	N/A	PLAQUEMINE	101	N/A	2014	\$135,000,000	This project will create 101 acres of marsh building off of the BA-0141 Lake Hermitage CIPRA project utilizing NRDA, with restoration funds.	2
NRDA	Queen Eass Island Restoration	BA-0202	BH	N/A	JEFFERSON	56	N/A	N/A	\$20,000,000	This project is designed to restore suitable coastal wetland nesting and brood rearing habitat on the island from its current size of less than 5 acres to approximately 30 acres (9 acres 24 ft x 20 ft). This will be accomplished by hydraulic engineering sediment from a nearby marsh and creating a new island. The island will be created by dredging the channel and creating a new island. The island will be created by dredging the channel and creating a new island.	2
NRDA	Barataria Basin Ridge and Marsh Creation - Spanish Pass Increment	BA-0303	MC	N/A	PLAQUEMINE	1,254	N/A	N/A	\$124,400,000	Spanish Pass is a natural feature, a tributary of the Mississippi River located west of Venice, Louisiana. The natural channel banks and adjacent marsh have degraded due to natural and manmade causes. The ridge restoration feature of the project will restore 120 acres of eastern ridge. The marsh creation feature of the project will dredge sediment from the Mississippi River, near Venice, LA, to create approximately 1,134 acres of marsh.	2
NRDA	Raccoon Island Restoration Project	CS-0880	BH	N/A	CAMERON	208	N/A	N/A	\$27,000,000	The primary goal of the project is to restore bird habitat by dredging material from the Calcasieu River Channel and adding it to the island along with constructing new dunes and ponds. Approximately 208 acres of bird habitat will be restored.	4
NRDA	Lake Eugene Marsh Creation - Increment One	FO-0180	MC	N/A	ST BERNARD	1549	N/A	N/A	\$127,000,000	This project will create approximately 1,549 acres of marsh, dredging approximately four million cubic yards of sediment from the Calcasieu River Channel and adding it to the marsh.	1
NRDA	NRDA, Calcasieu Lake Headlands	TE-0100	BH	N/A	TERREBONNE	1,272	N/A	Pending	\$111,309,000	This project is designed to restore suitable coastal wetland nesting and brood rearing habitat on the island from its current size of less than 5 acres to approximately 30 acres (9 acres 24 ft x 20 ft). This will be accomplished by hydraulic engineering sediment from a nearby marsh and creating a new island. The island will be created by dredging the channel and creating a new island. The island will be created by dredging the channel and creating a new island.	3A
NRDA	Terrebonne Basin Ridge and Marsh Creation - Bayou Terrebonne Increment	TE-0139	MC	N/A	TERREBONNE	1496	N/A	N/A	\$120,000,000	The purpose of this project is to increase freshwater and sediment flows from the Atchafalaya River in order to build, sustain, and maintain wetlands within the Terrebonne Basin. The project intends to dredge the OHVW east of the Atchafalaya and install a bypass structure at Bayou de la Poudre to increase freshwater and sediment flows from Atchafalaya flow to Terrebonne marshes.	3A
OTHER	Lake Portchartrain Migration Project	H-PLMIT	SP	N/A	ST JOHN THE BAPTIST	608	N/A	1996	\$2,727,892	This project consisted of a near-point, segmented barrier system in Lake Portchartrain parallel to a five-mile reach of the Manchac Wildlife Management Area. The project specifically required for damages resulting from construction of the Lake Portchartrain Hunt and Protection Project.	1
OTHER	Coastal Wetlands Public Outreach	NA	OT	N/A	N/A	N/A	N/A	N/A	\$400,000	The DNR Public Information Office provides a variety of printed materials, educational ideas and cds, fact sheets, website information, and a traveling wetlands exhibit for the public. Other Department outreach efforts include participating in conferences, workshops, seminars, and school activities. Much of the agency's educational outreach is in partnership with the Bureau of Land Management and the American's Wetland and Wildlife Campaign. As a result of working in several states, writers and reporters, the Public Information Office has contributed to the publishing of hundreds of national articles over the past years. To contact the Louisiana Department of Natural Resources' Public Information Office online, visit dnr.louisiana.gov .	COASTWIDE
RESTORE	West Grand Terre Beach Nourishment and Stabilization	BA-0197	BH	N/A	JEFFERSON	In Development	N/A	N/A	\$45,000,944	The project would complete the engineering and design to build an additional 12,700 feet of beach and dune, restore up to 86 acres of back barrier marsh and a rock treatment to protect restored marsh.	2
RESTORE	Calcasieu Ship Channel Safety Corridor Measures	CS-0065	H&B	N/A	CAMERON	In Development	N/A	Pending	In Development	The purpose of the project is to manage sediments being introduced into adjacent water bodies through the Calcasieu Ship Channel to reduce the rate of wetland loss in the surrounding wetlands. The project intends to construct features to prevent sediment from entering wetlands adjacent to Calcasieu Lake through the Calcasieu Ship Channel. Measures would control sedimentation and would be constructed in a manner that would allow for the continued functioning and debris improvement and increased viability of the Calcasieu Ship Channel and the Port of Lake Charles.	4
RESTORE	River Restoration into Marshes Swamp	FO-0029	FD	EPA	ST JOHN THE BAPTIST, ST JAMES	36121	N/A	Pending	\$147,028,725	This project intends to restore a natural hydrologic regime and to increase natural inputs in a wetland area within the south of Lake Maumelle through the diversion of Mississippi River water into an area of degraded wetlands. The project was originally proposed under CIPRA, but underwent subsequent development as a state-only project.	1
RESTORE	Golden Triangle Marsh Creation	FO-0163	MC	N/A	ORLEANS, ST BERNARD	In Development	N/A	N/A	\$54,550,330	This project would complete the engineering and design to build an additional 100 acres of marsh within the Golden Triangle Marsh system.	1
RESTORE	Baton Rouge Living Shoreline Project	FO-0174	SP	N/A	ST BERNARD	In Development	N/A	N/A	\$57,716,731	The project would create a living shoreline structure by mechanically placing a man-made structure, or a series of structures, of the structure of 150 ft x 150 ft, near the mouth of Bayou La Loutre.	1
RESTORE	Houma Navigation Canal Lock Corridor	TE-0113	H&B	N/A	TERREBONNE	In Development	N/A	Pending	In Development	The Houma Navigation Canal Lock Corridor (TE-113) is a part of the Morganza to the Gulf of Mexico Hurricane Protection Project. The structure will provide storm surge protection, increase freshwater distribution, and provide navigation along the Houma Navigation Canal. The initial step into the project is to meet with stakeholders to discuss alternative design considerations for optimization of the HNC Lock Corridor and determine a preferred design. The next step will be to conduct Engineering and Design of the preferred design.	3A
SECTION 20401136	MRDO, Breton Island Restoration, Mile 2.3 to 4.0	NR	DM	USACE	PLAQUEMINE	26	N/A	1999	\$1,850,000	This section 204 project utilized material from maintenance dredging activities along the Mississippi River Gulf Outlet (MRGO) to repair Breton Island.	1
SECTION 20401135	MRDO, Breton Island Restoration, Mile 2.3 to 4.0	NR	DM	USACE	PLAQUEMINE	N/A	N/A	1999	\$150,000	This section 204 project provided for the unconfined placement of 3,461,601 cubic yards of material into shallow water adjacent to the south jetties at about mile 15.3. The material was dredged from miles 14.0 to 11.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed in an elevation conducive to marsh vegetation establishment.	1
SECTION 20401135	Mississippi River Gulf Outlet, Mile 14 to 11	NR	DM	USACE	ST BERNARD	50	N/A	1999	\$350,000	The project involved pumping approximately 1.6 million cubic yards to create some 50 acres of marsh behind the MRGO jetty. This project was funded due to the impact of Hurricanes Luis and Traci on the marsh.	1
SECTION 20401135	Mississippi River Gulf Outlet, Mile 14 to 12 (2002)	NR	DM	USACE	ST BERNARD	50	N/A	2002	\$230,000	This project involved pumping approximately 1.6 million cubic yards of sediment to create 11.3 acres of marsh. The material was dredged from miles 14.0 to 12.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed in an elevation conducive to marsh vegetation establishment.	1
SECTION 20401135	Mississippi River Gulf Outlet, Mile 14 to 12 (2003)	NR	DM	USACE	ST BERNARD	113	N/A	2003	\$510,000	This project involved pumping approximately 1.6 million cubic yards of sediment to create 11.3 acres of marsh. The material was dredged from miles 14.0 to 12.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed in an elevation conducive to marsh vegetation establishment.	1
SECTION 20401136	Barataria Bay Wetlands, Mile 31 to 24.5	NR	DM	USACE	JEFFERSON	126	N/A	1999	\$110,000	This project involved pumping approximately 1.6 million cubic yards of sediment to create 11.3 acres of marsh. The material was dredged from miles 14.0 to 12.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed in an elevation conducive to marsh vegetation establishment.	2

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flanking Unit
SECTION 2041135	Barataria Waterway Guard Trench Island Th. 2	NA	DM	USACE	JEFFERSON	80	N/A	2002	\$130,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Barataria Bay. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
SECTION 2041135	Cakibou River and Pass (Barataria Waterway Phase 1, 8)	NA	DM	USACE	CAMERON	488	N/A	1999	\$1,600,004	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Cakibou River and Pass. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	4
SECTION 2041135	Vine Island Restoration	DE-81-558	DM	USACE	TERRE BONNE	37	N/A	1991, 2003	\$1,807,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from a scheduled maintenance dredging project in the Vine Island area. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	3A
SECTION 2041135	Barataria Bay Waterway, Grand Terre Island (Phase 2)	NA	DM	USACE	JEFFERSON	115	N/A	1996	\$1,370,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Barataria Bay. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
SECTION 2041135	Houma Navigation Canal, Vine Island Canal (Phase 1)	NA	DM	USACE	TERRE BONNE	50	N/A	2002	\$1,800,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Houma Navigation Canal. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	3A
SECTION 2041135	Brown Lake	NA	MC, DM	USACE	CAMERON	315	N/A	1999	\$1,32,435	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Brown Lake. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	4
STATE	Assessment to the Gulf	AT-0012	OT	N/A	RAPOUE	N/A	N/A	N/A	\$970,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Assessment to the Gulf. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	3B
STATE	Atchafalaya Basin Natural Resources Inventory and Assessment	AT-0013	OT	N/A	ST MARY, BERTRAND, ST MARTIN	N/A	N/A	N/A	\$1,450,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Atchafalaya Basin. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	3B
STATE	Nacem Sponon Division	EA-0003	FD	N/A	PLAQUEMINES, JEFFERSON	8200	N/A	1992	\$8,602,381	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Nacem Sponon Division. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	West Pointe a la Hache Sponon Division	EA-0004	FD	N/A	PLAQUEMINES	9200	N/A	1992	\$9,845,693	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the West Pointe a la Hache Sponon Division. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Queen Bass	BA-0005-B	SP, DM	N/A	JEFFERSON	145	N/A	1993	\$1,475,176	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Queen Bass. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Bay de Chaudes	BA-0005-C	SP	N/A	ST CHARLES	128	N/A	1990	\$176,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Bay de Chaudes. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Lake Salvador Shoreline Protection Extension	BA-0015-A1	SP	N/A	ST CHARLES	2035	N/A	2005	\$4,440,344	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Lake Salvador Shoreline Protection Extension. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Bayou Segnette	BA-0016	SP	N/A	JEFFERSON	88	N/A	1994, 1998	\$1,373,151	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Bayou Segnette. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Bayou Lafourche Freshwater Introduction	BA-0025	FD	N/A	LAFOURCHE	Not Available	N/A	2011	\$20,000,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Bayou Lafourche Freshwater Introduction. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Paquemines Parish - Southeast Louisiana Strategic Restoration	BA-0045-BF	MC	N/A	PLAQUEMINES	N/A	N/A	N/A	\$4,500,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Paquemines Parish - Southeast Louisiana Strategic Restoration. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Jean Lafitte Tidal Protection	BA-0075-1	HP	N/A	JEFFERSON	N/A	2.3	Pending	\$15,730,300	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Jean Lafitte Tidal Protection. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Acadiana Tidal Protection	BA-0075-2	HP	N/A	JEFFERSON	N/A	5.1	Pending	\$20,500,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Acadiana Tidal Protection. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	St. Charles West Bank Hurricane Protection Levee	EA-0085	HP	N/A	ST CHARLES	N/A	9	Pending	\$14,500,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the St. Charles West Bank Hurricane Protection Levee. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Bayou Lafourche S&W 2nd Cutoff Structure	BA-0091	OT	N/A	LAFOURCHE	N/A	N/A	Pending	\$4,390,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Bayou Lafourche S&W 2nd Cutoff Structure. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Breakwater Jet Design	BA-0092	SP	N/A	JEFFERSON	N/A	N/A	N/A	\$1,000,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Breakwater Jet Design. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Donorship to the Gulf of Mexico Hurricane Protection	BA-0115	HP	USACE	ASSUMPTION, BERTRAND, LAFOURCHE, ST JOHN, ST BAPTIST, ST CHARLES, ST JAMES	N/A	Not Available	Pending	\$10,269,387	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Donorship to the Gulf of Mexico Hurricane Protection. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Grand Isle-F Island Breakwaters	BA-0168	SP	N/A	JEFFERSON	Not Available	N/A	2015	\$6,000,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Grand Isle-F Island Breakwaters. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Kramer Bayou Break Levee	BA-0169	HP	N/A	LAFOURCHE	N/A	6	Pending	\$1,000,000	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Kramer Bayou Break Levee. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Beach Management Plan	BA-0170	BH	N/A	JEFFERSON, LAFOURCHE, PLAQUEMINES, TERRE BONNE	N/A	N/A	N/A	\$7,106,111	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Beach Management Plan. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2, 3A
STATE	Barataria Large-Scale Component E-Panning	BA-0192	MC	N/A	PLAQUEMINES, JEFFERSON	8070	N/A	N/A	In Development	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Barataria Large-Scale Component E-Panning. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	2
STATE	Bayou Chen	BC	SP	N/A	CALCHACHEU	488	N/A	1991	\$12,440	This section 204 project provides for the beneficial placement of 500,000 cubic yards of material dredged from the Bayou Chen. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway. The dredging is to be used to create a new channel in the bay area between mile 7.5 and 11.5 of the waterway.	4

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefitted	Miles of Levee Protected	Construction Completion	Total Budget	Project Description	Flowing Unit
STATE	Brown Marsh	BRM-01	MC	N/A	LA/ OURLACHE	44	N/A	2002	\$473,365	Project features consisted of a Ben layer marsh creation/retreatment covering 44 acres in Calumet Parish.	3A
STATE	Lake L'Ange Hydrologic Restoration	EP-0006	FD	N/A	ST BERNARD	108	N/A	1987	\$1,400,000	This project involved the construction of a pumping station located along the south-central edge of the St. Bernard Parish Ridge. This project was completed in 1987 and has been in operation since that time. The project was built in 1987.	1
STATE	Chetaniou Au Foye	CAT-01	SP	BOEMRE	VERMILION	40	N/A	2005	\$1,802,271	The project consisted of the construction of a 1.5 mile long, 100-foot wide, 10-foot deep canal. The canal was constructed to provide a waterway for the Chetaniou Au Foye area. The project was completed in 2005.	3B
STATE	Holly Beach	CS-0001	SP	N/A	CAMERON	88	N/A	1991, 1992, 1993, 1994	\$8,437,000	The project consisted of the construction of a 1.5 mile long, 100-foot wide, 10-foot deep canal. The canal was constructed to provide a waterway for the Holly Beach area. The project was completed in 1991, 1992, 1993, and 1994.	4
STATE	Reynolds Canal Marsh Management	CS-0002	MW	N/A	CAMERON	6575	N/A	1994	\$2,805,457	The project was designed to stabilize saltmarsh and water levels by reducing water flows through Reynolds Canal and Black Lake.	4
STATE	Cameron Creole Levee	CS-0004-A	HF	N/A	CAMERON	2602	N/A	2011	\$12,600,000	The intent of this project is to provide for repair and maintenance of critical perimeter control structures adjacent to Cameron Parish. These structures were severely damaged by Hurricane Rita.	4
STATE	Cameron Creole Structure Automation	CS-0004-A-1	HF	N/A	CAMERON	N/A	N/A	1999	\$730,000	This project consists of automating three existing water control structures along the east shore of Lake de la Cade. These structures are currently operated manually and are difficult to maintain. Automation of these structures will improve management capabilities in the Sabine National Wildlife Refuge.	4
STATE	Cameron Parish Shoreline Restoration	CS-0023	OT	N/A	CAMERON	523	N/A	2014	\$45,900,000	The project involved the re-establishment of dunes and beach ridges for 8.7 miles extending from the western Cadeaux River delta to the eastern edge of the Cameron Parish. The project was completed in 2014.	4
STATE	Black Lake Supplemental Beneficial Use Deciduous Area	CS-0034	DM	USACE	CAMERON	448	N/A	2010	\$21,034,379	The project consisted of a 1.5 mile long, 100-foot wide, 10-foot deep canal. The canal was constructed to provide a waterway for the Black Lake area. The project was completed in 2010.	4
STATE	Blind Lake	CS-8L	SP	N/A	CAMERON	488	N/A	1989	\$173,433	The purpose of this project was to protect the Gulf of Mexico from erosion along Blind Lake. The project consisted of placing 2,339 linear feet of limestone breakwater along the south side of the Gulf of Mexico. The project was completed in 1989.	4
STATE	Sabine Terraces	CS-8T	SNT	N/A	CAMERON	118	N/A	1990	\$130,047	A total of 13 sediment terraces were constructed in a checkerboard pattern and planted with smooth cordgrass (Spartina alterniflora) in riparian areas of the Sabine National Wildlife Refuge. The project objective was to increase the length of marsh-water interface, the amount of sediment accretion, and the amount of sediment storage. The project was completed in 1990.	4
STATE	Father's Habitat Restoration on West Grand Terre Island at Fort Levee	FTL-31	SP	N/A	JEFFERSON	Not Available	N/A	2000	\$2,378,116	This project consists of a rock dike built to protect the Gulf shoreline of West Grand Terre Island and Fort Levee. This project was completed in 2000.	2
STATE	Grand de Bay Sea Breakwaters	GBSB	SP	N/A	JEFFERSON	50	N/A	1995	\$530,000	The purpose of this project was to reduce erosion on the bay side of Grand Isle. Fifteen 300-foot breakwaters were constructed on the bay side of Grand Isle.	2
STATE	Dredged Dredging Program - Lake St. Andrew	LA-0001-A	MC, DM	N/A	ST CHARLES	28	N/A	1999	\$342,276	Two dikes were filled utilizing dredged material adjacent to Lake St. Andrew on the Salvador Wildlife Management Area. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Lake St. Andrew to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the lake.	2
STATE	Dredged Dredging Program - Bayou Duport	LA-0001-B	DM, MC	N/A	JEFFERSON	66	N/A	2000	\$1,460,617	Three dikes were filled utilizing dredged material adjacent to Bayou Duport and The Pin. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Bayou Duport to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the bay.	2
STATE	Pais a L'Orde Site - Dredged Dredging Program	LA-0001-C	DM	N/A	PLAQUEMINES	26	N/A	2005	\$450,000	The project created approximately 26 acres of sustainable freshwater marsh in the vicinity of Pais a L'Orde, Louisiana. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Pais a L'Orde to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the lake.	1
STATE	Tennoire School Board Site Dredged Dredging	LA-0001-D	DM	N/A	TERREBOINE	40	N/A	2005	\$2,599,407	This project created approximately 40 acres of marsh just north of Lake Deschamps along the western bank of Miron Canal. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Lake Deschamps to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the lake.	3D
STATE	Grand Bayou Blue Bay - Dredged Dredging	LA-0001-E	DM, MC	N/A	LA/ OURLACHE	38	N/A	2007	\$1,331,434	This project created approximately 38 acres of marsh near Catfish Lake using dredged material from Grand Bayou Blue. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Grand Bayou Blue to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the lake.	3A
STATE	Dredged Dredging - Port au Per	LA-0001-F	DM	N/A	TERREBOINE	67	N/A	2007	\$2,469,760	This project created approximately 67 acres of marsh on Port au Per Island adjacent to the Gulf of Mexico. This project is part of the coastal state Dredging Program. The goal of the program is to use a small, mobile hydraulic dredge along the shoreline of Port au Per to deposit dredged material, and thereby maintain and/or rebuild threatened coastal marshes adjacent to the lake.	3B
STATE	Southwest Coastal Louisiana Feasibility Study	LA-0020	DM, TE, SP, MC	USACE	CALCASIEU, VERMILION, CAMERON	227	N/A	Pending	\$8,000,000	The project involves a comprehensive assessment and hurricane protection alternatives to address the coastal impacts of Southwest Louisiana. It includes a comprehensive assessment, marsh creation, saltwater protection, and shoreline restoration measures. The project was authorized December 1, 2005.	4
STATE	Sabine Cycle 2	LA-0021-1	DM	N/A	CAMERON	227	N/A	2013	\$8,000,000	The purpose of this project is to cover the cost of marsh for the Sabine Refuge Marsh Creation, Cycle 2 Breaux Act project.	4
STATE	MA31 - Management	LA-0211	OT	N/A	COASTWIDE	N/A	N/A	N/A	\$230,000	This project is to recognize a watershed under the State of Louisiana's Coastal Protection and Restoration Authority as part of the active process of managing multiple floodplain mapping projects for the coastal area of Louisiana.	3D
STATE	Sediment Diversion Implementation and Program Management	LA-0216	DI	N/A	JEFFERSON, LAFOURCHE, PLAQUEMINES, ST BERNARD	N/A	N/A	N/A	In Development	This project will include all work involved in the development of the Diversion Management program. This will be performed by CIPRA personnel and CH2M and will result in the development of full E&D scopes for both the Mississippi and Mississippi diversions.	1
STATE	Pecan Island Freshwater Introduction	ME-0001	FD	N/A	VERMILION	3000	N/A	1992	\$487,152	The purpose of this project is to introduce freshwater from the north to counteract the saltwater intrusion from the south. The project consists of two water control structures and approximately 5,730 linear feet of earthen embankment needed to channel water from the north to the south marsh.	4
STATE	Marsh Creation Near Freshwater Diversion	ME-0025-SF	MC	N/A	VERMILION	96	N/A	2015	\$5,100,000	The purpose of this project is to create 96 acres of marsh southeast of intersection of Acadiana Canal and Freshwater Bayou.	4
STATE	Small Sediment Diversions	MR-0001-B	SD	N/A	PLAQUEMINES	8719	N/A	1993	\$1,110,400	This project involved the excavation of 13 canals through the levees of Mississippi River distributary channels within the Bay de l'Est.	1
STATE	North Grand Isle Breakwaters	NGI	SP	N/A	JEFFERSON	50	N/A	1995	\$150,000	This project was authorized to construct impervious rock breakwaters on the bay side of Grand Isle to protect crops located between Grand Isle and the west side of Louisiana Hwy 1. The Louisiana Department of Natural Resources (DNR) contributed no construction funds and was involved in construction inspection only. The local Level District supplied construction funds.	2
STATE	Vegetation Siphon Diversion	PO-0001	FD	N/A	ST BERNARD	84	N/A	1992	\$330,584	The purpose of this project is to return into operation the existing siphon, and to enlarge the size of the diversion so that more sediment and freshwater are available to offset marsh subsidence and saltwater intrusion.	1

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPLR Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acreage Restored	Miles of Beachfront	Construction Completion	Total Budget	Project Description	Planning Unit
ETA TE	Yellow Bayou	TV-0003-B	SP	N/A	ST MARY'	126	N/A	1982	\$134,500	The objectives of the project were to map out the integrity of approximately 2000 acres of river marsh between Jackson Bayou and the Breton-Aveyrie Canal and to stabilize 7,465 feet of the East Cote d'Alcove Bay at low tide. This was achieved by constructing an 875-foot dike berm adjacent to the water's edge to reduce erosion.	3B
ETA TE	Marsh Island Control Structures	TV-0008	M/W	N/A	IBERIA	643	N/A	1983	\$453,500	The objectives of the project were to reduce the rate of land loss, investigate shallow overwater areas, and increase wetland flood within the water management units. A suspended canopy covered and wetland area was installed as a collection of active marsh habitat. The project also included the construction of a dike berm to separate the water management units from the adjacent water bodies. Canal side banks were breached and other works were conducted to facilitate water movement between adjacent marsh parcels.	3B
ETA TE	Freshwater Bayou Bank Protection	TV-0011	OP	N/A	VERMILION	241	N/A	1994	\$2,177,425	This project conserves riparian wetlands by maintaining the physical integrity of marshes that separate freshwater Bayou and adjacent water bodies. The dominant project feature consists of the construction of 34,000 linear feet of rock dike, extending north to the confluence of Lake Bayou and Freshwater Bayou. The original project was constructed in 1994; however, repairs were made to the structure in 1996 and 2001.	3D
ETA TE	Oakleaf Key Structures	TV-0013-B	SP	N/A	VERMILION, IBERIA	168	N/A	2000	\$2,107,726	This project enhanced the adjacent CWP PRR-A funded TV-13a project by installing low-dike structures at the outlet of Oakleaf and Aveyrie Canals to redirect more water flow through the portion of Bayou de l'Ane south of the OWWV.	3B
ETA TE	South Central Coastal Marsh	TV-0054	OT	USACE	ST MARY', IBERIA, ST MARTIN	In Development	In Development	Pending	\$970,000	The South Central Coastal project was authorized \$970,000 in 2009 surplus funds. The project team, which includes the Office of Coastal Protection and Restoration, St Mary Parish, St Martin Parish, and Iberia Parish, have initiated a data gathering effort. We anticipate completing this phase of the project by the end of 2010. The information will be used to develop a partnership with the US Army Corps of Engineers. Once study authorization is obtained from the US Congress the project we propose to the feasibility phase.	3B
ETA TE	Morgan City/St Mary Flood Protection	TV-0055	HP	N/A	ST MARY'	N/A	4.5	Pending	\$3,870,000	This project will provide flood protection improvements by raising or improving over seven miles of the current levee system in the Morgan City area. The project will consist of engineering flood control structures along the Old River and Aveyrie Canal south of the IBERIA-Aveyrie Canal. When completed, this project will provide flood protection improvements by allowing the course of the Old River-Aveyrie Canal to adjust the impact of storm surge from Vermilion Bay.	3B
ETA TE	Bayou Tigre Flood Control	TV-0075	HP	N/A	IBERIA, VERMILION	N/A	N/A	Pending	\$6,200,000	This project will utilize \$6,200,000 of funds we allocated from TV-56 to design and construct a pumping station to augment flood control operations at a closure gate across Bayou Tigre, currently under design in project TV-40. This project will help improve ponding and flooding on the project site caused by flood stage storage during a significant event.	3D
ETA TE	Sulfur Freshwater Bayou Bank Stabilization	TV-0076	SP	N/A	VERMILION	Not Available	N/A	2010	\$1,200,000	This project will utilize \$1,200,000 remaining from ME-0025-SF project to augment the TV-0018-EET shoreline rock dike measure along Freshwater Bayou.	3B
ETA TE	Gulfport Canal/Cypress Point	TV-4558(SP)	SP	N/A	ST MARY'	26	N/A	1999	\$1,316,418	The project features approximately 3,650 linear feet of rock breakwaters along the Vermilion Bay shoreline and approximately 3,375 linear feet of freshwater rock dike along the Vermilion Bay Outlet and Canal inlet and the south bank of the Gumbert Canal.	3B
ETA TE	Grand Isle/Lake de l'Eau	N/A	OT	N/A	GRAND ISLE	N/A	N/A	Deauthorized	\$1,500,000	This project involves the use of Twin Span Dikes as a form of shoaling protection for the Bayou Garonne area.	1
ETA TE	Harris Canal/Harris Marsh	N/A	HP	N/A	JEFFERSON	N/A	N/A	2009	\$4,800,000	This project involved the installation of a combination of sheet pile and section flood protection, ultimately to an elevation of 10.0 feet above the east side of the Harris Canal from the sector gate of La Lasse Boulevard to the existing levee at the west end, to provide intermediate-scale protection against contribution of the HEDSIS system.	2
ETA TE	Raising of LA 1 at Golden Meadow Floodgate and Completion of Golden Meadow Lock Structure	N/A	HP	N/A	LAFOURCHÉ	N/A	N/A	2010	\$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.	2
ETA TE	Raising of LA 23 at Lake de l'Eau	N/A	HP	N/A	PLAQUEMINES	N/A	N/A	2012	\$1,200,000	This project involves raising LA 23 to the elevation of the adjoining La Frusarde Gunter guide areas, where the highway crosses the guide levees. LOU-10 performed the engineering, design, and bid contract to complete the project.	2
ETA TE	Bayou de l'Eau Site Remediation/Channel	N/A	DM	N/A	TERRIBONNE	N/A	N/A	N/A	\$330,000	The purpose of this project is to pre-clear the Bayou de l'Eau disposal site adjacent to and east of the Houma Navigation Canal.	3A
ETA TE	Chabrier Ring Levee	N/A	HP	N/A	TERRIBONNE	N/A	Not Available	2009	\$630,000	The project consists of the design and construction for a segment of levee around the Chabrier Medical Center in Iberville, Louisiana. The proposed ring levee will surround the Chabrier Medical Center and will provide flood protection for the facility allowing operation during possible flood events.	3A
ETA TE	Wine Island	N/A	DM	N/A	TERRIBONNE	N/A	N/A	2007	\$2,800,000	The purpose of this project was to beneficially use material from the dredging of the Houma Navigation Canal Bay Channel in Wine Island.	3A
ETA TE	NRCS Biomass Production Program	N/A	VP	NRCS	COASTWIDE	N/A	N/A	N/A	\$60,000	The NRCS-Louisiana Biomass Program is a multi-year programmatic initiative to accelerate the collection, testing, and release of important coastal wetland restoration plants. The Biomass Program began in 1999 in conjunction with the LOU-ROCK Small Dam Program with emphasis on plant performance and direct seed dredged sediment. This program is an important coastal restoration initiative due to its potential to establish native vegetation and improve soil productivity, with the goal of restoring specific wetland habitats and increasing the resilience of coastal ecosystems.	COASTWIDE
ETA TE	NRCS Biomass Production Program	N/A	VP	NWRC	COASTWIDE	N/A	N/A	N/A	\$1,552,100	The National Wetlands Reserve Program provides funding for the acquisition and management of lands for wildlife and fish habitat. The program is intended to benefit matching private and public lands to improve environmental conditions of wetlands sites, thereby increasing the likelihood of successful restoration efforts.	COASTWIDE
ETA TE	NRCS Vegetative Planting	N/A	VP	NRCS	COASTWIDE	609	N/A	N/A	\$398,869	This is a coastal vegetative planting program that is implemented annually and involves the installation of vegetative plantings in selected areas where vegetation is needed.	COASTWIDE
WRICA	Davis Pond Freshwater Diversion	BA-0001	FD	USACE	ST CHARLES	33000	N/A	2002	\$120,000,000	The purpose of this project is to maintain and enhance the existing ecological framework of the Barataria Basin by providing freshwater, nutrients, and sediment. This wetland restoration project and help offset much assistance. This project is set up to 10,500 acres.	2
WRICA	Cameron Freshwater Diversion	ES-0008	FD	USACE	PLAQUEMINES	16000	N/A	1991	\$24,818,800	This project consists of freshwater and saltwater diversions from the Mississippi River to coastal bays and marshes. It is designed to restore wetlands and protect them from sea level rise. The project is set up to 1,800 acres.	1

Notes

^aPrograms: CNRPFA—Coastal Wetlands Planning, Protection and Restoration Act; State Restoration projects funded primarily by the State of Louisiana; SECTION 204(1)(5)—Water Resources Development Act Sections 204 and 1135 beneficial use of dredged material projects; WRDA—Water Resources Development Act; LCA—Louisiana Coastal Area; FEMA—Federal Emergency Management Agency; CLEP—Coastal Land Easement Program; Supplemental—Supplemental funding from other sources; Other—Non-Federal assistance programs; CLEP 2007—Coastal land Easement Assistance Program; Supplement 07, Supplement 08, Supplement De-Stale—Other Federal assistance programs; Other funded—Other federal assistance programs not otherwise listed.

Project Sponsor: BOEMRE—Bureau of Ocean Energy Management, Regulation, and Enforcement, EPA—Environmental Protection Agency, FEMA—Federal Emergency Management Agency, HUD—Housing and Urban Development, NMFS—National Marine Fisheries Service, NRC—National Nuclear Security Administration, NRE—National Renewable Energy Research Center, USFWS—U.S. Fish and Wildlife Service, USACE—U.S. Army Corps of Engineers, USDOI—U.S. Geological Survey

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CEP L: Priority Printed List (as authorized each year by the CWIPRA Task Force).

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Appendix B
Three-Year Expenditure
Projections

Table B-1. Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Projected Expenditures

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
Engineering and Design (P1)					
BA-0171	Caminada Headlands Back Barrier Marsh Creation ¹	\$0	\$0	\$0	\$0
BA-0193	Caminada Headlands Back Barrier Marsh Creation Increment 2 ¹	\$852,977	\$0	\$0	\$852,977
BA-0194	East Leeville Marsh Creation and Nourishment ¹	\$1,092,071	\$472,732	\$0	\$1,564,803
BA-0195	Barataria Bay Rim Marsh Creation and Nourishment	\$43,982	\$28,317	\$0	\$72,300
CS-0078	No Name Bayou Marsh Creation and Nourishment ¹	\$505,837	\$141,357	\$0	\$647,194
CS-0079	Oyster Lake Marsh Creation and Nourishment ¹	\$571,037	\$244,730	\$0	\$815,766
ME-0031	Freshwater Bayou Marsh Creation	\$10,258	\$4,637	\$0	\$14,896
ME-0032	South Grand Chenier Marsh Creation- Baker Tract	\$91,161	\$39,069	\$0	\$130,230
PO-0075	LaBranche East Marsh Creation	\$40,350	\$0	\$0	\$40,350
PO-0133	LaBranche Central Marsh Creation	\$45,947	\$0	\$0	\$45,947
PO-0169	New Orleans Landbridge Shoreline Stabilization and Marsh Creation ¹	\$426,372	\$0	\$0	\$426,372
PO-0173	Fritchie Marsh Creation and Terracing	\$67,615	\$67,615	\$0	\$135,230
PO-0178	Bayou LaLoutre Ridge Restoration and Marsh Creation ¹	\$1,800,000	\$800,000	\$0	\$2,600,000
PO-0179	St. Catherine Island Marsh Creation and Shoreline Protection ¹	\$1,150,940	\$542,361	\$0	\$1,693,301
TE-0112	North Catfish Lake Marsh Creation	\$17,780	\$17,780	\$8,038	\$43,598
TE-0117	Island Road Marsh Creation and Nourishment ¹	\$718,748	\$181,164	\$0	\$899,912
TE-0134	West Fourchon Marsh Creation ¹	\$330,000	\$0	\$0	\$330,000
TE-0138	Bayou DeCade Ridge and Marsh Creation ¹	\$596,296	\$393,719	\$0	\$990,014
N/A	New PPL Approval Estimate ²	\$3,500,000	\$3,500,000	\$2,100,000	\$9,100,000
Construction (P2)					
BA-0125	Northwest Turtle Bay Marsh Creation ¹	\$20,646,943	\$8,073,472	\$0	\$28,720,415
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation ¹	\$9,174,182	\$0	\$0	\$9,174,182
CS-0066	Cameron Meadows Marsh Creation and Terracing ¹	\$550,000	\$7,990,000	\$18,310,000	\$26,850,000
LA-0284	Salvinia Weevil Propagation Facility ¹	\$280,967	\$0	\$0	\$280,967
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization ¹	\$18,632,284	\$0	\$0	\$18,632,284
ME-0020	South Grand Chenier Marsh Creation Project	\$1,922,200	\$189,587	\$0	\$2,111,787
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration ¹	\$11,930,768	\$0	\$0	\$11,930,768
TV-0063	Cole's Bayou Marsh Restoration ¹	\$12,068,795	\$0	\$0	\$12,068,795
N/A	New PPL Phase II Approvals ²	\$1,500,000	\$36,000,000	\$19,500,000	\$57,000,000
Demonstration Projects (P1 & P2)					
LA-0280	Shoreline Protection, Preservation, and Restoration (SPPR) Panel ¹	\$318,565	\$27,056	\$0	\$345,621
Subtotal		\$88,886,075	\$58,713,597	\$39,918,038	\$187,517,709
Adjustment for Outlying Years³		N/A	\$31,286,403	\$50,081,962	\$81,368,366
Total Expenditures		\$88,886,075	\$90,000,000	\$90,000,000	\$268,886,075
Surplus Expenditures (See Table B-5)		(\$624,870)	\$0	\$0	(\$624,870)
Federal Expenditures (see Note 1)		\$74,630,825	\$76,289,212	\$76,493,168	\$227,413,206
Trust Fund Expenditures		\$13,630,380	\$13,710,788	\$13,506,832	\$40,847,999

Notes:

1- Project is being led by CPRA; projected expenditures include Federal funds; any State expenditures beyond its 15% cost share will be reimbursed by the Federal partner.

2- Estimate based on prior-year PPL approvals; to be replaced with project-specific expenditure forecasts following approval at the January 2018 CWPPRA Task Force Meeting.

3- Because CWPPRA projects compete for funding annually, CWPPRA expenditures as presented in Table B-1 (which include projected expenditures for approved projects only) do not adequately capture likely CWPPRA expenditures in outlying years. The State's estimated CWPPRA expenditures for FY 2020 - FY 2021 are therefore based on prior years' expenditures.

Table B-2. Louisiana WRDA Projected Expenditures

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
LA-0020	Southwest Coastal Louisiana ¹	\$100,000	TBD	TBD	\$100,000
Total Expenditures		\$100,000	\$0	\$0	\$100,000
Surplus Expenditures for WRDA (see Table B-6)		(\$100,000)	\$0	\$0	(\$100,000)
Trust Fund Expenditures for WRDA		\$0	\$0	\$0	\$0

Notes:

1- Project expenditures are funded through Surplus revenues (see Table B-5); expenditures in future fiscal years will be covered with accrued credit or Trust Fund dollars.

Table B-3. Community Development Block Grant (CDBG) Projected Expenditures

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
BA-0082	Lafitte Area Levee Repair	\$50,000	\$0	\$0	\$50,000
TE-0078	Cut-Off/Pointe Aux Chene Levee	\$4,484,248	\$680,708	\$0	\$5,164,956
N/A	CDBG Program Administration	\$11,680	\$11,680	\$0	\$23,360
Total Expenditures		\$4,545,928	\$692,388	\$0	\$5,238,316

Table B-4. State-Only Project Expenditures (Non-Surplus)

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
MOEX Projects					
PO-0142	Hydrologic Restoration of the Amite River Diversion Canal ¹	\$352,343	\$131,250	\$1,057,030	\$1,540,623
Capital Outlay Projects					
BA-0066	West Bank and Vicinity ²	\$405,000	\$0	\$0	\$405,000
TE-0064	Morganza to the Gulf ²	\$8,300,000	\$0	\$0	\$8,300,000
Projects with Trust Fund Expenditures					
BA-0109	HSDRRS Mitigation- WBV ³	\$75,000	\$50,000	\$10,000	\$135,000
BA-0154	Previously Authorized Mitigation WBV ³	\$30,000	\$7,500	\$0	\$37,500
BA-0158	New Orleans to Venice Mitigation- Plaquemines Non-Fed ³	\$11,680	\$11,680	\$11,680	\$35,040
BA-0159	New Orleans to Venice Mitigation- Fed ³	\$11,680	\$11,680	\$11,680	\$35,040
PO-0057	SELA- Overall ³	\$13,286	\$13,286	\$6,643	\$33,215
PO-0121	HSDRRS Mitigation- LPV ³	\$71,307	\$0	\$0	\$71,307
Total State Expenditures		\$9,270,296	\$225,396	\$1,097,033	\$10,592,725

Notes:

1- Projected expenditures are for post-construction activities including site assessment, nutria control, and vegetative plantings.

2- Project receiving supplemental funding from Surplus funds (see Table B-5).

3- Project is currently 100% Federal. Projected expenditures are for staff coordination with Federal project team members.

Table B-5. Surplus Projected Expenditures (2007, 2008, 2009)

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
BA-0043 (EB)	Mississippi River Long Distance Sediment Pipeline ¹	\$9,527,152	\$0	\$0	\$9,527,152
BA-0045	Caminada Headland Beach and Dune Restoration ²	\$96,024	\$80,840	\$0	\$176,864
BA-0071	Medium Diversion with Dedicated Dredging at Myrtle Grove ³	\$1,214,260	\$0	\$0	\$1,214,260
BA-0075-1	Jean Lafitte Tidal Protection	\$7,500,000	\$3,500,000	\$0	\$11,000,000
BA-0075-2	Rosethorne Tidal Protection	\$4,500,000	\$4,500,000	\$0	\$9,000,000
BA-0085	St. Charles West Bank Hurricane Levee Protection	\$3,575,073	\$0	\$0	\$3,575,073
BA-0169	Kraemer/Bayou Boeuf Levee Lift	\$250,000	\$0	\$0	\$250,000
LA-0020	Southwest Coastal Louisiana	\$100,000	\$974,459	\$0	\$1,074,459
PO-0062	West Shore Lake Pontchartrain	\$3,500,000	\$0	\$0	\$3,500,000
PO-0063	Lake Pontchartrain and Vicinity	\$12,253,238	\$1,566,720	\$340,048	\$14,160,006
PO-0167	St. Tammany Parish Coastal Protection Study	\$1,200,000	\$500,000	\$0	\$1,700,000
PO-0170	Violet Canal North Levee Alignment ⁴	\$218,874	\$0	\$0	\$218,874
TE-0064	Morganza to the Gulf	\$6,700,000	\$0	\$0	\$6,700,000
TE-0065-SP	Larose to Golden Meadow- Larose Sheetpile ⁵	\$2,000,000	\$1,741,940	\$1,741,940	\$5,483,880
TE-0113	Houma Navigation Canal Lock Complex	\$0	\$0	\$0	\$0
TE-0116	St. Mary Backwater Flooding	\$500,000	\$0	\$0	\$500,000
TV-0055	Morgan City/ St Mary Flood Protection	\$0	\$0	\$0	\$0
TV-0057	Delcambre-Avery Canal (E&D)	\$100,000	\$573,268	\$0	\$673,268
TV-0067	Bayou Tigre Flood Control Project	\$1,000,000	\$1,000,000	\$3,476,750	\$5,476,750
TV-0075	Bayou Tigre Flood Control Complex	\$0	\$1,000,000	\$5,171,222	\$6,171,222
N/A	Southeast Louisiana Flood Protection/ LERRDS ⁶	\$50,599,000	\$2,259,200	\$3,460,000	\$56,318,200
N/A	Reprogrammed Surplus ⁷	\$ 5,806,173	\$0	\$0	\$5,806,173
Programmatic and Non-Project Surplus Expenditures					
LA-0026	Rehabilitation and Repair of State Restoration Projects	\$1,098,239	\$0	\$0	\$1,098,239
LA-0027	Barrier Island Maintenance Program	\$2,904,804	\$0	\$0	\$2,904,804
N/A	Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) ⁸	\$624,870	\$0	\$0	\$624,870
LA-0025	Innovative Coast-Wide Initiatives	\$106,394	\$0	\$0	\$106,394
N/A	Beneficial Use	\$1,289,186	\$0	\$0	\$1,289,186
N/A	Emergency Reserve	\$5,993,775	\$0	\$0	\$5,993,775
N/A	Innovative Programs	\$876,143	\$0	\$0	\$876,143
N/A	Non-Structural Program Development ⁹	\$1,000,000	\$151,047	\$0	\$1,151,047
LA-0265	Levee Engineering and Design Standards Development and Analysis	\$0	\$0	\$0	\$0
Total Expenditures		\$124,533,205	\$17,847,474	\$14,189,960	\$156,570,639

Notes:

1- Expenditures may be used to supplement funding for Large-Scale Barataria Marsh Creation (BA-0192) and other coastal projects.

2- Surplus funds include post-construction monitoring expenditures (see Table B-8).

3- Includes funding for Diversion Modeling and Model Improvement (LA-0282).

4- Project constructed with leftover funds from project PO-0061 (completed in FY 2011).

5- Expenditures will be used to fund additional improvements within the Larose to Golden Meadow alignment.

6- Includes funds that may be used for West Bank and Vicinity (BA-0066), HSDRRS Mitigation- West Bank and Vicinity (BA-0109), HSDRRS Mitigation- Lake Pontchartrain and Vicinity (PO-0121), SELA (PO-0057), Permanent Closure of Canals and Pump Stations (PO-0060), LPV Task Force Guardian Mitigation- Bayou Sauvage (PO-0145), Previously Authorized Mitigation LPV- Manchac (PO-0146), Previously Authorized Mitigation- WBV (BA-0154), New Orleans to Venice (BA-0067), New Orleans to Venice Mitigation- Plaquemines Non-Fed (BA-0158), New Orleans to Venice Mitigation- Fed (BA-0159), and/or Plaquemines TFU Mitigation- Braithwaite to Scarsdale (BA-0156).

7- Represents unexpended funds from previously completed Surplus projects. Funds will be used for implementation of additional projects subject to approval by the Joint Legislative Committee on the Budget.

8- Expenditures will be used to supplement funding for CWPPRA projects (see Table B-1).

9- Funds will be used to develop a coordinated strategy for implementing nonstructural projects identified in the Master Plan coastal communities. This may also include development of pilot projects in coastal parishes with high levels of risk and vulnerability.

Table B-6. CWPBRA Monitoring Projected Expenditures

Project No.	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
AT-0002	Atchafalaya Sediment Delivery	\$2,920	\$0	\$0	\$2,920
AT-0003	Big Island Mining	\$2,920	\$0	\$0	\$2,920
BA-0002	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	\$41,024	\$46,024	\$2,336	\$89,384
BA-0003-C	Naomi Outfall Management	\$30,340	\$22,014	\$16,424	\$68,778
BA-0020	Jonathan Davis Wetland Protection	\$16,936	\$11,680	\$4,380	\$32,996
BA-0027-C	Barataria Landbridge Shoreline Protection (Phase 3)	\$4,380	\$19,272	\$11,680	\$35,332
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp	\$61,680	\$47,300	\$57,300	\$166,280
BA-0035	Chaland Pass to Grand Bayou	\$4,380	\$90,440	\$11,680	\$106,500
BA-0036	Dedicated Dredging on the Barataria Basin Landbridge	\$4,380	\$4,380	\$4,380	\$13,140
BA-0037	Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake	\$5,840	\$2,920	\$2,920	\$11,680
BA-0038	Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration	\$4,380	\$17,300	\$11,680	\$33,360
BA-0039	Mississippi River Sediment Delivery (Bayou Dupont)	\$11,422	\$12,840	\$83,930	\$108,192
BA-0042	Lake Hermitage Marsh Creation	\$18,713	\$76,625	\$12,848	\$108,186
BA-0048	Bayou Dupont Marsh and Ridge Creation	\$14,464	\$29,228	\$21,152	\$64,844
BA-0068	Grand Liard Marsh and Ridge Restoration	\$106,264	\$30,520	\$11,680	\$148,464
BA-0164	Bayou Dupont Sediment Delivery Marsh Creation #3	\$24,759	\$3,504	\$10,512	\$38,775
BA-0173	Bayou Grande Chenier Marsh and Ridge Restoration	\$2,920	\$107,846	\$9,528	\$120,294
BS-0003-A	Caernarvon Diversion Outfall Management	\$2,920	\$2,920	\$14,016	\$19,856
BS-0011	Delta Management at Fort St. Philip	\$14,600	\$4,380	\$4,380	\$23,360
BS-0016	South Lake Lery Shoreline and Marsh Restoration	\$16,224	\$4,672	\$22,473	\$43,369
CS-0004-A	Cameron-Creole Maintenance	\$44,384	\$44,384	\$30,368	\$119,136
CS-0011-B	Sweet Lake/Willow Lake Hydrologic Restoration	\$2,920	\$2,920	\$2,920	\$8,760
CS-0021	Highway 384 Hydrologic Restoration	\$8,760	\$10,804	\$2,920	\$22,484
CS-0023	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	\$10,804	\$5,840	\$2,920	\$19,564
CS-0024	Perry Ridge Shore Protection	\$2,920	\$2,920	\$0	\$5,840
CS-0027	Black Bayou Hydrologic Restoration	\$31,038	\$18,190	\$18,190	\$67,419
CS-0028-3	Sabine Refuge Marsh Creation, Increment 3	\$12,264	\$8,760	\$16,936	\$37,960
CS-0028-4	Sabine Refuge Marsh Creation, Increment 4	\$12,264	\$4,380	\$16,936	\$33,580
CS-0029	Black Bayou Culverts Hydrologic Restoration	\$2,920	\$16,936	\$16,936	\$36,792
CS-0030	GIWW - Perry Ridge West Bank Stabilization	\$2,920	\$2,920	\$20,148	\$25,988
CS-0031	Holly Beach Sand Management	\$16,936	\$2,920	\$16,936	\$36,792
CS-0032	East Sabine Lake Hydrologic Restoration	\$12,264	\$2,920	\$12,264	\$27,448
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	\$2,920	\$2,920	\$2,920	\$8,760
CS-0059	Oyster Bayou Marsh Creation & Terracing	\$29,950	\$43,966	\$43,966	\$117,883
LA-0003-B	Coastwide Nutria Control Plan	\$152,920	\$152,920	\$152,920	\$458,760
LA-0008	Bioengineered Oyster Reef Demonstration	\$2,920	\$0	\$0	\$2,920
LA-0016	Non-Rock Alternatives for Shoreline Protection Demonstration Project	\$5,840	\$0	\$0	\$5,840
LA-0039	Coastwide Plantings Program	\$138,324	\$158,180	\$162,852	\$459,356
ME-0004	Freshwater Bayou Wetland (Phases 1 & 2)	\$6,140	\$16,936	\$16,936	\$40,012
ME-0011	Humble Canal Hydrologic Restoration	\$31,038	\$31,038	\$17,022	\$79,099
ME-0013	Freshwater Bayou Bank Stabilization	\$2,920	\$7,016	\$2,920	\$12,856
ME-0014	Pecan Island Terracing	\$2,920	\$2,920	\$22,776	\$28,616
ME-0016	Freshwater Introduction South of Highway 82	\$30,206	\$29,038	\$15,022	\$74,267
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	\$11,680	\$76,680	\$76,680	\$165,040
ME-0019	Grand-White Lakes Landbridge Protection	\$2,920	\$2,920	\$2,920	\$8,760
ME-0020	South Grand Chenier Hydrologic Restoration Project	\$2,920	\$2,920	\$2,920	\$8,760
ME-0022	South White Lake Shoreline Protection	\$2,920	\$2,920	\$2,920	\$8,760
MR-0003	West Bay Sediment Diversion	\$176,440	\$14,600	\$5,840	\$196,880
MR-0006	Channel Armor Gap Crevasse	\$4,672	\$0	\$0	\$4,672
MR-0009	Delta-Wide Crevasse	\$8,760	\$4,672	\$4,672	\$18,104
PO-0006	Fritchie Marsh Restoration	\$14,600	\$11,680	\$4,380	\$30,660
PO-0016	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	\$2,920	\$2,920	\$2,920	\$8,760
PO-0018	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	\$2,920	\$2,920	\$2,920	\$8,760
PO-0022	Bayou Chevee Shoreline Protection	\$8,760	\$7,592	\$8,760	\$25,112
PO-0024	Hopedale Hydrologic Restoration	\$2,920	\$2,920	\$2,920	\$8,760
PO-0033	Goose Point/Point Platte Marsh Creation	\$8,760	\$2,336	\$2,336	\$13,432
PO-0104	Bayou Bonfouca Marsh Creation	\$44,675	\$43,784	\$2,336	\$90,795
TE-0020	Isle Dernieres Restoration East Island	\$21,024	\$2,920	\$0	\$23,944
TE-0026	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	\$21,024	\$2,336	\$2,336	\$25,696
TE-0028	Brady Canaly Hydrologic Restoration	\$46,024	\$30,840	\$36,680	\$113,544
TE-0034	Penchant Basin Natural Resources Plan, Increment 1	\$92,520	\$55,840	\$5,840	\$154,200
TE-0037	New Cut Dune/Marsh Restoration	\$21,024	\$5,840	\$3,504	\$30,368
TE-0040	Timbalier Island Dune/Marsh Restoration	\$3,504	\$20,440	\$2,336	\$26,280
TE-0044	North Lake Mechant Landbridge Restoration	\$28,032	\$28,032	\$3,504	\$59,568
TE-0046	West Lake Boudreaux Shoreline Protection and Marsh Creation	\$2,628	\$20,615	\$18,104	\$41,347
TE-0048	Raccoon Island Shoreline Protection/Marsh Creation	\$68,760	\$48,760	\$5,840	\$123,360
TE-0050	Whiskey Island Back Barrier Marsh Creation	\$21,024	\$5,840	\$3,504	\$30,368
TE-0052	West Belle Pass Barrier Headland Restoration	\$5,840	\$2,920	\$2,920	\$11,680
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	\$2,920	\$5,840	\$5,840	\$14,600
TV-0004	Cote Blanche Hydrologic Restoration	\$2,920	\$2,920	\$2,920	\$8,760
TV-0012	Little Vermilion Bay Sediment Trapping	\$2,920	\$2,920	\$0	\$5,840
TV-0013-A	Oaks/Avery Canal Hydrologic Restoration, Increment 1	\$8,968	\$16,936	\$16,936	\$42,840
TV-0014	Marsh Island Hydrologic Restoration	\$6,966	\$20,982	\$16,936	\$44,884
TV-0015	Sediment Trapping at "The Jaws"	\$16,936	\$2,920	\$2,920	\$22,776
TV-0017	Lake Portage Land Bridge	\$16,936	\$16,936	\$2,920	\$36,792

Table B-6. CWPRA Monitoring Projected Expenditures

Project No.	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
TV-0018	Four Mile Canal Terracing and Sediment Trapping	\$2,920	\$2,920	\$8,760	\$14,600
TV-0021	East Marsh Island Marsh Creation	\$11,362	\$12,264	\$20,706	\$44,333
TV-0063	Coles Bayou Marsh Restoration	\$8,760	\$28,864	\$16,936	\$54,560
CRMS	Coastwide Reference Monitoring System	\$8,667,740	\$8,995,740	\$9,192,820	\$26,856,300
Total Expenditures		\$10,334,579	\$10,615,184	\$10,402,895	\$31,352,658
Federal CWPRA Monitoring Expenditures		\$8,784,392	\$9,022,906	\$8,842,461	\$26,649,759
Trust Fund CWPRA Monitoring Expenditures		\$1,550,187	\$1,592,278	\$1,560,434	\$4,702,899

Table B-7. Projected Expenditures for Monitoring of WRDA Projects

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
BA-0001	Davis Pond Freshwater Diversion	\$653,999	\$693,455	\$700,557	\$2,048,011
BS-0008	Caernarvon Freshwater Diversion	\$536,352	\$567,572	\$587,990	\$1,691,914
Total Expenditures (GOMESA)¹		\$1,190,351	\$1,261,027	\$1,288,547	\$3,739,924

Notes:

1- Monitoring expenditures of WRDA projects are subject to a 75% federal/25% state cost share. For FY 2019-2021, CPRA is funding its 25% cost share of monitoring costs with GOMESA funds, and will seek reimbursement from the USACE for the 75% federal match.

Table B-8. Projected Expenditures for Monitoring of Other Projects

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
Berm to Barrier Projects¹					
BA-0040	Riverine Sand Mining/Scofield Island Restoration	\$84,372	\$5,840	\$5,840	\$96,052
BA-0110	Shell Island East	\$14,600	\$17,300	\$4,380	\$36,280
NFWF Projects					
BA-0143	Caminada Headland Beach and Dune Restoration Increment 2	\$353,360	\$351,024	\$291,024	\$995,408
NRDA Projects					
BA-0111	Shell Island West	\$134,678	\$26,424	\$91,024	\$252,126
BA-0141	NRDA Lake Hermitage Marsh Creation Increment 2	\$58,360	\$81,024	\$31,680	\$171,064
BA-0142	NRDA Cheniere Ronquille	\$114,040	\$26,424	\$91,024	\$231,488
TE-0100	NRDA Caillou Lake Headlands	\$164,300	\$131,024	\$141,024	\$436,348
Surplus Projects²					
BA-0045	Caminada Headland Restoration	\$96,024	\$80,840	\$0	\$176,864
USACE Mitigation Projects					
BA-0109	HSDRRS Mitigation - WBV	\$11,680	\$11,680	\$11,680	\$35,040
BA-0154	Previously Authorized Mitigation - WBV	\$11,680	\$11,680	\$11,680	\$35,040
BA-0158	New Orleans to Venice Mitigation - Plaquemines Non-Federal	\$7,300	\$7,300	\$0	\$14,600
BA-0159	New Orleans to Venice Mitigation - Federal	\$7,300	\$7,300	\$0	\$14,600
PO-0038-SF	MRGO Closure Structure	\$7,300	\$7,300	\$0	\$14,600
PO-0093	MRGO - Lake Borgne - Bayou Dupre Segment	\$7,300	\$7,300	\$0	\$14,600
PO-0094	MRGO - Lake Borgne - Bayou Bienvenue Segment	\$7,300	\$7,300	\$0	\$14,600
PO-0095	MRGO - Lake Borgne - Shell Beach Segment	\$7,300	\$7,300	\$0	\$14,600
PO-0121	HSDRRS Mitigation - LPV	\$7,300	\$7,300	\$7,300	\$21,900
PO-0145	LPV Task Force Guardian Mitigation - Bayou Sauvage	\$7,300	\$7,300	\$7,300	\$21,900
PO-0146	LPV Mitigation Project, Manchac WMA Marsh Creation	\$7,300	\$7,300	\$7,300	\$21,900
LOSCO Projects					
BA-0196	LOSCO- EML	\$36,680	\$36,680	\$31,680	\$105,040
LA-0278	General Oil Spill- LOSCO	\$11,680	\$11,680	\$11,680	\$35,040
LA-0283	Multiple Oil Spill- LOSCO	\$41,024	\$41,024	\$41,024	\$123,072
State-Only Projects					
PO-0142	Hydrologic Restoration of the Amite River Diversion Canal	\$76,796	\$43,447	\$33,014	\$153,257
PO-0148	Living Shoreline	\$37,916	\$67,131	\$43,755	\$148,802
PO-0152	Lake Borgne and MRGO Shoreline Protection	\$7,300	\$7,300	\$0	\$14,600
Total Expenditures		\$1,320,190	\$1,016,222	\$862,409	\$3,035,419
NFWF Expenditures		\$353,360	\$351,024	\$291,024	\$995,408
NRDA Expenditures		\$471,378	\$264,896	\$354,752	\$1,091,026
Surplus Expenditures		\$96,024	\$80,840	\$0	\$176,864
LOSCO Expenditures		\$89,384	\$89,384	\$84,384	\$263,152
Trust Fund Expenditures		\$310,044	\$230,078	\$132,249	\$672,371

Notes:

1- Monitoring expenditures funded with remaining Berm to Barrier funds (included in Trust Fund Carry Forward in Table 4-1).

2- Monitoring expenditures funded with Surplus funds (see Table B-5).

Table B-9. CWPRA Projects with O&M Budget Project Expenditures^{1,2,3}

Project No.	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
AT-0002	Atchafalaya Sediment Delivery	\$2,920	\$2,920	\$2,920	\$8,760
AT-0003	Big Island Mining	\$2,920	\$2,920	\$2,920	\$8,760
BA-0002	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	\$28,760	\$24,694	\$22,300	\$75,754
BA-0003-C	Naomi Outfall Management	\$21,740	\$21,740	\$22,616	\$66,096
BA-0020	Jonathan Davis Wetland Protection	\$5,840	\$5,840	\$6,716	\$18,396
BA-0023	Barataria Bay Waterway West Side Shoreline Protection	\$5,840	\$5,840	\$0	\$11,680
BA-0026	Barataria Bay Waterway East Side Shoreline Protection	\$2,770,440	\$5,840	\$5,840	\$2,782,120
BA-0027	Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2	\$4,672	\$3,679	\$3,679	\$12,030
BA-0027-C	Barataria Basin Landbridge Shoreline Protection, Phase 3	\$68,176	\$3,679	\$3,679	\$75,534
BA-0027-D	Barataria Basin Landbridge Shoreline Protection Phase 4	\$4,672	\$3,679	\$3,679	\$12,030
BA-0034-2	Hydrologic Restoration and Vegetative Plantings in the des Allemands Swamp	\$4,672	\$4,672	\$4,672	\$14,016
BA-0035	Pass Chalard to Grand Bayou Pass Barrier Shoreline Restoration	\$9,461	\$9,578	\$10,220	\$29,258
BA-0037	Little Lake Shoreline Protection/ Dedicated Dredging Near Round Lake	\$646,680	\$10,337	\$5,490	\$662,506
BA-0038	Pelican Island and Pass La Mer to Chalard Pass Restoration	\$9,928	\$110,045	\$10,045	\$130,018
BA-0039	Bayou Dupont Sediment Delivery System	\$6,140	\$6,140	\$6,140	\$18,420
BA-0041	South Shore of the Pen Shoreline Protection and Marsh Creation	\$133,176	\$252,629	\$5,840	\$391,645
BA-0042	Lake Hermitage Marsh Creation	\$11,797	\$11,972	\$12,147	\$35,916
BA-0048	Bayou Dupont Marsh and Ridge Creation	\$136,473	\$9,928	\$123,723	\$270,124
BA-0068	Grand Liard Marsh and Ridge Restoration	\$136,473	\$9,928	\$27,923	\$174,324
BA-0164	Bayou Dupont Sediment Delivery- Marsh Creation 3	\$9,928	\$99,856	\$9,928	\$119,712
BA-0173	Bayou Grande Chenier Marsh and Ridge Restoration	\$50,000	\$70,440	\$284,046	\$404,486
BS-0003-A	Caernarvon Diversion Outfall Management	\$47,336	\$47,336	\$47,336	\$142,008
BS-0011	Delta Management at Fort St. Philip	\$5,840	\$5,840	\$5,840	\$17,520
BS-0016	South Lake Lery Shoreline and Marsh Restoration	\$5,840	\$5,840	\$5,840	\$17,520
CS-0004-A	Cameron-Creole Maintenance	\$204,200	\$204,200	\$129,200	\$537,600
CS-0011-B	Sweet Lake/Willow Lake Hydrologic Restoration	\$417,848	\$4,088	\$4,380	\$426,316
CS-0020	East Mud Lake Marsh Management	\$576,800	\$5,840	\$5,840	\$588,480
CS-0021	Highway 384 Hydrologic Restoration	\$40,840	\$39,088	\$19,380	\$99,308
CS-0023	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	\$53,796	\$39,088	\$59,380	\$152,264
CS-0024	Perry Ridge Shore Protection	\$3,796	\$4,088	\$4,380	\$12,264
CS-0027	Black Bayou Hydrologic Restoration	\$5,789,200	\$14,088	\$14,380	\$5,817,668
CS-0028-2	Sabine Refuge Marsh Creation, Increment 2	\$388,760	\$388,760	\$88,760	\$866,280
CS-0028-4	Sabine Refuge Marsh Creation, Increment 4	\$70,625	\$4,088	\$4,380	\$79,093
CS-0028-5	Sabine Refuge Marsh Creation, Increment 5	\$70,625	\$4,088	\$4,380	\$79,093
CS-0029	Black Bayou Culverts Hydrologic Restoration	\$141,680	\$31,680	\$31,680	\$205,040
CS-0030	GIWW - Perry Ridge West Bank Stabilization	\$358,680	\$4,088	\$4,380	\$367,148
CS-0031	Holly Beach Sand Management	\$48,760	\$4,088	\$4,380	\$57,228
CS-0032	East Sabine Lake Hydrologic Restoration	\$4,672	\$4,672	\$4,672	\$14,016
CS-0049	Cameron-Creole Freshwater Introduction - Vegetative Plantings	\$474,600	\$54,088	\$54,380	\$583,068
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	\$3,796	\$4,088	\$195,507	\$203,391
CS-0059	Oyster Bayou Marsh Creation & Terracing	\$3,796	\$202,215	\$4,380	\$210,391
LA-0003-B	Coastwide Nutria Control Program	\$3,316,907	\$3,316,907	\$3,316,907	\$9,950,721
LA-0016	Non-Rock Alternatives for Shoreline Protection Demonstration Project	\$3,796	\$4,088	\$4,380	\$12,264
ME-0004	Freshwater Bayou Wetland (Phases 1 & 2)	\$3,796	\$4,088	\$4,380	\$12,264
ME-0011	Humble Canal Hydrologic Restoration	\$28,796	\$19,088	\$19,380	\$67,264
ME-0013	Freshwater Bayou Bank Stabilization	\$3,796	\$4,088	\$4,380	\$12,264
ME-0014	Pecan Island Terracing	\$3,796	\$4,088	\$4,380	\$12,264
ME-0016	Freshwater Introduction South of Highway 82	\$13,796	\$14,088	\$14,380	\$42,264
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	\$3,796	\$4,088	\$4,380	\$12,264
ME-0019	Grand-White Lakes Landbridge Protection	\$3,796	\$4,088	\$4,380	\$12,264
ME-0020	South Grand Chenier Hydrologic Restoration Project	\$3,796	\$4,088	\$4,380	\$12,264
ME-0021	Grand Lake Shoreline Protection (CIAP + Tebo Point)	\$13,796	\$14,088	\$14,380	\$42,264
ME-0022	South White Lake Shoreline Protection	\$3,796	\$4,088	\$4,380	\$12,264
MR-0009	Delta Wide Crevasses	\$20,740	\$300	\$300	\$21,340
PO-0006	Fritch Marsh Restoration	\$11,680	\$5,840	\$5,840	\$23,360
PO-0016	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	\$27,596	\$27,596	\$27,596	\$82,788
PO-0018	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	\$25,141	\$25,141	\$25,141	\$75,422
PO-0022	Bayou Chevee Shoreline Protection	\$94,016	\$14,016	\$14,016	\$122,048
PO-0024	Hopedale Hydrologic Restoration	\$28,976	\$28,976	\$28,976	\$86,928
PO-0030	Lake Borgne Shoreline Protection	\$826,580	\$6,140	\$6,140	\$838,860
PO-0033	Goose Point/Point Platte Marsh Creation	\$5,840	\$5,840	\$5,840	\$17,520
PO-0075	Labranche East Marsh Creation	\$0	\$4,088	\$4,088	\$8,176
PO-0104	Bayou Bonfouca Marsh Creation Project	\$40,596	\$27,848	\$44,200	\$112,644
PO-0133	Labranche Central Marsh Creation	\$0	\$4,088	\$4,088	\$8,176
TE-0022	Point au Fer Canal Plugs	\$5,840	\$5,840	\$5,840	\$17,520
TE-0023 (USACE)	West Belle Pass Headland Restoration	\$5,840	\$5,840	\$4,672	\$16,352
TE-0026	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	\$491,760	\$250,260	\$5,840	\$747,860
TE-0028	Brady Canal Hydrologic Rest.	\$33,680	\$33,680	\$33,680	\$101,040
TE-0034	Penchant Basin Natural Resources Plan Increment 1	\$118,840	\$118,840	\$5,840	\$243,520
TE-0037	New Cut Dune and Marsh Restoration	\$19,728	\$19,728	\$7,990	\$47,446
TE-0039	South Lake Decade Freshwater Introduction	\$3,504	\$4,672	\$4,672	\$12,848
TE-0043	GIWW Bank Restoration of Critical Areas in Terrebonne	\$4,672	\$4,672	\$4,672	\$14,016
TE-0044	North Lake Mechant Landbridge Restoration	\$88,210	\$88,210	\$5,490	\$181,910
TE-0045	Terrebonne Bay Shore Protection Demonstration	\$475,168	\$4,672	\$4,672	\$484,512
TE-0046	West Lake Boudreaux Shoreline Protection and Marsh Creation	\$5,490	\$5,490	\$5,490	\$16,469
TE-0048	Raccoon Island Shoreline Protection/Marsh Creation	\$2,760,206	\$1,393,297	\$5,490	\$4,158,992
TE-0050	Whiskey Island Back Barrier Marsh Creation	\$7,172	\$7,172	\$7,172	\$21,516
TE-0052	West Belle Pass Barrier Headland Restoration	\$426,736	\$306,213	\$4,672	\$737,621

Table B-9. CWPRA Projects with O&M Budget Project Expenditures^{1,2,3}

Project No.	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	\$83,760	\$83,760	\$83,760	\$251,280
TV-0004	Cote Blanche Hydrologic Restoration	\$21,680	\$21,680	\$21,680	\$65,040
TV-0012	Little Vermilion Bay Sediment Trapping	\$58,176	\$4,088	\$4,380	\$66,644
TV-0013-A	Oaks/Avery Canal Hydrologic Restoration, Increment 1	\$301,344	\$4,088	\$4,380	\$309,812
TV-0014	Marsh Island Hydrologic Restoration	\$3,796	\$4,088	\$4,380	\$12,264
TV-0015	Sediment Trapping at "The Jaws"	\$57,008	\$4,088	\$4,380	\$65,476
TV-0017	Lake Portage Land Bridge	\$3,796	\$4,088	\$4,380	\$12,264
TV-0018	Four Mile Canal Terracing and Sediment Trapping	\$37,008	\$4,088	\$4,380	\$45,476
TV-0021	East Marsh Island Marsh Creation	\$39,774	\$83,184	\$4,380	\$127,338
TV-0063	Coles Bayou Marsh Restoration	\$3,796	\$4,088	\$4,380	\$12,264
TOTAL CWPRA O&M Expenditures		\$22,324,010	\$7,760,281	\$5,080,360	\$35,164,651
Federal CWPRA O&M Expenditures		\$18,975,408	\$6,596,239	\$4,318,306	\$29,889,953
State CWPRA O&M Expenditures		\$3,348,601	\$1,164,042	\$762,054	\$5,274,698

Notes:

1. Table shows all approved CWPRA projects. Demonstration and vegetative planting projects are not shown as they have no O&M budgets. Other projects without O&M budgets have "None" entered in the budget columns. Projects not scheduled to complete within a given year have "Not Constructed" entered in the budget column(s).
2. State share is based on CWPRA cost share of 85% Federal/15% State except for PPL 5-6 projects, which have a 90% Federal/10% State cost share.
3. Projects that the USACE is responsible for O&M are indicated by (USACE) after the project number.

Table B-10. O&M Projected Expenditures for CWPRA Projects without Federal Cost Share

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
TE-0020	Isles Dernieres Restoration East Island	\$7,172	\$7,172	\$7,172	\$21,516
TE-0024	Isles Dernieres Restoration Trinity Island	\$7,172	\$7,172	\$7,172	\$21,516
TE-0025	East Timbalier Island Sediment Restoration, Phase 1	\$4,672	\$4,672	\$4,672	\$14,016
TE-0027	Whiskey Island Restoration	\$7,172	\$7,172	\$7,172	\$21,516
TE-0030	East Timbalier Island Sediment Restoration, Phase 2	\$4,672	\$4,672	\$4,672	\$14,016
TE-0040	Timbalier Island Dune and Marsh Restoration	\$7,172	\$7,172	\$7,172	\$21,516
Total Expenditures		\$38,032	\$38,032	\$38,032	\$114,096

Table B-11. Projected Expenditures for O&M of WRDA Projects

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
BA-0001	Davis Pond Freshwater Diversion	\$1,072,601	\$1,155,902	\$1,131,443	\$3,359,946
BS-0008	Caernarvon Freshwater Diversion	\$139,828	\$147,128	\$147,128	\$434,084
Total Expenditures (GOMESA)¹		\$1,212,429	\$1,303,030	\$1,278,571	\$3,794,030

Notes:

- 1- O&M expenditures of WRDA projects are subject to a 75% federal/25% state cost share. For FY 2019-2021, CPRA is funding its 25% cost share of O&M costs with GOMESA funds, and will seek reimbursement from the USACE for the 75% federal match.

Table B-12. Projected Expenditures for O&M of Other Projects

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
Hurricane Protection Projects					
BA-0066	West Bank and Vicinity ¹	\$455,024	\$506,575	\$359,144	\$1,320,743
BA-0067	New Orleans and Vicinity ¹	\$455,398	\$529,168	\$550,420	\$1,534,986
LA-0154	FEMA LAMP ¹	\$132,147	\$109,717	\$0	\$241,864
LA-0206	HSDRRS Armoring ¹	\$349,523	\$379,479	\$412,805	\$1,141,807
LA-0253	Flood Protection Inspections ¹	\$263,257	\$276,270	\$292,583	\$832,110
LA-0269	CPRA Letter of No Objection	\$485,888	\$510,182	\$535,691	\$1,531,761
LA-0271	O&M Division State Wide Levee Board Meetings	\$172,490	\$181,115	\$190,170	\$543,775
PO-0057	SELA- Overall ¹	\$156,441	\$158,264	\$150,133	\$464,838
PO-0060	Permanent Canal Closures and Pump Stations ¹	\$2,609,325	\$1,114,791	\$51,018	\$3,775,134
PO-0063	Lake Pontchartrain and Vicinity ¹	\$553,245	\$617,707	\$379,232	\$1,550,184
PO-0096	Flood Protection Assistance ¹	\$2,371,472	\$1,377,546	\$2,683,923	\$6,432,941
USACE Mitigation Projects					
BA-0109	HSDRRS Mitigation - WBV	\$7,008	\$12,614	\$18,688	\$38,310
BA-0154	Previously Authorized Mitigation - WBV	\$7,008	\$12,614	\$18,688	\$38,310
BA-0158	New Orleans to Venice Mitigation - Plaquemines Non-Federal	\$7,008	\$7,008	\$7,008	\$21,024
BA-0159	New Orleans to Venice Mitigation - Federal	\$7,008	\$7,008	\$7,008	\$21,024
PO-0038SF	MRGO Closure Structure	\$61,960	\$61,960	\$61,960	\$185,880
PO-0093	MRGO - Lake Borgne -Bayou Dupre Segment	\$8,184	\$8,184	\$8,184	\$24,552
PO-0094	MRGO - Lake Borgne -Bayou Bienvenue Segment	\$8,184	\$8,184	\$8,184	\$24,552
PO-0095	MRGO - Lake Borgne -Shell Beach Segment	\$8,184	\$8,184	\$8,184	\$24,552
PO-0121	HSDRRS Mitigation - LPV	\$39,343	\$39,343	\$39,343	\$118,030
PO-0145	LPV Task Force Guardian Mitigation - Bayou Sauvage	\$18,688	\$18,688	\$18,688	\$56,064
PO-0146	LPV Mitigation Project, Manchac WMA Marsh Creation	\$13,114	\$13,114	\$13,114	\$39,343
PO-0152	Lake Borgne and MRGO Shoreline Protection	\$8,184	\$8,184	\$8,184	\$24,552
State-Only Projects					
BA-0003	Naomi Siphon	\$26,680	\$12,180	\$12,180	\$51,040
BA-0004	West Point a la Hache Siphon	\$26,680	\$12,180	\$12,180	\$51,040
BA-0005	Fort Livingston	\$90,740	\$90,740	\$27,892	\$209,372
CS-0002	Rycade Canal	\$82,008	\$0	\$0	\$82,008
LA-0273	Gulf Coast Joint Venture and Partnerships	\$8,576	\$8,576	\$8,576	\$25,728
ME-0001	Pecan Island Structure	\$13,796	\$14,088	\$14,380	\$42,264
PO-0001	Violet Siphon	\$325,680	\$25,680	\$25,680	\$377,040
PO-0036	Orleans Landbridge	\$7,308	\$7,308	\$7,308	\$21,924
PO-0072	Biloxi Marsh	\$41,208	\$40,274	\$40,274	\$121,755
PO-0142	Hydrologic Restoration of the Amite River Diversion Canal	\$13,114	\$13,114	\$13,114	\$39,343
PO-0148	Living Shoreline	\$52,521	\$56,673	\$56,673	\$165,867
TE-0001	Montegut Wetlands	\$5,840	\$5,840	\$5,840	\$17,520
TE-0003	Bayou LaCache Wetlands	\$108,760	\$108,760	\$108,760	\$326,280
TV-xx	Quintana Canal	\$2,034,795	\$14,088	\$14,380	\$2,063,263
TV-0013-B	Avery Canal	\$83,796	\$14,088	\$14,380	\$112,264
N/A	Maintenance Surveys	\$33,288	\$33,288	\$33,288	\$99,864
N/A	GPS Network (continued development and maintenance)	\$78,796	\$79,088	\$75,000	\$232,884
Total Expenditures		\$11,231,670	\$6,501,865	\$6,292,258	\$24,025,793
Surplus Expenditures		\$6,133,800	\$3,825,920	\$3,800,048	\$13,759,768
Trust Fund Expenditures		\$5,097,870	\$2,675,945	\$2,492,210	\$10,266,025

Notes:

1- Expenditures funded with Surplus funds (see Table B-5).

Table B-13. Oil Spill Projected Expenditures¹

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
Deepwater Horizon NRDA					
BA-0153	Mid-Barataria Sediment Diversion (Construction)	\$0	\$348,913,760	\$248,913,760	\$597,827,520
BA-0202	Queen Bess Island Restoration	\$2,000,000	\$18,500,000	\$0	\$20,500,000
BA-0203	Barataria Basin Ridge and Marsh Restoration-Spanish Pass Increment	\$1,048,276	\$279,865	\$200,000	\$1,528,141
CS-0080	Rabbit Island Restoration	\$1,400,000	\$200,000	\$24,000,000	\$25,600,000
PO-0180	Lake Borgne Marsh Creation- Increment 1	\$2,000,000	\$1,000,000	\$20,500,000	\$23,500,000
TE-0100	NRDA Caillou Lake Headlands	\$15,000,000	\$0	\$0	\$15,000,000
TE-0139	Terrebonne Basin Ridge and Marsh Creation-Bayou Terrebonne Increment	\$2,500,000	\$1,600,000	\$500,000	\$4,600,000
N/A	NRDA Replenish and Protect Living Coastal and Marine Resources	\$2,820,000	\$26,000,000	\$26,000,000	\$54,820,000
N/A	NRDA Recreational Use 1	\$22,000,000	\$0	\$0	\$22,000,000
N/A	NRDA Recreational Use 2	\$25,000,000	\$13,000,000	\$0	\$38,000,000
N/A	NRDA Bird Islands	\$1,000,000	\$5,000,000	\$2,000,000	\$8,000,000
N/A	NRDA Restoration Planning	\$2,555,433	\$2,346,016	\$2,062,575	\$6,964,024
N/A	NRDA Nutrient Reduction	\$3,000,000	\$3,000,000	\$3,000,000	\$9,000,000
N/A	Regionwide Trustee Implementation Group	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
N/A	NRDA Adaptive Management	\$12,250,000	\$14,258,475	\$14,458,475	\$40,966,949
N/A	NRDA OM&M (See Table B-8)	\$471,378	\$264,896	\$354,752	\$1,091,026
Total Deepwater Horizon NRDA Expenditures		\$94,045,087	\$435,363,012	\$342,989,562	\$872,397,660
NFWF Projects					
BA-0153	Mid-Barataria Sediment Diversion (E&D)	\$34,920,464	\$45,331,822	\$6,318,378	\$86,570,664
BS-0030	Mid-Breton Sediment Diversion	\$20,639,935	\$18,268,293	\$29,437,186	\$68,345,414
LA-0276	Sediment Diversion Management	\$3,756,507	\$4,303,893	\$2,212,874	\$10,273,274
TE-0110	Increase Atchafalaya Flow to Eastern Terrebonne	\$5,449,090	\$5,449,090	\$5,449,090	\$16,347,271
TE-0118	East Timbalier Island	\$6,100,000	\$82,000,000	\$70,000,000	\$158,100,000
N/A	NFWF Adaptive Management	\$6,860,300	\$10,016,905	\$8,855,405	\$25,732,610
N/A	NFWF OM&M (See Table B-8)	\$353,360	\$351,024	\$291,024	\$995,408
Total NFWF Expenditures		\$78,079,656	\$165,721,027	\$122,563,957	\$366,364,641
RESTORE Projects					
BA-0197	West Grand Terre Beach Nourishment and Stabilization	\$2,200,000	\$2,000,000	\$20,000,000	\$24,200,000
BS-0025	Lower Mississippi River Management	\$3,000,000	\$3,000,000	\$2,700,000	\$8,700,000
CS-0065	Calcasieu Ship Channel Salinity Control Measures	\$7,363,739	\$2,750,380	\$17,134,293	\$27,248,411
PO-0029	Mississippi River Reintroduction into Maurepas Swamp	\$7,000,000	\$6,000,000	\$25,400,000	\$38,400,000
PO-0163	Golden Triangle Marsh Creation	\$750,000	\$750,000	\$20,000,000	\$21,500,000
PO-0174	Biloxi Marsh Living Shoreline	\$800,000	\$500,000	\$10,300,000	\$11,600,000
TE-0113	Houma Navigation Canal Lock Complex	\$8,379,266	\$23,131,845	\$71,388,889	\$102,900,000
N/A	RESTORE Adaptive Management	\$5,705,000	\$6,511,780	\$6,511,780	\$18,728,559
N/A	Parish Matching Program ²	\$6,750,000	\$9,750,000	\$3,500,000	\$20,000,000
N/A	RESTORE Center of Excellence	\$1,800,000	\$1,500,000	\$1,500,000	\$4,800,000
Total RESTORE Expenditures		\$43,748,005	\$55,894,004	\$178,434,962	\$278,076,970
Total Oil Spill Expenditures		\$215,872,747	\$656,978,043	\$643,988,481	\$1,516,839,271
GOMESA Oil Spill Expenditures		\$0	\$0	\$0	\$0
Surplus Oil Spill Expenditures		\$0	\$0	\$0	\$0
State Oil Spill Expenditures		\$215,872,747	\$656,978,043	\$643,988,481	\$1,516,839,271

Notes:

1- Red font denotes projected expenditures for which funding has not yet been procured.

2- Expenditures represent potential matching funds for project implementation to eligible parishes identified in 33 U.S.C. §1321(t)(1)(D)(II) provided that the project constitutes an eligible activity under 31 C.F.R. §§ 34.201 and 34.203 and meets the purposes identified in La. R.S. 49:214.5.4(G) & (I).

Table B-14. GOMESA Projected Expenditures

Project ID	Project Name	FY 2019	FY 2020	FY 2021	Project Total (FY 2019 - FY 2021)
N/A	40 Arpent Canal Levee- Lockport Co. Canal to Butch Hill Station (NLLD)	\$100,000	\$5,450,000	\$0	\$5,550,000
N/A	Hollywood Canal Closure Structure (NLLD)	\$72,500	\$0	\$1,427,500	\$1,500,000
N/A	Reach L (SLLD)	\$500,000	\$4,000,000	\$2,000,000	\$6,500,000
N/A	Little Bayou Bleu (SLLD)	\$400,000	\$0	\$0	\$400,000
N/A	Reach L Mitigation (SLLD)	\$200,000	\$0	\$1,000,000	\$1,200,000
N/A	Rosethorne Basin Phase 1 & 2 (LAILD)	\$7,000,000	\$4,000,000	\$0	\$11,000,000
N/A	Grand Isle Beach Stabilization (GIILD)	\$8,500,000	\$7,000,000	\$0	\$15,500,000
N/A	West Shore Lake Pontchartrain (PLD)	\$2,000,000	\$2,000,000	\$2,000,000	\$6,000,000
N/A	NF-06a.1 Drainage Canal Relocation ROW Acquisition (Plaquemines Parish)	\$6,000,000	\$0	\$0	\$6,000,000
N/A	Magnolia Ridge Levee Lift and Road (St. Charles Parish)	\$3,500,000	\$0	\$0	\$3,500,000
N/A	30% E&D- Phases 1-3 (St. James Parish)	\$500,000	\$500,000	\$0	\$1,000,000
N/A	Davis Pond Upper Barataria Risk Reduction (LBLD)	\$1,500,000	\$1,500,000	\$3,000,000	\$6,000,000
N/A	St. Tammany Ring Levee (St. Tammany Parish)	\$3,000,000	\$3,000,000	\$3,000,000	\$9,000,000
N/A	H&H Study (Vermilion Parish)	\$600,000	\$0	\$0	\$600,000
N/A	GOMESA CPRA Allocation	\$3,500,000	\$3,500,000	\$3,500,000	\$10,500,000
N/A	GOMESA OM&M	\$7,402,780	\$2,564,057	\$7,567,118	\$17,533,954
N/A	GOMESA Adaptive Management (See Table 4-3)	\$2,735,000	\$4,035,000	\$4,635,000	\$11,405,000
N/A	Future GOMESA Projects (TBD) ¹	\$0	\$70,500,000	\$44,000,000	\$114,500,000
Total Expenditures		\$47,510,280	\$108,049,057	\$72,129,618	\$227,688,955

Notes:

1- GOMESA funding in outlying years is contingent upon receipt of sufficient funding. Projects proposed to begin receiving funding in FY 2020-2021 include the following:

- Goose Bayou (Penn Levee (LAILD))- FY 2021
- Pumping Capacity Improvements Phase 1 (BLFWD)- FY 2020
- Bayou Chene Option 1 (SMLD)- FY 2020
- 100-Year Levee Lift- NOV-NF-W-4, Oakville to LaReusitte and MRL 179 (Plaquemines Parish)- FY 2020
- PrB Levee (Iberia Parish)- FY 2021
- Kellog Pump Station T-Wall (St. Charles Parish)- FY 2020
- Magnolia Ridge Levee Pipeline and T-Wall (St. Charles Parish)- FY 2021
- Levee Reach 1 (Vermilion Parish)- FY 2021
- Sunset Levee Upper Barataria Risk Reduction (LBLD)- FY 2020

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Appendix C

Barrier Island Status Report

BARRIER ISLAND STATUS REPORT

Fiscal Year 2019 Annual Plan

In compliance with Act 297 of the 2006 Regular Legislative Session, the Coastal Protection and Restoration Authority (CPRA) provides this barrier island status report as part of the Annual Plan document, which will be submitted to each member of the Louisiana Legislature. The current Barrier Island Status report is available electronically at the CPRA website. Please visit www.coastal.la.gov to download and review the full report. A summary of the report is provided below.

Constructed Projects

The coastlines of the modern Mississippi River delta plain are bordered by numerous barrier islands from Raccoon Island in the west to Hewes Point in the northern Chandeleur Islands (Figure 1). These barrier islands could be grouped to represent fragmented remnants of distal extremities of several major delta lobes and headlands: to identify these barrier islands with their respective delta lobes they have been grouped from west to east as the Early Lafourche Delta System, Late Lafourche Delta System, Modern Delta System, and the St. Bernard Delta System. The back-barrier lagoons are connected to the Gulf of Mexico by approximately 25 tidal inlets which separate these barrier islands from each other and allow the exchange of diurnal tides.

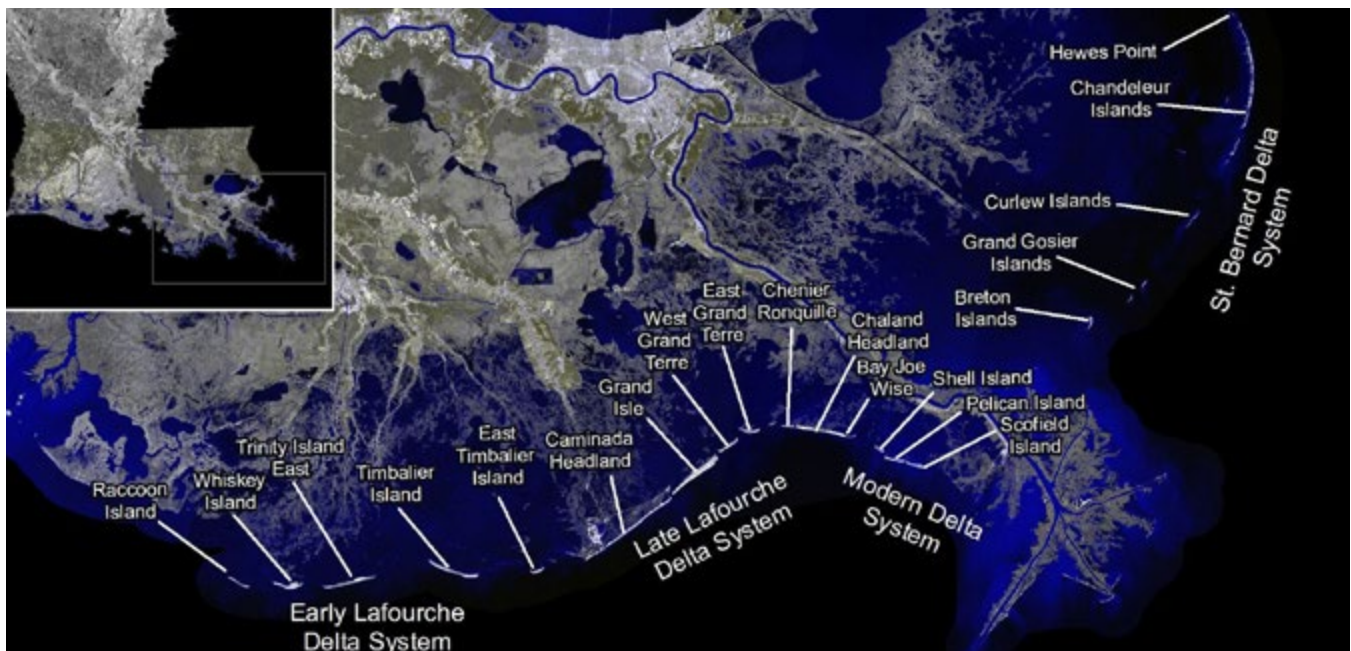


Figure 1. Location of barrier islands and Barrier Island Delta Systems in Louisiana

The restoration of Louisiana's barrier islands and barrier island systems has been a priority for a number of restoration programs over the past several decades and 39 barrier island projects have been constructed to date (including 12 in the Early Lafourche Delta System, 16 in the Late Lafourche Delta System, 9 in the Modern Delta System, and 2 in the St. Bernard Delta System: see Table 1). Most of these constructed barrier island projects have been monitored, and their performance has been assessed to adaptively improve resilience and persistence of these projects and future barrier island projects.

With several major restoration projects in place, the post-restoration estimated Year of Disappearance (YOD) for several barrier island systems in Louisiana have been extended from years to decades. This increase in island longevity throughout the system is a direct benefit of the restoration projects. Further, with the increase in both frequency and intensity of major hurricanes over the past decade (and similar projections into the future), in the absence of the restoration and protection program, it is expected many of these islands would have disappeared much sooner than original projections.

Monitoring and Maintenance

Louisiana's barrier islands are part of a complex system controlled by many overlapping and interrelated processes. The four primary barrier island systems have been monitored and evaluated by recent efforts, such as the Barrier Island Comprehensive Monitoring (BICM) program, the monitoring of the Emergency Berms, and project specific efforts. These programs have provided information to CPRA regarding the current condition and stability of Louisiana's barrier islands. To minimize the acceleration of island disintegration that commonly occurs after a breach, a barrier island Breach Management Program is currently being developed to address both breach prevention and response to breaches when they occur. This program will considerably improve the state's ability to repair storm-induced damages and extend the life-expectancy and integrity of Louisiana's barrier shorelines. Finally, to ensure the efficient and effective use of limited sediment resources in Louisiana, a number of programs/projects, including Borrow Area Monitoring and Maintenance (BAMM) and the Louisiana Sand Resources Database (LASARD), have been initiated under the overarching umbrella of the Louisiana Sediment Management Plan (LASMP). In order to monitor the impact of loading of sand to build beach and dune and restore the barrier islands/headlands, a CIAP-funded Caminada Moreau Subsidence Study (CMSS) was undertaken.

A final report entitled "Louisiana Barrier Island Comprehensive Monitoring (BICM) Program Summary Report: Data and Analyses 2006 through 2010: U.S. Geological Survey Open-File Report 2013-1083" was published as a USGS open file and can be accessed online at <http://cims.coastal.la.gov/DocLibrary/DocumentSearch.aspx?Root=0&Folder=0> (Kindinger et al 2013). The BICM program used both historical and newly acquired (2006 - 2010) data to assess and monitor changes in the aerial and subaqueous extent of islands, habitat types, sediment texture and geotechnical properties, environmental processes, and vegetation composition. BICM datasets included aerial still and video photography (multiple time series) for shoreline assessment, shoreline position, habitat mapping, and land loss from CIR aerial photography light detection and ranging (LiDAR) surveys for topographic elevations; single-beam and swath bathymetry; and sediment grab samples. The BICM program has begun a new data collection cycle in 2015 with plans to complete analysis and reporting in 2019.

Barrier Island Performance Assessment

Louisiana's barrier shoreline is one of the fastest eroding shorelines in the world. Due to the geologic setting and the predicted changes in sea level during coming decades, these shoreline habitats and the services they provide are some of the most vulnerable features of our coastal landscape. Barrier island stability is affected by a number of factors, including settlement, overwash, offshore loss of sediment, longshore transport, and island breaching. Each of these factors is discussed in the context of recent high-frequency data collection.

Shoreline erosion data from BICM indicate that most of Louisiana's shoreline is eroding faster than ever before with some short-term (1996 - 2005) erosion rates more than double the historic (1890s - 2005) averages. However, recent information from the post-BICM studies elucidates the benefits of recent restoration projects. The full report includes a presentation of the overall findings from BICM and detailed discussion of recent shoreline change rates by geomorphologic delta complex. Additionally, the BICM program is currently updating shoreline change rates for the entire coast thru 2012, with plans to develop 2015 data.

Minimized Design Template

The minimized design template is defined as a design template with minimal barrier island dimensions that restores the barrier shoreline's geomorphic form and ecologic function and retains this form and function after being subjected to the design storm events.

A minimized design template was previously developed for the Terrebonne Basin barrier shorelines extending from East Timbalier Island to Raccoon Island as part of the Louisiana Coastal Area program for the Terrebonne Basin Barrier Shoreline Restoration Project (TBBSR). Efforts related to modeling for 2017 Master Plan project evaluations have led to development of a minimal design template for the coast. Future efforts related to regional project evaluation and prioritizations can utilize this minimal design, allowing valid comparisons and prioritization areas along the coast using an un-biased approach. Table 2 in the full report presents the dimensions of the minimized restoration templates.

Future Plans

Louisiana has invested hundreds of millions of dollars over the past two decades restoring its barrier islands and shorelines and plans to continue to invest in rebuilding these features. Unlike the 2012 Coastal Master Plan, which called for restoration of specific barrier islands, the 2017 Coastal Master Plan recommends funding Louisiana's Barrier Island Program, which CPRA is currently developing. Rather than recommending specific barrier island and shoreline projects and assigning them to a certain implementation period, CPRA intends to restore the Terrebonne, Timbalier, and Barataria barrier islands and shorelines as part of a regular rebuilding program. In addition, CPRA plans to continue system-wide monitoring, exploration and management of compatible sediment via acquisition of geotechnical and geophysical data, and improving overall understanding of sediment management requirements to support the sediment needs and prioritization of the current 2017 Coastal Master Plan projects. This will allow monitoring and assessment of these critical features to drive project investment and for CPRA to be able to nimbly react when catastrophic events like future hurricanes impact these areas.

Table 1. List of Constructed, Funded for Construction, and Future Barrier Island Projects in Louisiana

Barrier Shoreline Restoration Projects	Funding Program	Construction Date
Early Lafourche Barrier System		
<i>Constructed Projects</i>		
1 Raccoon Island Repair (TE-0106)	Various	1994
2 Barrier Island Sand Retention (TE-0004b)	FEMA	1995
3 Raccoon Island Breakwaters (TE-0029)	CWPPRA	1997
4 Raccoon Island Shoreline Protection/ Marsh Creation (TE-0048)	CWPPRA	2007, 2013
5 Whiskey Island Restoration (TE-0027)	CWPPRA	1999
6 Whiskey Island Back Barrier Marsh Creation (TE-0050)	CWPPRA	2009
7 Enhancement of Barrier Island and Salt Marsh Vegetation DEMO (TE-0053)	CWPPRA	2012
8 Isles Dernieres Restoration Trinity Island (TE-0024)	CWPPRA	1999
9 New Cut Dune and Marsh Restoration (TE-0037)	CWPPRA	2007
10 Isles Dernieres Restoration East Island (TE-0020)	CWPPRA	1999
11 BIMP 2009 Sand Fencing (LA-0246)	STATE	2009
12 Wine Island Revegetation Project	FEMA	1995
<i>Funded for Construction</i>		
NRDA Caillou Lake Headlands (TE-0100) (under construction)		
1 (includes Ship Shoal: Whiskey West Flank Restoration (TE-0047))	NRDA	2018
<i>Future Projects</i>		
None		
Barrier Shoreline Restoration Projects	Funding Program	Construction Date
Late Lafourche Barrier System		
<i>Constructed Projects</i>		
1 Barrier Island Sand Retention (TE-0004b)	FEMA	1995
2 Timbalier Island Planting Demonstration (TE-18)	CWPPRA	1996
3 Timbalier Island Dune and Marsh Creation (TE-40)	CWPPRA	2004
4 BIMP 2009 Sand Fencing (LA-0246)	STATE	2009
5 East Timbalier Island Sediment Restoration, Phase 1 (TE-25)	CWPPRA	2000
6 East Timbalier Island Sediment Restoration, Phase 2 (TE-30)	CWPPRA	2000
7 West Belle Pass Barrier Headland Restoration (TE-52)	CWPPRA	2012
8 Caminada Headland Beach and Dune Restoration (BA-45)	CIAP/ STATE	2015
9 Grand Isle Bay Side Breakwaters (BA-0187)	STATE	
10 Fifi Island Restoration (BA-0155)	CIAP	2015
11 Fifi Island Breakwater (BA-0168)	CIAP	2015
12 Grand Isle and Vicinity Hurricane Protection	WRDA	2010
13 Vegetative Planting of a Dredged Material Disposal Site on Grand Terre (BA-28)	CWPPRA	2001
14 Restoration on West Grand Terre Island at Fort Livingston (BA-0186)	NOAA	2003
15 East Grand Terre Island Restoration (BA-30)	CIAP	2010
16 Caminada Headland Beach and Dune Restoration, Increment 2 (BA-143)	NFWF	2016
<i>Future Projects</i>		
1 East Timbalier Island (TE-0118) (in design)	NFWF	TBD
2 West Grand Terre Beach Nourishment and Stabilization Project (BA-0197) (in design)	RESTORE	TBD
3 Caminada Back Barrier Marsh Creation (BA-0171) (in design)	CWPPRA	TBD
4 Caminada Back Barrier Marsh Creation Increment 2 (BA-0193) (in design)	CWPPRA	TBD
Barrier Shoreline Restoration Projects	Funding Program	Construction Date
Modern Barrier System		
<i>Constructed Projects</i>		
Pass La Mer to Chaland Pass (BA-38, part 1)		
1 also known as "Chaland Headland"	CWPPRA	2007
2 BIMP 2009 Sand Fencing (LA-0246)	STATE	2009
Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35)		
3 also known as "Bay Joe Wise"	CWPPRA	2009
4 Barataria Barrier Island Complex Project: Pelican Island and Pass (BA-38, part 2)	CWPPRA	2012
5 Emergency Berms W8, W9, W10	Berm Funds	2010-2011
6 Riverine Sand Mining/Scofield Island Restoration (BA-40)	CWPPRA/ Berm Funds	2013
7 Shell Island Restoration East Berm (BA-110)	Berm Funds	2013
8 Chenier Ronquille Barrier Island Restoration (BA-76)	NRDA	2017
9 Shell Island Restoration West NRDA (BA-111)	NRDA	2017
<i>Funded for Construction</i>		
None		
<i>Future Projects</i>		
None		
Barrier Shoreline Restoration Projects	Funding Program	Construction Date
St. Bernard Delta System		
<i>Constructed Projects</i>		
1 Chandeleur Islands Marsh Restoration (PO-27)	CWPPRA	2001
2 Emergency Berms E4	Berm Funds	2010
<i>Funded for Construction</i>		
None		
<i>Future Projects</i>		
1 Louisiana Outer Coast Restoration: Breton Island (in design)	NRDA	TBD

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Appendix D

Caernarvon & Davis Pond Operational Plans for 2018

Available Online (<http://coastal.la.gov/diversion-operations/>)

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Appendix E

Inventory of Non-State Projects

A. Federal Protection Projects

EAST JEFFERSON LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



Legend

Levee Construction Type

- Earthen Levee
- I-Wall
- Sheet Pile
- Control Structure
- Control Structure
- Flood Gate
- Pump Station
- Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

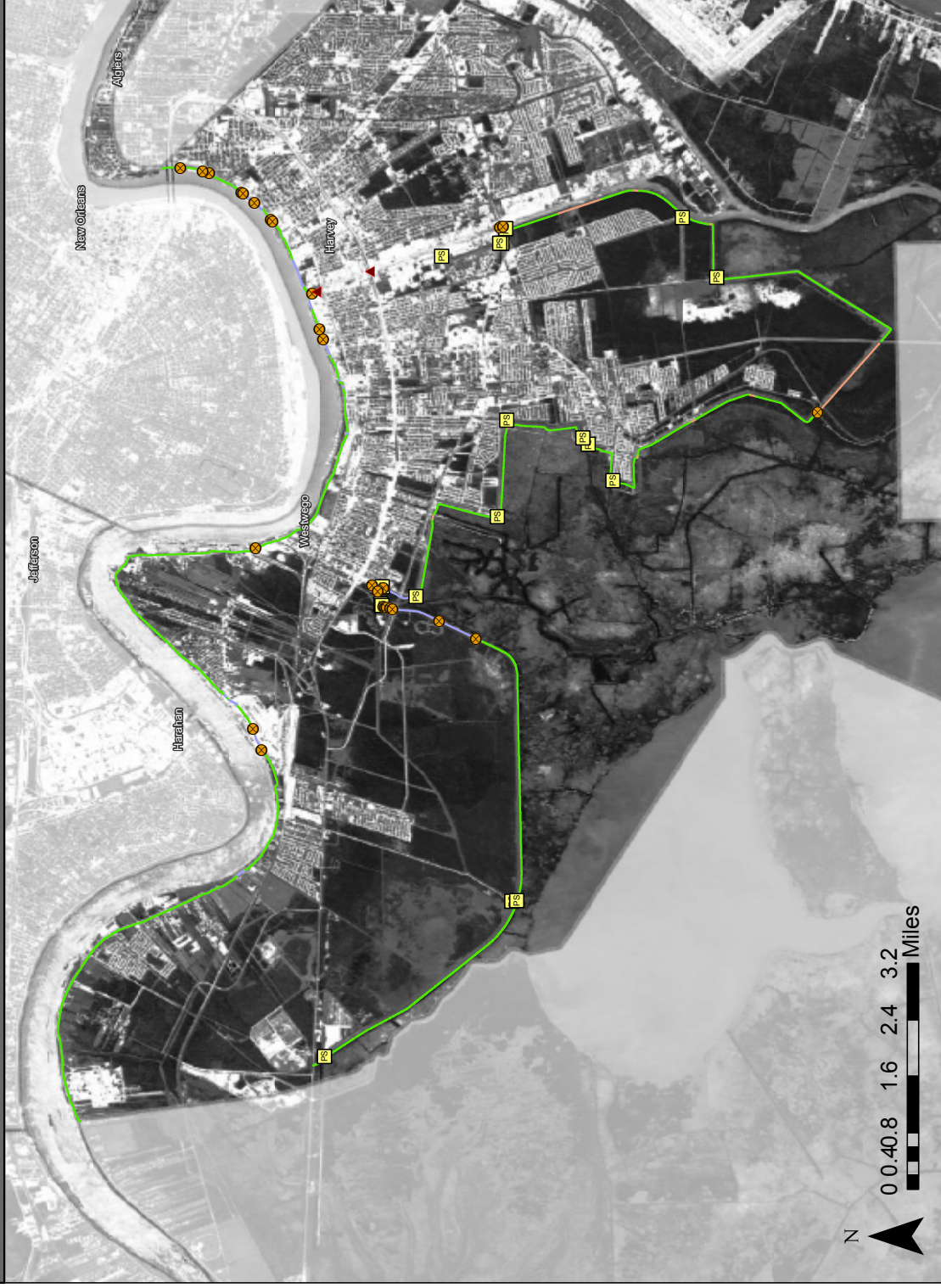
Data Sources:
USACE
LA OCPR

WEST JEFFERSON LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

Legend

Levee construction types

- Earthen Levee
- I-Wall
- Sheet Pile
- Control Structure
- Flood Gate
- Pump Station
- Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCPR



ALGIERS LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



Legend

Levee Construction Type

Earthen Levee

I-Wall

Control Structure

Control Struture

Pump Station

Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

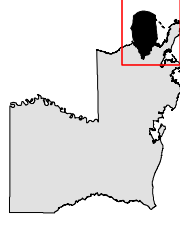
Data Sources:
USACE
LA OCPR

LAKE BORGNE BASIN LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

Legend

Levee Construction Type

- Earthen Levee
- I-wall
- Control Structure
- Flood Gate
- Pump Station
- Water Bodies

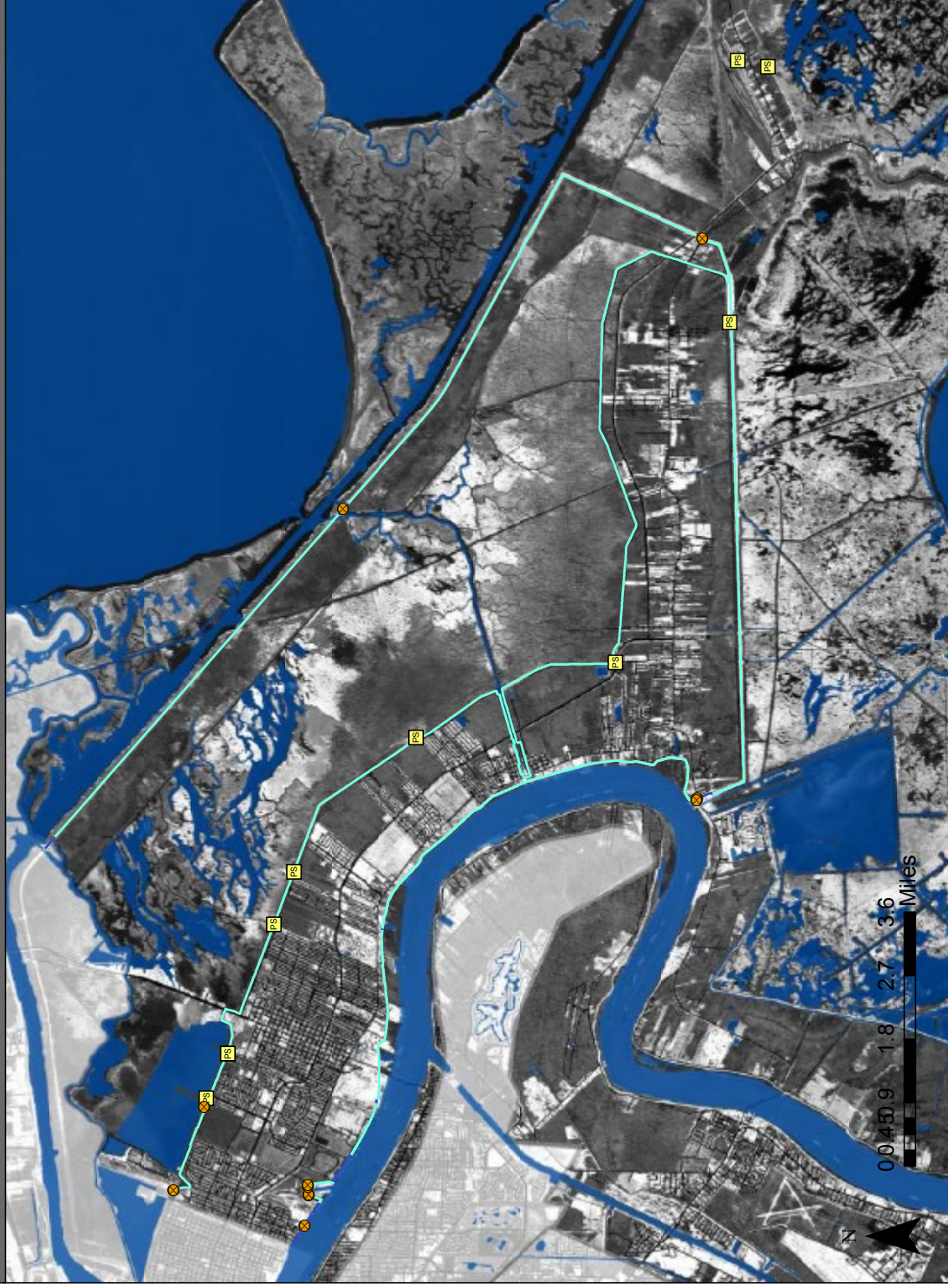


Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCPR



ORLEANS LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

- Legend**
- Earthen Levee
 - I-Wall
 - T-Wall
 - L-Wall
 - Sheet Pile
 - Control Structure
 - Flood Gate
 - Pump Station
 - Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCHPR



PLAQUEMINES PARISH GOVERNMENT LEVEE ALIGNMENTS & STRUCTURES

Legend

Levee Construction Type

- Control Structure
- Earthen Levee
- I-Wall
- Sheet Pile
- T-Wall
- Control Structure
- Flood Gate
- Pump Station
- Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

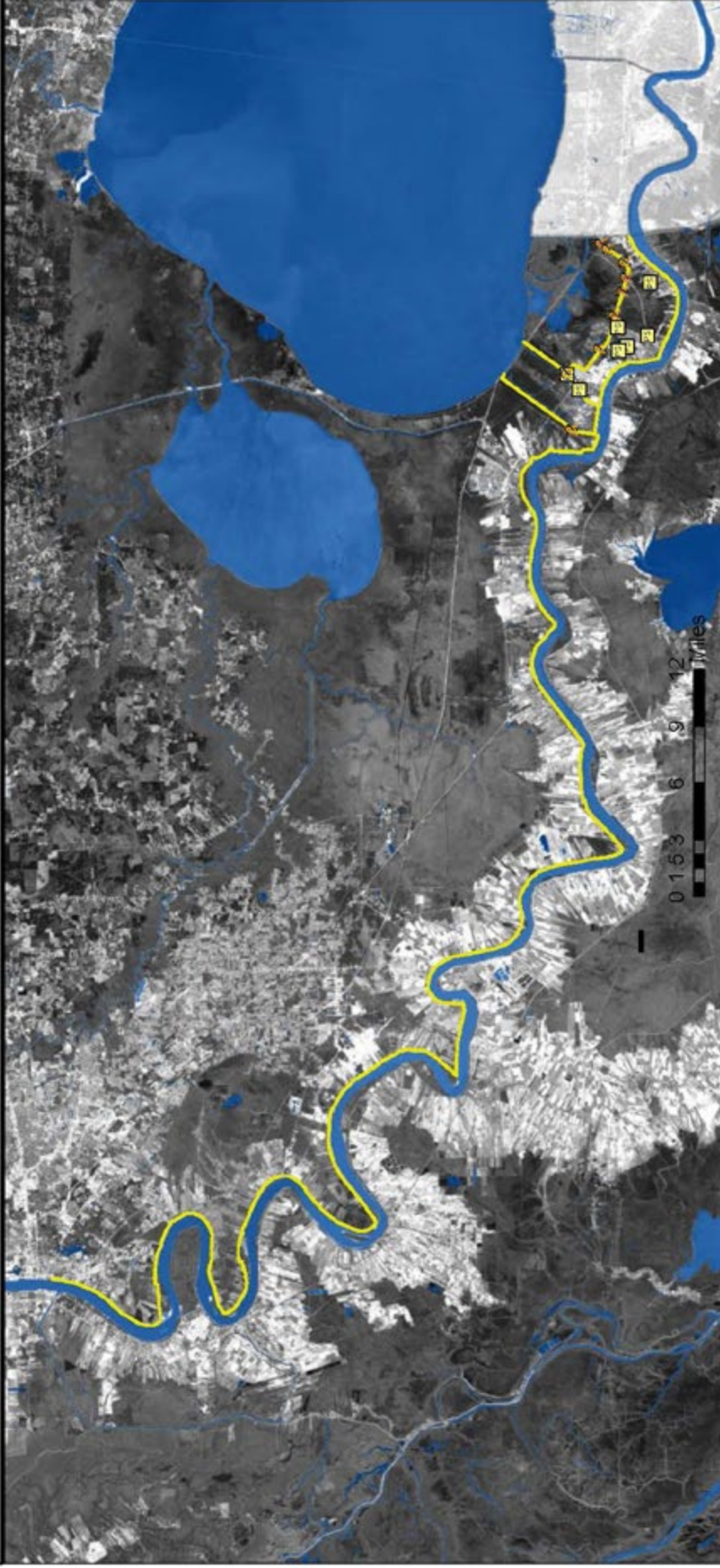
Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA-OCPR



PONTCHARTRAIN LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCPR



SOUTH LAFOURCHE LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

Legend

Levee construction types

Earthen Levee

I-Wall

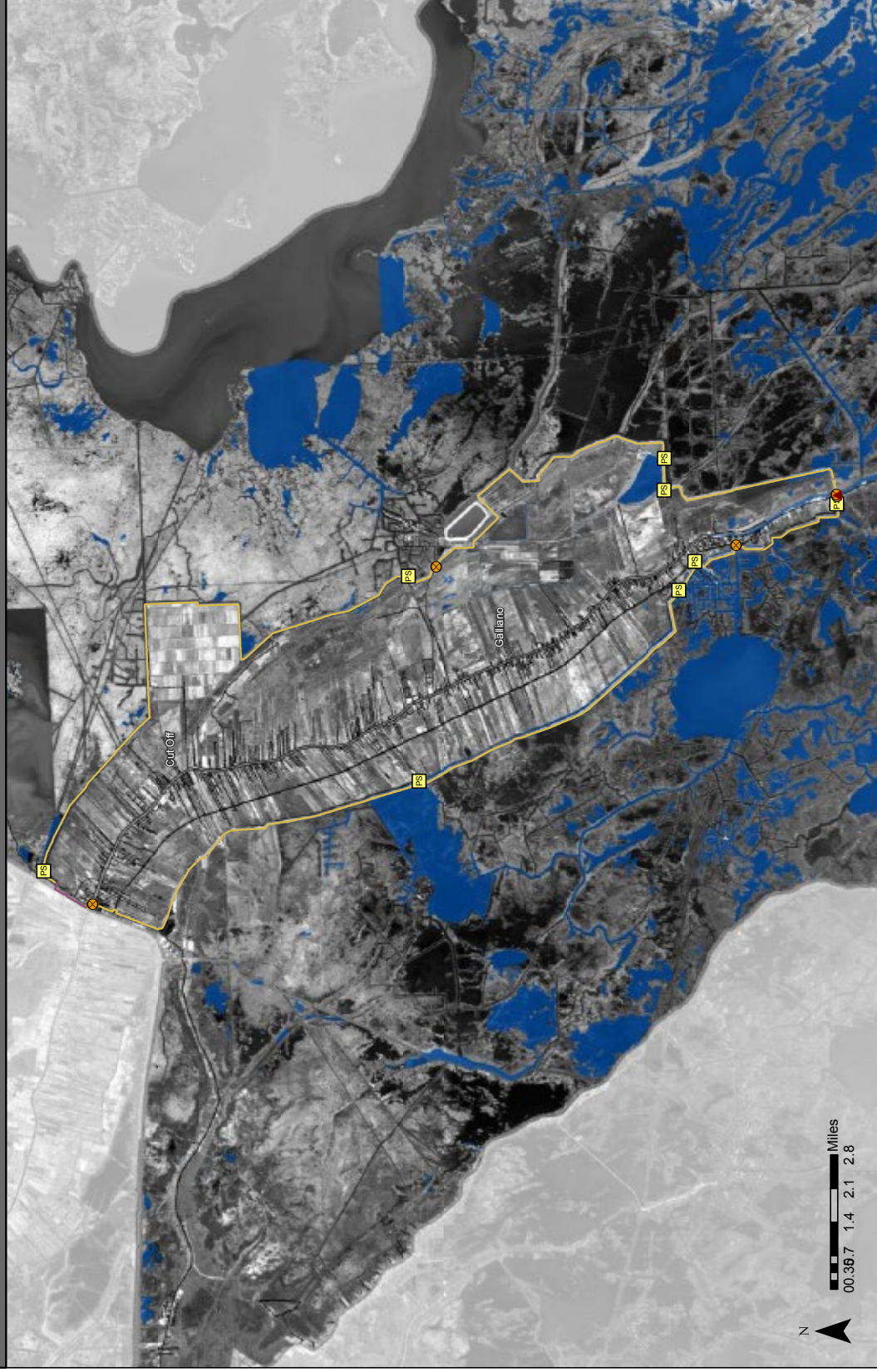
Sheet Pile

Control Structure

Flood Gate

Pump Station

Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCPR



TERREBONNE LEVEE & CONSERVATION DISTRICT LEVEE ELEVATIONS

Legend

Levee Elevation (Ft)

2.4 - 5.5

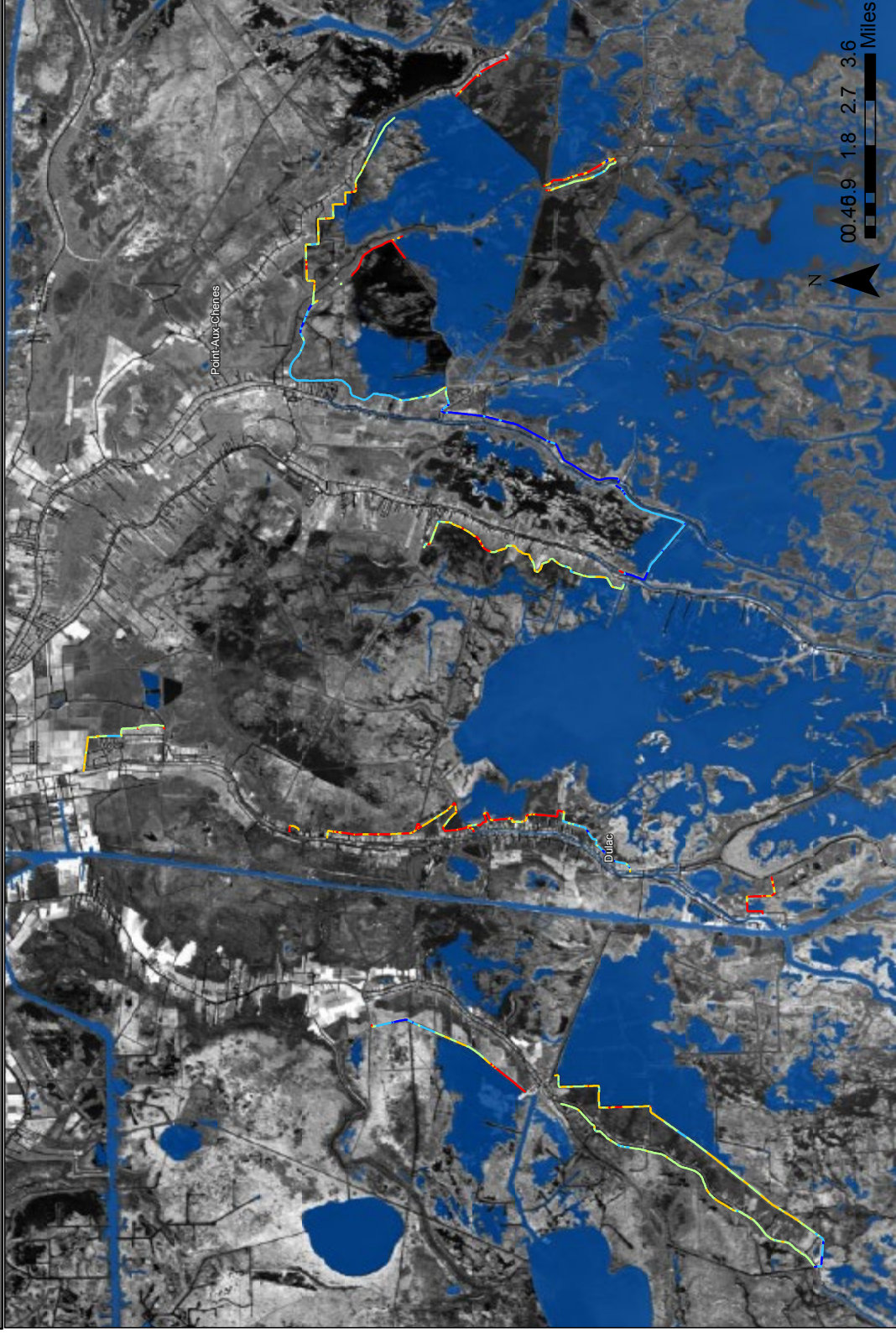
5.6 - 6.8

6.9 - 8.2

8.3 - 10.0

10.1 - 12.7

Water Bodies



Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:
USACE
LA OCPR



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Appendix E

Inventory of Non-State Projects

B. Projects and Project Concepts in Coastal Parish Master Plans

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Program	Local Project Number		Project Name		Project Type		Senate District		House District		Parish		Project Costs		Project Summary	Planning Unit
N/A	FD 37	N/A	Sediment Introductions at South Shore Sister Lake	MC	20	53	Ter.				Not provided		Description not provided.		3a	
N/A	FD 21	N/A	Marsh Creation North Stump Canal	MC	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 22	N/A	Marsh Creation School Board Property South of Swing Bayou	MC	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 23	N/A	Marsh Creation North-East of Toilet Bowl Canal	MC	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 24	N/A	Marsh Creation North East of Bayou Pechant	MC	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 70	N/A	Brandy Canal Hydrological Restoration Project	HR	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 57	N/A	Dredge Bayou Terrebonne from Company Canal to Humble Canal	HR	20	53	Ter.				\$5,000,000 - \$20,000,000		Dredging Bayou Terrebonne will result in an increase in the amount of freshwater available to eastern Terrebonne Parish marshes.		3a	
N/A	FD 58	N/A	Dredge Minors Canal (GIWW to Lake Decade)	HR	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 62	N/A	Dredge Company Canal to Convey Freshwater Flow to Terrebonne Marshes	HR	20	53	Ter.				\$5,000,000 - \$20,000,000		Dredging Company Canal between the GIWW and Bayou Terrebonne will result in an increase in the amount of freshwater available for eastern Terrebonne Parish marsh sustainability.		3a	
N/A	FD 59	N/A	Connect St. Louis Canal to Petit Callou	HR	20	53	Ter.				Not provided		Description not provided.		3a	
N/A	FD 65	N/A	Large Pump Station at Bayou Terrebonne	HP	20	53	Ter.				\$500,000		Storm water drainage will be used to introduce freshwater to an area of marsh west of Bayou Terrebonne currently experiencing saltwater intrusion and a high rate of subsidence.		3a	
N/A	FD 66	N/A	Pump Station at Bayou Petit Callou for Freshwater Diversion to Ward 7	HP	20	53	Ter.				Not provided		Description not provided.		3a	
N/A	FD 79	N/A	Bayou Terrebonne Freshwater Diversion Project	FD	20	53	Ter.				\$2,000,000 - \$5,000,000		Through the use of an existing drainage ditch, removal of an earthen plug between the Montegut and Point aux Chenes drainage systems, construction of 3 small pump stations, and construction of a screw gate water control device near the removed plug location, increased volumes of freshwater can be made available to the marshes of Montegut and Point aux Chenes within the wildlife Management Areas. Over 9,000 acres of brackish and intermediate marsh will be benefited.		3a	
N/A	FD 68	N/A	South Lake Decade Freshwater Enhancement and Shoreline Protection	HR, SP	20	51	Ter.				\$5,800,000		Proposed project components include installing three control structures along the rim of the lake and enlarging Lapeyrouse Canal to allow the controlled diversion of the Atchafalaya River water, nutrients, and sediments south into project area marshes. Outfall management structures are planned in the marsh interior to provide better distribution of river water. In addition, approximately 1.6 miles of foreshore rock dyke is planned to protect the critical areas of the south lake shoreline from breaching.		3a	
N/A	FD 71	N/A	Ashland Freshwater Introduction and Wetland Assimilation Project	WA	20	53	Ter.				\$5,000,000		This freshwater introduction project will incorporate wastewater treatment effluent and freshwater from the GIWW by way of St. Louis Canal to Terrebonne Marshes north of Lake Boudreaux. Nutrients added to the system will enhance and promote plant growth and the sediment introduced will promote accretion to an area at risk for further deterioration.		3a	
N/A	FD 77	N/A	Woodlawn Ranch Road	HR	20	53	Ter.				\$500,000		This pump station project is the largest among those considered at 1350 cfs. Utilizing stormwater drainage from the Houma area, freshwater will be introduced to the marshes north of Lake Boudreaux in an area currently impacted by saltwater intrusion and subsidence. This project works in conjunction with Ashland Freshwater Introduction and Wetland Assimilation.		3a	
N/A	FD 85	N/A	Reconnect Grand Bayou to GIWW	HR	20	53	Ter.				\$5,000,000 - \$20,000,000		Installation of a water control structure between GIWW and Grand Bayou and dredging of Grand Bayou will be added in order to increase the amount of water available to this region of Terrebonne Parish. Increased sheet flow of freshwater and nutrients will assist in vegetation enhancement and accretion in an area of marsh that is rapidly deteriorating.		3a	
N/A	FD 33	N/A	Freshwater Introduction via Blue Hammock Bayou	FD	20	51	Ter.				Not provided		Description not provided.		3a	
N/A	FD 67	N/A	Falgout Canal Freshwater Enhancement (Phase I)	HR	20	51	Ter.				\$10,000,000		Saltwater intrusion and hydrologic isolation have led to rapid deterioration of marsh within the marshes located adjacent to Falgout Canal, between Bayou Dularge and the Houma Navigation Canal. This project will allow for re-establishment of Atchafalaya River influence.		3a	
N/A	FD 80	N/A	Freshwater Diversion using the Bayou Terrebonne Flood Gate	FD	20	53	Ter.				Not provided		Description not provided.		3a	
N/A	FD 72	N/A	Lower Bayou Dularge Pump Station	HR	20	51	Ter.				\$500,000		Pump station D19 will divert approximately 200 cfs of freshwater east of Bayou Dularge into an area of marsh currently experiencing saltwater intrusion and a high rate of subsidence.		3a	
N/A	FD 73	N/A	Upper Bayou Dularge	HR	20	51	Ter.				\$500,000		Pump station D18 will be used to introduce approximately 200 cfs of freshwater to the marshes north of Falgout Canal. Marshes in this area are at risk of further deterioration due to saltwater intrusion.		3a	
N/A	FD 74	N/A	Mayfield	HR	20	53	Ter.				Not provided		Description not provided.		3a	

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Program	Local Project Number		Project Name		Project Type		Senate District		House District		Parish		Project Costs		Project Summary		Planning Unit
State and Local	JE-1	LaBranche Wetlands Drainage Diversion	FD	8	105	Jef.						\$855,000			Storm water drainage from the northwest corner of Jefferson Parish (Kenner, LA area) now enters the Parish Line Canal and flows north, directly into Lake Pontchartrain. The proposed project would include the construction of a water control structure to divert storm water drainage into the LaBranche Wetlands for hydrologic restoration. The storm water would be diverted at the northernmost feasible location to maximize the wetland area benefitted and the level of water quality enhancement.	1	
N/A	N/A	Breton Sound	MC	1	105	Plaq.						Not provided			Breton Sound Fringe Marsh Barriers.	1	
N/A	N/A	Baptiste Collete	MC	1	105	Plaq.						Not provided			Baptiste Collette and Surrounding Marshes.	1	
N/A	N/A	American/California bay	FD	1	105	Plaq.						Not provided			American/California bay/Bohemia Diversion.	1	
N/A	N/A	Bayou Lamoque	FD	1	105	Plaq.						Not provided			Bayou Lamoque Diversion.	1	
N/A	N/A	Caernarvon	FD	1	105	Plaq.						Not provided			Caernarvon Diversion.	1	
N/A	N/A	Fort St. Phillip	FD	1	105	Plaq.						Not provided			Fort St. Phillip Diversion.	1	
N/A	N/A	Grand Bay	FD	1	105	Plaq.						Not provided			Grand Bay Diversion.	1	
N/A	N/A	White Ditch	FD	1	105	Plaq.						Not provided			White's Ditch Diversion.	1	
N/A	N/A	Breton Land bridge	MC	1	105	Plaq.						Not provided			Breton Sound Land Bridge.	1	
N/A	N/A	Baptiste Collette-Fort St. Phillip	RR	1	105	Plaq.						Not provided			Baptiste Collette to Fort St. Phillip Ridge Reforestation.	1	
N/A	N/A	Bohemia-White's Ditch	RR	1	105	Plaq.						Not provided			Back Levee Canal-Bohemia to White's Ditch Ridge Reforestation.	1	
N/A	N/A	Caernarvon	RR	1	105	Plaq.						Not provided			Unnamed Ridges South of Caernarvon Ridge Reforestation.	1	
N/A	N/A	Caernarvon	RR	1	105	Plaq.						Not provided			Unnamed Ridges South of Caernarvon Ridge Reforestation.	1	
N/A	N/A	Caernarvon	RR	1	105	Plaq.						Not provided			Fort St. Phillip to Ostrica Lock Ridge Reforestation.	1	
N/A	N/A	Fort St. Phillip-Ostrica	RR	1	105	Plaq.						Not provided			Fort St. Phillip to Ostrica Lock Ridge Reforestation.	1	
N/A	N/A	Ostrica-Bayou Lamoque	RR	1	105	Plaq.						Not provided			Ostrica Lock to Bayou Lamoque Ridge Reforestation.	1	
N/A	N/A	River aux Chenes	RR	1	105	Plaq.						Not provided			River Aux Chenes Ridge Reforestation.	1	
N/A	N/A	Breton Sound	SP	1	105	Plaq.						Not provided			Breton Sound Fringe Marsh.	1	
N/A	N/A	Violet	FD	1	103	StB.						Not provided			Violet Diversion.	1	
N/A	N/A	Lake Borgne	SP, OR	1	103	StB.						Not provided			Lake Borgne surge breaker/reef.	1	
N/A	N/A	Bayou Terre aux Boeufs/La Loutre	MC	1	103	StB.						Not provided			Marsh Creation-Bayou Terre aux Boeufs to Bayou la Loutre Land Bridge.	1	
N/A	N/A	Bloxi Marsh	MC	1	103	StB.						Not provided			Bloxi Marsh Creation.	1	
N/A	N/A	Central Wetlands	MC	1	103	StB.						Not provided			Central Wetlands Marsh Creation.	1	
N/A	N/A	Lake Borgne/MRGO	MC	1	103	StB.						Not provided			MRGO/Lake Borgne Landbridge Marsh Creation.	1	
N/A	N/A	Orleans Landbridge	MC	1	103	StB.						Not provided			Orleans Landbridge Marsh Creation.	1	
N/A	N/A	Bloxi Marsh	SP, OR	1	103	StB.						Not provided			Bloxi Marsh Oyster Reefs/Shoreline Protection.	1	
N/A	N/A	Lake Borgne	SP	1	103	StB.						Not provided			Lake Borgne Shoreline Protection-MRGO Land Bridge.	1	
N/A	N/A	Orleans Landbridge	SP	1	103	StB.						Not provided			Orleans Landbridge shoreline protection.	1	
N/A	N/A	St. Bernard Parish	OR	1	103	StB.						Not provided			Develop Oyster reefs as shoreline barrier-Bloxi Marsh.	1	
CWPPRA	NA-9	Bayou Dupont Sediment Delivery Expansion	MC	8	105	Jef.						\$25,000,000			This project would supplement a sediment delivery project now being developed by extending the sediment deposition areas to the north (Phase I) and south (Phase II) to restore these wetlands and enhance Land Bridge integrity. Phase I would restore the bounding shorelines and restore approximately 1,800 acres of wetlands. Phase II would restore approximately 2,000 acres of wetlands.	2	
CWPPRA	PR-1	Bayou Rigolettes, Bayou Perot, and Harvey Cut Channel Management	HR	8	105	Jef.						\$2,770,000			This project would restore hydrologic conditions at the critical Land Bridge area by plugging several oil and gas canals, restricting channel dimensions at Harvey Cut, and restricting channel dimensions at the Bayou Perot/ Little Lake intersection.	2	
CWPPRA	MG-3	Dupre Cut Project (BA-26) Wetland Restoration	MC	8	105	Jef.						\$45,880,000			The project includes the development of an area-wide sediment delivery system. This system would utilize sediments that are hydraulically-dredged from the Mississippi River, and transported via slurry pipelines to the targeted marsh sites. The existing rock dikes at Dupre Cut will act as a retention feature to ensure that the sediments are successfully distributed into the target areas.	2	

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Program	Local Project Number		Project Name		Project Type		Senate District		House District		Parish		Project Costs		Project Summary	Planning Unit
CWPPRA	MG-5	South Shore of The Pen Shoreline Protection/ Stabilization	MC, SP	8	105	Jef.						\$34,800,000			The project would be conducted in three phases. Phase I would involve placing a dedicated dredge in the Barataria Bay Waterway that would retrieve sediments from the bottom of the waterway and place them behind the existing rock armor along the eastern shore. Phase II would include constructing a rock dike along the southeastern shoreline of The Pen and using a dedicated dredge to place materials behind it. Phase II would consist of reinforcing the existing protection along the southwestern shore of The Pen and filling the area behind the protection with dredged material.	2
CWPPRA	PR-2	Dupre Cut/ Barataria Bay Waterway Channel Management	HR	8	105	Jef.						\$7,600,000			This project proposes to strategically place four sheetpile barriers in the Barataria Bay Waterway as a means of reestablishing historic levels of hydrologic exchange within the area. This project would help protect the integrity of the shorelines of the Dupre Cut portion of the Barataria Bay Waterway. The project would also restrict channel dimensions to limit saltwater intrusion, tidal prism, and enhance freshwater retention.	2
CWPPRA	BS-1	PPL 3 (XBA-1c) Grand Pierre Island Restoration	SP	8	105	Jef.						N/A			The project would reconstruct breached shorelines, then restore interior marsh elevations and sand dune features.	2
CWPPRA	PR-7	Land Bridge Shoreline Protection Extension and Wetland Restoration	MC, SP	8	105	Jef.						\$39,000,000			This project is designed to fortify the region on the southern side of a portion of the Land Bridge Project - Phase 3. The wetland area is being hydrologically degraded by interior exposure from the oilfield canal breaches and shoreline erosion along surrounding water bodies. The project would construct approximately 28,000 feet of shoreline protection interspersed with viable oilfield canal closures, followed by the placement of dedicated dredge material to restore elevations of degraded wetland areas. The final identification of viable canal closure and wetland fill targets would be established during project design to maximize project effectiveness and minimize oil and gas impacts.	2
CWPPRA	NA-3	Goose Bayou to Cypress Bayou Shoreline Protection	SP	8	105	Jef.						\$5,000,000 - \$25,000,000			Approximately 8,000 linear feet of additional shoreline protection would be added along the west side of Goose Bayou to its intersection with Cypress Bayou. A dedicated dredge would move sediment from the bottom of The Pen to the area behind the shoreline protection. The deposited material would be built into a topographic ridge to restore the historic function of ridges in the project area. The artificial ridge would be planted with woody vegetation.	2
CWPPRA	BI-4	Elmer's Island and West Grand Terre Oak Ridge Restoration	BI	8	105	Jef.						\$3,000,000			This project will restore the natural ridges that historically sustained the growth of Oak Trees. The restored ridges would then be vegetated.	2
CWPPRA	FN-1	Caminada Chenier Restoration	BI	8	105	Jef.						\$19,000,000			This project will restore the areas natural chenier plain morphology by restoring the elevation and integrity of approximately seven deteriorated ridges. Existing ridges would be followed and breaches would be plugged to interconnect remaining ridge features. The project would also provide for the restoration of former borrow pits along LA Highway 1. Restoration of the former borrow pits would include the degradation of pit levees, followed by the placement of fill. Future dedicated dredging projects could be initiated for the purpose of restoring basin areas between the restored ridges to restore natural elevation and hydrologic gradients.	2
CWPPRA	MG-1	Myrtle Grove Natural Ridge Restoration	RR	8	105	Jef.						\$6,230,000			This project will restore the natural ridges that historically sustained the area's complex hydrology. Existing banklines will be followed and breaches will be plugged to interconnect existing land masses, and would thus create a series of ridges. The northern ridge would be constructed along a portion of the north bank of Bayou Dupont that lies between its intersection with oil and gas canals in the Sea Deuce area, westward from the intersection with the southeast bank of Chenier Traverse Bayou. The southern ridge would be constructed from the intersection of the Barataria Bay Waterway with the historical Bayou Barataria ridge, north of Dupre Cut, and would then veer southeastward, along the north bank of the historical ridge, crossing the Texaco Canals, and then intersecting with the north bank of Bayou Maurice, to terminate at the west bank of the Barataria Bay Waterway, south of Dupre Cut.	2
CIAP	MG-2	Lafitte Oil and Gas Field (East) Restoration	HR	8	105	Jef.						\$2,230,000			This project is to restore natural hydrology by eliminating avenues for saltwater intrusion and sediment loss. The Texaco Canals are a maze of existing oil and gas canals which now breach the natural ridges. After an evaluation of production activities within the field, several canals will be eliminated and plugged off to re-connect existing land masses. Future dedicated dredging can be utilized to fill the abandoned canals to reduce saltwater intrusion and enhance freshwater and sediment retention.	2
CIAP	PR-5	Shoreline Stabilization at North Bank of Bayou Rigolettes near Bayou Barataria	SP	8	105	Jef.						\$1,040,000			This project would protect the integrity of the north shoreline of Bayou Rigolettes at its intersection with Bayou Barataria near Lafitte, and would provide protection for the foundation and site of an existing water tank facility that provides potable drinking water to the coastal community of Grand Isle. The project would also eliminate further erosion of the north bank of Bayou Rigolettes directly at its intersection with Bayou Barataria, and by restricting any further widening of the channel, would help to limit unrestricted tidal prism exchange and saltwater intrusion.	2
CIAP	PR-6	Delta Farms Oil and Gas Field Restoration	SP	8	105	Jef.						\$1,300,000			This project would plug redundant oilfield access canals to enhance freshwater retention, improve hydrology, and to reduce pathways for saltwater intrusion and extreme tidal exchange.	2

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Program	Local Project Number		Project Name		Project Type			Senate District		House District		Parish		Project Costs		Project Summary	Planning Unit
CIAP	BI-5		Grand Isle Oil and Gas Pipeline Corridor Shoreline Protection - Alternative 1	SP		8		105			105	Jef.		\$2,400,000		The project is designed to protect Grand Isle's southern shoreline from erosion which may eventually affect the integrity of an offshore pipeline corridor. This alternative would construct a rock dike along an approximately 2-mile section of Grand Isle shoreline to directly protect the beach by armament.	2
CIAP	BI-5		Grand Isle Oil and Gas Pipeline Corridor Shoreline Protection - Alternative 2	SP		8		105			105	Jef.		\$1,600,000		The project is designed to protect Grand Isle's southern shoreline from erosion which may eventually affect the integrity of an offshore pipeline corridor. This alternative would construct approximately 1.25 miles of rip-rap breakwater segments to extend an existing breakwater alignment eastward. This would indirectly protect the beach by reducing wave energy.	2
CIAP	LAF-3		Levee Bridge Preliminary Design	INF		8		105			105	Jef.		\$1,750,000		This project would complete the preliminary design for the construction of a replacement for the Levee Bridge. The preliminary design phase would include survey, geotechnical testing, mitigation, permits, and the preparation of a preliminary design.	2
CARA	PR-11		Bayou Perot/ Rigolettes Peninsula Restoration	MC, SP		8		105			105	Jef.		\$125,000,000		The project would construct approximately 22,000 feet of restored shoreline to reconnect remaining landmasses of the peninsula. Dedicated dredge material would then be placed to fill open water areas, then to restore overall wetland elevations. The sequencing and limits for the filling of target areas would be established during project design to maximize effectiveness.	2
CARA	NA-8		Goose Bayou to Lafitte Levee	HP		8		105			105	Jef.		N/A		This project would construct flood protection from the Town of Jean Lafitte southward to Goose Bayou. The flood protection system would be constructed east of LA Highway 45 at the wetland/non-wetland interface.	2
CARA	BI-3		Elmer's Island Acquisition and Preservation	LA		8		105			105	Jef.		\$6,000,000		This project recommends the public purchase and preservation of 1,700 acres of Elmer's Island as a publicly accessible primitive area.	2
CARA	CS-4		Wetland Harbor Activities Recreational Facility (WHARF)	LA		8		105			105	Jef.		\$28,000,000		The project involves the development of multi-use facilities to provide individuals of all physical capabilities with onsite recreational opportunities. The development will also afford them access to the adjacent wetlands, nearby State and Federal parks, and the abundant natural and cultural experiences offered by Louisiana's wetlands.	2
CARA	BB-1		North Barataria Bay Shoreline Wave Breaks	SP		8		105			105	Jef.		\$42,600,000		This project would provide basin-wide protection to insure the integrity of the affected wetland shorelines south of Bay Jimmy and Wilkerson Bayou in the eastern portion of the project, north of Barataria Bay in the middle portion of the project, and adjacent to Bayou Cholas, Bayou Delond, and Creole Bay in the western portion of the project. The project would restrict channel dimensions at various locations in order to limit saltwater intrusion, tidal prism, and enhance freshwater retention.	2
State and Local	NA-1		Naomi Siphon Sediment Enrichment	FD		8		105			105	Jef.		\$330,000		This project involves using a dedicated dredge, during high water levels in the river, to pump river-bottom sediment into the discharge stream of the siphon. The enriched effluent would continue its course over land, depositing the sediments along its route.	2
State and Local	NA-6		Rosehome Wetlands Sewage Effluent Diversion	WA		8		105			105	Jef.		\$90,000		The proposed project envisions re-routing the Rosehome wastewater treatment plant effluent from the Intracoastal Canal to an area of adjacent wetlands. The project would consist of upgrading the capacity of the existing sewerage effluent pumping station and installing approximately 1,300 feet of force main. Water control structures and a flow distribution system would also be constructed to channel the flow through the wetlands. The outlet of the discharge line would be placed at the most hydrologically upstream point of the target wetland feasible to ensure that the maximum area of wetlands is benefited and the highest contaminant removal possible is achieved.	2
State and Local	CS-3		Bayou Segnette Wetlands Sewage Effluent Diversion	WA		8		105			105	Jef.		\$350,000		The proposed project envisions re-routing the Westwego wastewater treatment plant effluent from the local drainage canal network to an area of adjacent wetlands. The project would consist of constructing an effluent pumping station and installing approximately 4200 feet of force main. Water control structures and a flow distribution system would also be constructed to channel the flow through the wetlands. The outlet of the discharge line would be placed at the most hydrological upstream point of the target wetland feasible to ensure that the maximum area of wetlands is benefited and the highest contaminant removal possible is achieved.	2
State and Local	BI-6		Grand Isle Plan, Part I - NW Grand Isle Breakwater Enhancement	SP		8		105			105	Jef.		\$650,000		This project will modify existing ineffective breakwater segments on the northwest side of Grand Isle to close gaps which prevent sediment accretion.	2
N/A	N/A		Bay Coquette Barrier Island	BI		1		105			105	Plaq.		Not provided		Barrier island fronting Bay Coquette east of Scofield Island.	2
N/A	N/A		Chaland Headland	BI		1		105			105	Plaq.		Not provided		Chaland Headland.	2
N/A	N/A		Chenier Ronquille	BI		1		105			105	Plaq.		Not provided		Cheniere Ronquille.	2
N/A	N/A		E. Grand Terre	BI		1		105			105	Plaq.		Not provided		East Grande Terre.	2
N/A	N/A		Pass Chaland to Grand Bayou	BI		1		105			105	Plaq.		Not provided		Pass Chaland to Grande Bayou Pass.	2
N/A	N/A		Pelican Island	BI		1		105			105	Plaq.		Not provided		Restoration enhancement including elevating dunes and widening islands and planting a mangrove fringe on the backside of the islands across 2.4 miles, approximately 10 feet high and 2000 feet wide.	2
N/A	N/A		Sandy Point Barrier Island	BI		1		105			105	Plaq.		Not provided		Barrier Island E of Bay Coquette to Sandy Point.	2

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N/A	N/A		Sandy Point	BI	1		105		105		Plaq.		Not provided		Sandy Point/Bay Coquette.		2
N/A	N/A		Scofield Island	BI	1		105		105		Plaq.		Not provided		Restoration enhancement including elevating dunes and widening islands and planting a mangrove fringe on the backside of the islands approximately 10 feet high and 2000 feet wide.		2
N/A	N/A		Shell/Lanaux Island	BI	1		105		105		Plaq.		Not provided		Shell/Lanaux Island.		2
N/A	N/A		Baptiste Collete	DE	1		105		105		Plaq.		Not provided		Baptiste Collete sub-delta.		2
N/A	N/A		Venice	FD	1		105		105		Plaq.		Not provided		Venice: Tiger Pass to West Bay.		2
N/A	N/A		Bastian Bay/Buras	FD	1		105		105		Plaq.		Not provided		Buras/Bastian Bay Diversion.		2
N/A	N/A		Myrtle Grove	FD	1		105		105		Plaq.		Not provided		Myrtle Grove Diversion.		2
N/A	N/A		Naomi	FD	1		105		105		Plaq.		Not provided		Naomi Siphon.		2
N/A	N/A		Spanish Pass/Venice Diversion	FD	1		105		105		Plaq.		Not provided		Spanish Pass Freshwater Diversion.		2
N/A	N/A		West Point a la Hache	FD	1		105		105		Plaq.		Not provided		West Point a la Hache Siphon.		2
N/A	N/A		Empire-Triumph Fringe Marsh	MC	1		105		105		Plaq.		Not provided		Fringe Marsh Construction.		2
N/A	N/A		Myrtle Grove-Naomi	MC	1		105		105		Plaq.		Not provided		Myrtle Grove to Naomi Fringe Marsh.		2
N/A	N/A		Port Sulphur-West Pointe a la Hache	MC	1		105		105		Plaq.		Not provided		Port Sulphur to West Pointe a la Hache Fringe Marsh.		2
N/A	N/A		Venice-Triumph Fringe Marsh	MC	1		105		105		Plaq.		Not provided		Fringe Marsh Construction.		2
N/A	N/A		West Point a la Hache-Myrtle Grove	MC	1		105		105		Plaq.		Not provided		West Pointe a la Hache to Myrtle Grove Fringe Marsh.		2
N/A	N/A		Bayou Long/ Bayou Fontanelle	RR	1		105		105		Plaq.		Not provided		Empire Channel Islands, Bayou Long/Bayou Fontanelle.		2
N/A	N/A		Lake Hermitage	RR	1		105		105		Plaq.		Not provided		Bayou Grand Cheniere/Lake Hermitage.		2
N/A	N/A		Nairn	RR	1		105		105		Plaq.		Not provided		Ridge North of Bay de la Chentere (West of Nairn).		2
N/A	N/A		Bastian Bay	SP	1		105		105		Plaq.		Not provided		Bastian Bay.		2
N/A	N/A		Bay Coquette	SP	1		105		105		Plaq.		Not provided		Bay Coquette.		2
N/A	N/A		Bay Joe Wise	SP	1		105		105		Plaq.		Not provided		Bay Joe Wise.		2
N/A	N/A		Bay Long	SP	1		105		105		Plaq.		Not provided		Bay Long.		2
N/A	N/A		Bayou Grand Liard/Buras	SP	1		105		105		Plaq.		Not provided		Bayou Grande Liard/Buras Fringe Marsh.		2
N/A	N/A		Bayou Long	SP	1		105		105		Plaq.		Not provided		Empire Waterway/ Bayou Long.		2
N/A	N/A		Grand Terre (West)	SP	1		105		105		Plaq.		Not provided		North of West Grande Terre Island.		2
N/A	N/A		Venice	RR	1		105		105		Plaq.		Not provided		Ridge West of Venice along banks of Spanish Pass.		2
N/A	N/A		Highway 82/ Schooner Bayou Control Structure	SP	26	47					Ver.		Not provided		Install a barrier along the south bank of Schooner Bayou from LA Hwy 82 to the Schooner Bayou structure. These measures would halt saltwater intrusion into the basin, preserving the integrity of the Mementau Basin and create surge protection for the communities, agricultural economy and act as another line of defense against storm surges caused by tropical storms and hurricanes.		4
N/A	FD 8		South-West Shore Lake Decade	MC	20		51		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 42		East Island Dune and Marsh Restoration	BI	20		53		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 6		Marsh Creation to the North of Lost Lake	MC	20		51		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 7		West Shore Lake Decade	MC	20		51		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 9		Lake Decade Marsh Creation and Nourishment	MC	20		51		51		Ter.		\$21,000,000		Sediment would be dredged from Lake Decade and placed in a semi-confined manner in strategic locations along the lake shoreline to create and nourish intertidal intermediate and fresh marsh. Approximately half of the created marsh would be planted with appropriate wetland vegetation. The borrow area in Lake Decade would be located and designed in a manner to avoid and minimize potential environmental impacts to the maximum extent practicable.		3a
N/A	FD 10		North Shore Lake Mechant	MC	20		51		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 28		Marsh Creation East of Lake Boudreaux	MC	20		53		53		Ter.		Not provided		Description not provided.		3a

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N/A	FD 11	Marsh Creation North Racourdi Bay	MC	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 35	Bayou Dularge to Grand Pass Ridge Restoration	RR	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 36	Bayou Decade Ridge Restoration from Lake Decade to Racourci Bay	RR	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 12	Marsh Creation Bush Canal	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 13	Lake Boudreaux-Lake Quilman Shoreline Protection and Marsh Creation	MC, SP	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 15	Marsh Creation North Shore Lake Tambour	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 16	Terrebonne Bay Shoreline Protection/Marsh Creation Comprehensive Plan Project	MC, SP	20	51/53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 27	Marsh Creation East of Felix Lake	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 34	Bayou Terrebonne Ridge Restoration - Below Bush Canal	RR	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 87	Lake Mechant South-West Shoreline Protection and Bayou Dularge Ridge Protection	SP, RR	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 88	HNC Beneficial Use of Dredge Material (Bay Tambour and Terrebonne Bay)	MC	20	51/53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 89	Madison/Terrebonne Bays Marsh Creation	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 14	Marsh Creation North Shore Lake Chen	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 19	Bay Racourci Marsh Creation and Terracing Project	MC, SNT	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 20	Rebuild the East Bank of the Bayou Terrebonne - Integrity for Freshwater Conveyance	MC	20	53	Ter.	\$5,000,000 - \$20,000,000	Marsh creation on the east bank of Bayou Terrebonne from Madison Canal to Grand Bayou to improve the integrity of the channel to convey freshwater.		3a						
N/A	FD 25	Marsh Creation North Deep Saline	MC	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 26	Marsh Creation West of Four Point Bayou	MC	20	51	Ter.	Not provided	Description not provided.		3a						
N/A	FD 31	Lost Lake Shoreline Protection and Hydrologic Restoration	SP, HR	20	51	Ter.	\$26,000,000	The proposed project consists of several features to protect the marsh, create marsh and extend the land bridge function of the North Lost Lake Mechant Landbridge Project to the west. Marshes north, east, and west of Lost Lake serve an important function as an intermediate zone buffering fresh marshes to the north from higher salinities to the south. Features include 160 acres marsh nourishment along the northern and western shoreline of Lost Lake, 30 acres terracing to reduce fetch in the northeast of Lost Lake, 300 acres of marsh creation between Lake Paige and Bayou Decade, removal of weirs and installation of more open structures to increase the flow of freshwater and sediment delivery.		3a						
N/A	FD 63	Marsh Creation South-West of Four League Bay (Phased Implementation)	MC	20	51	Ter.	\$5,000,000 - \$20,000,000	Use of material dredged from the Atchafalaya River to create marsh of Point Au Fer Island.		3a						
N/A	FD 69	North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management	FI	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 84	Bank Stabilization along Bush Canal and Bayou Terrebonne	SP	20	53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 17	DULAC Bayou - Marsh Terracing	SNT	20	51/53	Ter.	Not provided	Description not provided.		3a						
N/A	FD 18	South Montegut - Marsh Terracing	SNT	20	53	Ter.	Not provided	Description not provided.		3a						

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N/A	FD 75		Lower Grand Caillou	HR		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 76		Upper Grand Caillou	HR		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 78		Point-Aux-Chene	HR		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 60		Remove Constrictions/Dredge GIWW from Bayou Black to Bayou Wallace	HR		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 82		Installation of Flap Gated Culverts Under Highway 57 between Dulac and Highway 56	HR		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 3		Plugs Leaks in GIWW (Bankline Protection for GIWW)	HR		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 61		Break in Avoca Guide Levee, North of Horse Shoe to Convey Freshwater to Terrebonne Marshes	FD		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 32		Chacahoula Basin Plan	HR		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 64		Carencro Bayou Freshwater Introduction Project	HR		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 43		Wine Island	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 44		West Timberlallier Island	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 50		Beach and Back Barrier Marsh Restoration, East and Trinity Islands	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 96		Barrier Shoreline Restoration Point Au Fer Island	BI		20		51		Ter.		Not provided		Description not provided.		3a
N/A	FD 46		Wine Island Rookery	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 48		West Racoon Island Shoal Enhancement and Protection	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	FD 38		Rock (Breakwaters) for Whiskey Island	BI		20		53		Ter.		Not provided		Description not provided.		3a
N/A	N/A		Franklin Canal Closure and Levee Improvements	HP		21		50		SIM.		\$5,775,000		Under normal circumstances, the Franklin Canal funnels stormwater from urban areas in and around Franklin to low lying outfall marshes and bays of the Gulf of Mexico along Louisiana's central coast. However, the Franklin Canal also serves as a conduit for reverse flows generated by storm surge from the Gulf. In this capacity, the canal has carried elevated water levels northward resulting in flooding in Franklin and along US Hwy 90 (an evacuation route) during Hurricanes Rita and Ike. A closure and levee improvements are proposed to prevent backflow through the canal during surge events. The proposed project uses a floating barge to close the canal and includes sheet pile, earthwork embankment, and levee improvements.		3b
N/A	N/A		Morgan City Levee Improvements	HP		21		50		SIM.		\$16,000,000 - \$20,000,000		The need for levee improvements in Morgan City was brought to the forefront by FEMA's issuance of new preliminary Digital Flood Insurance Rate Maps (DFIRMs) in 2009, recent levee profile surveys, and a subsequent appeal to FEMA issued by the City of Morgan City. Being proactive in flood protection, the citizens within Consolidated Gravity Drainage District No. 2 (Morgan City and vicinity) passed a bond election in late 2009. Proposed levee and pump station improvements indicate upgrades to existing levees to elevations ranging from 8 feet to 10 feet MSL. The improvements address vulnerability caused by water levels arising from Lake Palourde. The proposed upgrades will provide backwater protection from Atchafalaya riverine events and storm surge from the Gulf as well as from stormwater runoff in the Terrebonne Basin north of the city. Upon completion of this project, backwater protection levees in Morgan City will be suitable for certification by the City and FEMA accreditation.		3b
N/A	N/A		Amelia Flood Protection Improvements - Initial Phase (Partial Miller Plan Alternative 2E)	HP		21		50		SIM.		\$2,260,350		Amelia flood protection presently consists of a somewhat disparate, non-certifiable levee system which offers minimal backwater protection from Bayou Boeur and Lake Palourde. Drainage District No. 6 applied for Statewide Flood Control Program funds to increase the height of the levee to a consistent 7 feet MSL. Partial funding was granted. However, this initial phase is but a fraction of the proposed comprehensive levee system needed for the Amelia vicinity as proposed by the drainage district and state and federal authorities.		3b

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Program	Local Project Number		Project Name		Project Type			House District			Parish		Project Costs		Project Summary	Planning Unit
N/A	N/A		Hanson Canal and Yellow Bayou - Flood Control Structures	HP		21	50			50	SM.		\$6,200,000		Hanson Canal and Yellow Bayou, both similar to the Franklin Canal, were designated to serve as conduits for removal of stormwater following normal rainfall events. However, during hurricanes and related events, both serve as a means for reverse flow generated by storm surge. Hurricanes Rita and Ike are recorded example events. Closures and levee improvements are needed to prevent surge flows from moving inland during surge events.	3b
N/A	N/A		Yokely Levee Improvements	HP		21	50			50	SM.		\$5,000,000		During Hurricane Ike, the Charenton Navigational Canal overflowed its banks and inundated the Yokely drainage area with storm surge. Levee improvements and construction of a berm parallel to Industrial Road and the Charenton Navigational Canal south of US 90 are needed to prevent damages from storm surge inundation.	3b
N/A	N/A		Charenton Canal - Flood Control Structure and Levee Improvements - Alternative 1	HP		21	50			50	SM.		\$114,000,000		This alternative is presented as a flood control structure with embankment improvements along both sides of the Charenton Canal. Embankment improvements are needed to prevent overtopping of the canal along its length near urban areas. These improvements will connect to existing levees that are planned for upgrading and proposed federal and/or State funded levees. The timeframe for the construction of these federal/State levees was indefinite at this writing. Nonetheless, the general consensus at the local, regional, State, and federal levels is that the major new levee improvements are decades away, dependent upon state and federal funding appropriations. The functional success of this alternative is directly dependent upon completion of proposed federal and state alignments west of the Charenton Canal to and beyond the Cypremort Ridge tying in to highlands of the Teche Ridge near the parish line.	3b
N/A	N/A		Charenton Canal - Flood Control Structure and Levee Improvements - Alternative 2	HP		21	50			50	SM.		\$14,000,000		Alternative 2 proposes the construction of a flood control structure in Bayou Teche east of its intersection with Charenton Canal. This alternative is less costly than the previous option as it is not dependent on future new federal or state levee construction west of the Charenton Canal or along or west of the Cypremort Ridge. A short levee extension extending northward from the westernmost end of the Bayou Yokely Levee reach will be required.	3b
N/A	N/A		Berwick Levee Improvements - Reach W-124 South	HP		21	50			50	SM.		\$200,000		Reach W-124 near Turtle's Corner south of the city limits of Berwick has a height deficient section approximately 75 feet wide and 1.5 feet deep. The proposed project, which is a federal responsibility, is to fill and compact the area to ensure levee height and design consistency with the surrounding system.	3B
N/A	N/A		West of Wax Lake Outlet to Charenton Canal - Continued Levee Improvements	HP		21	50			50	SM.		\$117,000,000		Within the area defined by Drainage District No. 1, this project requires the elevation of 43 miles of levee to no less than 13 feet MSL. The current levee heights range from 3.5 feet to 20 feet MSL, and some reaches of the existing levee system have been breached by storm surge.	3b
N/A	N/A		Amelia Area - Continuation of Miller Plan Alternative 2E	HP		21	50			50	SM.		\$50,000,000		Alternative 2E follows the existing levee alignments in the northwestern section of Amelia and then create an internal levee ring to protect most of the residential areas of Amelia. This alternative excludes much of the industrial area along Bayou Boeuf.	3b
N/A	N/A		Berwick Lock Elevation	HP		21	50			50	SM.		\$1,000,000 - \$100,000,000		The Berwick Lock is currently below the elevation of the surrounding Atchafalaya River levee and seawall protection system. This situation creates vulnerability for all urban and agriculture land situated between Berwick and Calumet as a direct function of Atchafalaya River flows, both riverine and surge. The USACE is aware of the lock elevation deficiency and has the responsibility to elevate the height as needed.	3b
N/A	N/A		WHLO East, Wax Lake East, and W-124 Levee Reach Improvements	HP		21	50			50	SM.		\$22,000,000		The reaches currently protect the municipalities of Berwick and Patterson and the community of Bayou Vista from storm surge. Currently, the levee reaches range from 9-19 feet MSL. The proposed project would elevate the levees to a consistent 18 feet MSL.	3b
N/A	N/A		SMLD Backwater Plan Reconnaissance and Feasibility Analysis	HP		21	50			50	SM.		\$100,000		Reconnaissance Study and possible feasibility analysis	3b
N/A	N/A		Amelia Area - Miller Plan Alternative 3E	HP		21	50			50	SM.		\$171,650,000		This alternative is presented in the Miller Plan, begins in Assumption Parish on the east side of Bayou Boeuf near its intersection with Lake Palourde, continues southward east and inclusive of existing urban areas, crosses the Intracoastal Waterway with a control structure, continues westward in St. Mary Parish south of the Intracoastal Waterway along the higher ground of Avoca Island in a generally northwest direction, and ties into the Avoca Levee near the Bayou Boeuf Locks south of Morgan City.	3b
N/A	N/A		Amelia Area - Louisiana State Master Plan Alignment 1E	HP		21	50			50	SM.		\$400,000,000		The Louisiana State Master Plan Alignment begins east of St. Mary Parish coming westward from Terrebonne Parish to the east bank of Bayou Boeuf, crosses Bayou Boeuf south of the railroad track via a control structure, follows Bayou Boeuf on the Amelia side southward then turns northwest along the bank, proposes a lock in Bayou Boeuf connection to Avoca Island levee near the Bayou Boeuf Locks at Morgan City.	3b
N/A	N/A		Amelia Area - SMLD Backwater Prevention Plan 4E	HP		21	50			50	SM.				An additional alternative was presented during the planning process (4E) involving the construction of a backwater protection flood control structure in Bayou Chene south of the GIWW with associated new levee alignments. This alternative is in the conceptual stage of planning and requires additional analysis, comparison, and contrast to the other eastern St. Mary and regional backwater protection alternatives. Once reasonable feasibility is established, a detailed evaluation of this alternative may be warranted as a suitable alternative in the state master plan. An initial investigation generally following the guidelines of a USACE reconnaissance study would be in order in an effort to determine the basic feasibility of the alternative. A more detailed feasibility will follow should the project prove feasible with benefits and cost comparable to Alternatives 1E and 3E.	3b

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Program	Local Project Number		Project Name		Project Type		House District		Parish		Project Costs		Project Summary	Planning Unit
N/A	N/A		Bayou Choupique - Levee Improvements and Flood Control Structure	HP	21	50		STM.			\$40,000,000		Bayou Choupique functions as a conduit for storm surge much like the canals noted previously. A flood control structure and associated levee improvements are proposed to ensure adequate flood protection for the west end of the parish.	3b
N/A	N/A		Bayou Sale - Levee Improvements	HP	21	50		STM.			\$32,700,000		The levees along Bayou Sale are proposed for elevation to 18 feet MSL to ensure adequate storm surge protection. Gordy and Ellerslie reaches are included.	3b
N/A	N/A		West of Charenton Drainage Canal - Levee Construction - Miller Plan (SMLD Alternative 2W)	HP	21	50		STM.			\$66,250,000		This Miller Plan alternative proposes a levee alignment west of the Charenton Canal that generally follows the 5 foot contour extending westward to the Ivanhoe Canal, turns southward along the east side of the Cypremort Ridge, crosses Bayou Cypremort with a minor control structure, then generally follows the 5 foot contour along the west side of the ridge to appropriate connecting elevations of the Teche Ridge.	3b
N/A	N/A		West of Charenton Drainage Canal - Levee Construction - Louisiana State Master Plan (SMLD Alternative 1W)	HP	21	50		STM.			\$35,000,000		The Louisiana State Master Plan proposes a levee alignment which generally follows the alignment of the Miller Plan's western levee routing, but instead of turning south at the Cypremort Ridge, it continues westward crossing the ridge and extends to and beyond the parish line into Iberia Parish.	3b
N/A	N/A		Scott Canal - Flood Control Structure	HP	21	50		STM.			\$500,000		Scott Canal acts as a conduit for storm surge much like the Franklin Canal. A flood control structure is proposed to ensure adequate flood protection for the west end of the parish.	3b
N/A	N/A		Kelley Canal - Flood Control Structure	HP	21	50		STM.			\$500,000		Kelley Canal acts as a conduit for storm surge similar to others noted. A flood control structure is proposed to ensure adequate flood protection for the west end of the parish.	3b
N/A	N/A		Vacherie Canal - Flood Control Structure	HP	21	50		STM.			\$500,000		The Vacherie Canal acts as a conduit for storm surge similar to others noted. A flood control structure is proposed to ensure adequate flood protection for the west end of the parish.	3b
N/A	N/A		Bayou Tige Watershed/Flood Protection	HP	26	49		Ver.			Not provided		Provide protection to the watershed from storm events by construction of a levee system and water control structures that would link to similar measures in Iberia Parish.	3b
N/A	N/A		Flood Control Structure at Boston Canal	HP	26	50		Ver.			Not provided		Construct a flood control structure at the intersection of Boston Canal and the GIWW that could be closed in the event of a hurricane or tropical storm that would aid in stemming the rise of flood waters.	3b
N/A	N/A		Four Mile Canal Structure	HP	26	47		Ver.			Not provided		A reduction in the cross-sectional area of the channel by installing a structure at the terminal end which could be closed during storm events. An opening in the structure would allow the passage of marine vessels and barges. This would be in conjunction with other measures proposed for the GIWW whereby spoil elevation and armoring along the south side of the GIWW is proposed.	3b
N/A	N/A		Hebert Canal Watershed/Storm Protection	HP	26	47		Ver.			\$3,000,000		Install control structure on the Hebert Canal at the marsh/upland interface and raise the level of existing protection levees that will afford increased protection to communities from saltwater intrusion damage and flooding from storm surges. A previous plan created by the USDA NRCS has been completed and has engineering and design data.	3b
N/A	N/A		Protection Levees on the Marsh/Upland Interface	HP	26	47/50		Ver.			Not provided		By raising the height of an existing system of agricultural levees, an additional line of defense from tidal surges could be recognized. These existing levees would serve as a sound base for increasing the elevation.	3b
N/A	N/A		LA Hwy. 330 Hurricane Protection	HP	26	50		Ver.			Not provided		Armor the south side of the east/west side of LA 330.	3b
N/A	N/A		Flood Control Structure at Oaks Canal	HP	26	50		Ver.			Not provided		Construct a flood control structure at the intersection of Oaks Canal and the GIWW that could be closed in the event of a hurricane or tropical storm that would aid in stemming the rise of flood waters and protect surrounding wetlands.	3b
N/A	N/A		Freshwater Bayou Bank Stabilization	SP	26	47		Ver.			Not provided		Provide protection to the eastern spoil banks along Freshwater Bayou by repairing existing breaches and subsequently armoring the existing spoil bank. This would create a sound boundary which would protect surrounding fragile wetlands and also provide protection from storm surges during a tropical storm or hurricane. Measures also would be undertaken to reduce the cross-sectional area of the intersection where Bayou Chene intersects Vermilion Bay.	3b/4
N/A	N/A		Utilization of Existing Oil Field Canals	HP	26	47/50		Ver.			Not provided		Using existing oilfield canal spoil banks, raise existing elevation so that it would serve as a buffer that would intercept and minimize storm surge impacts and help reduce the amount of water borne floatsam and debris.	3b/4

Project Type: BI=Barrier Island; DM=Beneficial Use of Dredged Material; FD=Freshwater Diversion; HP=Hurricane Protection; HR=Hydrologic Restoration; INF=Infrastructure; LA=Land Acquisition; MC=Marsh Creation; MM=Marsh Management; OM=Outfall Management; PA=Public Access; PL=Planning; RR=Ridge Restoration; SD=Sediment Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; VP=Vegetation Planting; WA=Wastewater Assimilation.

Parish: Asc.=Ascension, Cal.=Calcasieu, Cam.=Cameron, Ibe.=Iberia, Jef.=Jefferson, Liv.=Livingston, Ori.=Orleans, Plaq.=Plaquemines, SIB.=St. Bernard, SIC.=St. Charles, SLa.=St. James, SLo.=St. John the Baptist, STM.=St. Martin, STr.=St. Tammany, Tan.=Tangipahoa, Ter.=Terrebonne, Ver.=Vermilion.

PARISH CONCEPTS FROM COASTAL MASTER PLANS

Program	Local Project Number		Project Name		Project Type		Senate District		House District		Parish		Project Costs		Project Summary	Planning Unit
N/A	CPCS13		Calcasieu Ship Channel Salinity Control Measure Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$404,198,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS14		Cameron Creole Freshwater Introduction	HR	25	47	Cam.		Cam.		\$12,482,434		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS19		Constriction of Sabine Lake at Hwy 82 Causeway	HR	25	47	Cam.		Cam.		\$1,083,514		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS20		East Calcasieu Lake Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$5,495,089		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS22		East Calcasieu Lake Marsh Creation & Hydrologic Restoration (A)	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS23		East Calcasieu Lake Marsh Creation & Hydrologic Restoration (B)	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS29		First Bayou Freshwater Introduction	HR	25	47	Cam.		Cam.		\$3,772,982		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS31		Gulf Intracoastal Water Way Calcasieu Locks Expansion	HR	25	47	Cam.		Cam.		\$300,000,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS34		Gum Cove Ridge Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$307,820,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS39		Maintain Sabine River Flows into Sabine Lake	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS10		Calcasieu Ship Channel Sediment By Pass	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS70		Plug West Cove Canal	HR	25	47	Cam.		Cam.		\$1,033,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS53		Sabine River Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$47,768,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS54		Salinity Reduction at Sabine Lake Causeway	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS59		Tripod Bayou Control Structure	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME09		Humble Canal Hydrologic Restoration (Spillway)	HR	25	47	Cam.		Cam.		\$3,878,982		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME10		Humble Canal Spillway	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME11		Improved Drainage East Grand Chenier	HR	25	47	Cam.		Cam.		\$5,000,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME12		Kings Bayou Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$1,200,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME14		Little Pecan Bayou Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$8,778,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME18		Mermentau River Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$76,040,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME20		Mermentau Spillway (Big Burn) Humble Canal	HR	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME21		Muria & Kings Bayou Drainage Improvements	HR	25	47	Cam.		Cam.		\$1,281,040		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME23		Oak Grove Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$877,800		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME24		Reconditioning of East End Locks	HR	25	47	Cam.		Cam.		\$20,000,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME27		Rockefeller Wildlife Refuge Spillway & Hwy 82 Modification	HR	25	47	Cam.		Cam.		\$12,000,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME30		South Oak Grove Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$877,800		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME33		West Club Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$458,407		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPME35		Woods Tract Hydrologic Restoration	HR	25	47	Cam.		Cam.		\$219,450		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS01		Beneficial Use of Dredge Spoil at Sabine National Wildlife Refuge	MC	25	47	Cam.		Cam.		\$25,939,077		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS02		Black Bayou Marsh Creation	MC	25	47	Cam.		Cam.		\$1,189,934,181		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS03		Black Bayou Terraces	MC	25	47	Cam.		Cam.		\$8,532,094		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS04		Black Bayou Terracing Project	SNT	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS05		Black Lake Marsh Restoration	MC	25	47	Cam.		Cam.		\$4,382,606		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS06		Black Lake Restoration Project	Not Avail.	25	47	Cam.		Cam.		Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	
N/A	CPCS08		Black Lake/Gum Cove Terracing	MC	25	47	Cam.		Cam.		\$11,655,866		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.		4	

PARISH CONCEPTS FROM COASTAL MASTER PLANS

Program	Local Project Number			Project Name			Project Type			Senate District			House District			Parish			Project Costs			Project Summary			Planning Unit
	Project Number			Project Name			Project Type			Senate District			House District			Parish			Project Costs			Project Summary			
	Project Number	Project Name	Project Type	Senate District	House District	Parish	Project Costs	Project Summary	Planning Unit																
N/A	CPCS09	Calcasieu Ship Channel Marsh Creation	MC	25	47	Cam.	\$620,658,248	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS15	Cameron Meadows Marsh Creation	MC	25	47	Cam.	\$774,465,811	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS16	Cameron Meadows Wetland Restoration	MC	25	47	Cam.	\$2,580,279,941	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS17	Central Canal Marsh Creation	MC	25	47	Cam.	\$893,862,252	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS18	Commissary Point Marsh Creation	MC	25	47	Cam.	\$78,427,828	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS21	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$3,477,117,831	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS22	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$12,979,029	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS23	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$8,847,120	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS24	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$11,977,646	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS23	East Calcasieu Lake Marsh Creation & hydrologic Restoration	MC	25	47	Cam.	\$7,071,533	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS24	East Cove Marsh Creation	MC	25	47	Cam.	\$13,832,088	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS26	East Prong Grand Bayou Marsh Creation Project	MC	25	47	Cam.	\$26,566,711	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS33	Gum Cove Marsh Creation	MC	25	47	Cam.	\$780,218,832	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS37	Kelso Bayou Marsh Creation	MC	25	47	Cam.	\$12,040,467	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS38	Lake Calcasieu Beneficial Use	MC	25	47	Cam.	\$24,007,981	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS40	Marsh Creation in Calcasieu Lake - Beneficial Use	MC	25	47	Cam.	\$11,022,316	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS41	Mud Lake Marsh Creation	MC	25	47	Cam.	\$918,359,223	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS42	No Name Bayou Marsh Creation	MC	25	47	Cam.	\$39,478,302	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS43	North Cameron Meadows Restoration	MC	25	47	Cam.	\$87,470,645	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS44	North Mud Lake Marsh Creation & Nourishment	MC	25	47	Cam.	\$38,723,287	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS45	North West Cove Marsh Creation & Nourishment	MC	25	47	Cam.	\$49,018,650	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS46	North Willow Lake Restoration	MC	25	47	Cam.	\$13,063,672	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS47	Northwest Calcasieu Lake (North of Hackberry) Marsh Creation	MC	25	47	Cam.	\$3,093,080,570	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS47A	Northwest Calcasieu Lake (North of Hackberry) Component A Marsh Creation	MC	25	47	Cam.	\$904,215,130	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS47B	Northwest Calcasieu Lake (North of Hackberry) Component B Marsh Creation	MC	25	47	Cam.	\$934,629,690	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS47C	Northwest Calcasieu Lake (North of Hackberry) Component C Marsh Creation	MC	25	47	Cam.	\$1,274,052,035	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS48	Northwest Calcasieu Lake (South of Hackberry) Marsh Creation	MC	25	47	Cam.	\$2,569,391,271	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS48A	Northwest Calcasieu Lake (South of Hackberry) Component A Marsh Creation	MC	25	47	Cam.	\$1,136,005,097	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS48B	Northwest Calcasieu Lake (South of Hackberry) Component B Marsh Creation	MC	25	47	Cam.	\$1,442,245,190	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS50	Rabbit Island Marsh Creation	MC	25	47	Cam.	\$10,217,288	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS51	Sabine Marsh Creation Browns Lake Area	MC	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS52	Sabine Refuge Marsh Creation & Nourishment	MC	25	47	Cam.	\$53,031,969	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS53	Sabine Refuge Marsh Creation Project Cycles 6 & 7	MC	25	47	Cam.	\$22,051,574	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS56	Southeast Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$1,783,258,033	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS58	Sweet Lake Land & Oil Shoreline Protection & Marsh Creation	MC	25	47	Cam.	\$79,094,433	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																
N/A	CPCS59	Sweet Lake Marsh Creation	MC	25	47	Cam.	\$604,964,269	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4																

PARISH CONCEPTS FROM COASTAL MASTER PLANS

Program	Local Project Number			Project Name		Project Type		Senate District		House District		Parish		Project Costs		Project Summary	Planning Unit
N/A				CPCS61A	Vincent and Chinaberry Island Cameron Parish Marsh Creation	MC	25	47	Cam.					\$28,900,241		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS61B	Vincent and Chinaberry Island Cameron Parish Marsh Creation	MC	25	47	Cam.					\$28,926,641		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS61C	Vincent and Chinaberry Island Cameron Parish Marsh Creation	MC	25	47	Cam.					\$28,900,241		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS61D	Vincent and Chinaberry Island Cameron Parish Marsh Creation	MC	25	47	Cam.					\$27,370,384		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS62	West Cove Marsh Creation & Nourishment	MC	25	47	Cam.					\$31,851,387		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME01	Chenier du Fond Restoration & Shoreline Protection	SP	25	47	Cam.					Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME16	Lower Mud Lake Sediment Trapping	MC	25	47	Cam.					\$932,469		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME17	Lower Mud Lake Terracing and Bankline Stabilization	SNT, BS	25	47	Cam.					Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME28	South Grand Chenier Marsh Creation	MC	25	47	Cam.					\$22,325,704		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME29	South Grand Chenier Marsh Creation	MC	25	47	Cam.					\$1,717,512,928		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME34	Willow Cutoff Wetland Restoration	SP	25	47	Cam.					\$774,713		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS07	Black Lake Shoreline Restoration	SP	25	47	Cam.					\$13,668,024		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS11	Calcasieu-Sabine Bank Stabilization	SP	25	47	Cam.					\$25,412,000		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS12	Calcasieu-Sabine Component A Shoreline Protection	SP	25	47	Cam.					\$31,998,068		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS25	East Holly Beach Gulf Shoreline Protection	SP	25	47	Cam.					\$31,997,068		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS27	East Sabine Lake Shoreline Protection	SP	25	47	Cam.					\$11,376,898		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS32	Gulf Shoreline Protection (Calcasieu River to Freshwater Bayou)	SP	25	47	Cam.					\$452,469,592		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME19	Mermentau Ship Channel Sediment By Pass	OT	25	47	Cam.					Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS32A	Gulf Shoreline Protection (Calcasieu River to Rockefeller)	SP	25	47	Cam.					\$338,507,025		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS32B	Gulf Shoreline Protection (Calcasieu River to Lower Mud Lake)	SP	25	47	Cam.					\$173,457,789		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPCS56	Sweet Lake & Willow Lake North Shoreline Restoration	MC	25	47	Cam.					\$30,745,784		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME01	Chenier du Fond Restoration & Shoreline Protection	SP	25	47	Cam.					\$31,630,347		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME03	GIWW at Amoco Bank Stabilization	SP	25	47	Cam.					\$1,354,393		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME05	Grand Lake Shoreline Protection	SP	25	47	Cam.					\$14,085,683		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME06	Grand Lake Shoreline Protection at Umbrella Bay and Lacassine Point	SP	25	47	Cam.					\$29,986,251		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME13	Lacassine Pool South Levee Protection	SP	25	47	Cam.					\$17,932,158		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME22	North Little Chenier Levee Protection	OT	25	47	Cam.					Not provided		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME25	Rockefeller Gulf of Mexico Shoreline Stabilization, Joseph's Harbor East Project	SP	25	47	Cam.					\$19,564,190		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME26	Rockefeller Refuge Shoreline Protection	SP	25	47	Cam.					\$97,820,348		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME31	Southwest White Lake Shoreline Protection	SP	25	47	Cam.					\$21,077,340		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
N/A				CPME32	Umbrella Bay Shoreline Protection Project	SP	25	47	Cam.					\$21,670,281		Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4

Project Type: BI=Barrier Island; DM=Beneficial Use of Dredged Material; FD=Freshwater Diversion; HP=Hurricane Protection; Parish: Asc=Ascension, Asu=Assumption, Cal=Calcasieu, Cam=Cameron, Ibe=Iberia, Jef=Jefferson, Laf=Lafourche, Liv=Livingston, Ori=Orleans, HR=Hydrologic Restoration; INF=Infrastructure; LA=Land Acquisition; MC=Marsh Creation; MM=Marsh Management; OM=Outfall Plaq=Plaquemines, SIB=St. Bernard, SIC=St. Charles, SIda=St. James, SIdo=St. John the Baptist, SIdM=St. Mary, SIdML=St. Martin, SIdT=St. Tammany, Management; OT=other project types (Infrastructure, etc.); PA=Public Access; PL=Planning; TRN=Ridge Restoration; SD=Sediment Tan=Tangipahoa, Ter=Terrebonne, Ver=Verillion Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; TE=Terraces; VP=Vegetation Planting; WA=Wastewater Assimilation.

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Appendix E

Inventory of Non-State Projects

C. Restoration Partnership Projects

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Year	Project	Partner	Award	Match
FY2008	Black Lake/West Hackberry Terracing	Ducks Unlimited, Inc	\$2,000,000	\$2,110,000
FY2010	Westwego WHARF	Trust for Public Land	\$1,025,000	\$1,250,000
FY2010	Calcasieu-Sabine Watershed Restoration	Ducks Unlimited, Inc	\$1,780,805	\$1,195,290
FY2010	Christian Marsh Terraces	Coalition to Restore Coastal Louisiana	\$454,720	\$298,000
FY2010	10,000 Trees for Louisiana	Coalition to Restore Coastal Louisiana	\$84,475	\$335,790
FY2010	Terrebonne Vegetative Plantings	Terrebonne Parish	\$11,833	\$130,000
FY2010	N. Lake Mechant Landbridge completion	Conoco Phillips	\$30,000	\$5,000
FY2012	LaBranche Wetlands Hydrologic Restoration	Coalition to Restore Coastal Louisiana	\$350,000	\$330,000
FY2012	Reforestation 50 acres with Superior Bald cypress	Restore The Earth Foundation	\$100,000	\$540,000
FY2012	St. Louis Canal Freshwater Introduction Project	Ducks Unlimited, Inc	\$550,000	\$800,000
FY2013	Biloxi Marsh Oyster Reef Restoration Project	The Nature Conservancy	\$400,000	\$159,300
FY2013	Establishment of Bald cypress--Water Tupelo Nurseries for Restoration of Forested Wetlands and for Protection of Flood Control Levees in Coastal Louisiana	Comite Resources	\$100,000	\$50,000
FY2013	Carencro Bayou Freshwater Introduction	Ducks Unlimited, Inc	\$500,000	\$560,537
FY2014	Restoration and Refurbishment of the Grand Chenier Marshes	Miami Corporation and Cameron Gravity Drainage District #5	\$75,000	\$220,000
FY2014	Golden Meadow Marsh Creation	Ducks Unlimited, Inc	\$480,000	\$600,000
FY2014	Planting Bald cypress for Forested Wetland Restoration at East Tchefuncte Marsh Assimilation Wetland	City of Mandeville	\$25,000	\$25,000
FY2014	Coastal Forest and Ridge Restoration Planting Project	Coalition to Restore Coastal Louisiana	\$80,000	\$296,264
FY2014	Biloxi Marsh Community-based Oyster Reef Restoration Project	TNC and CRCL	\$352,432	\$210,696
FY 2015	Mud Lake Area Terraces	Apache Louisiana Minerals	\$150,000	\$150,000
FY 2015	Golden Meadow Marsh Creation, Phase II	Ducks Unlimited, Inc	\$385,000	\$600,000
FY 2015	W-15 Beneficial Use Marsh Creation Project	St. Tammany Parish Government	\$400,000	\$244,000
FY 2015	Freshwater Bayou Volunteer-Based Marsh Restoration Project	Coalition to Restore Coastal Louisiana	\$65,000	\$78,664
FY 2016	Mud Lake Area Terraces, Phase II	Apache Louisiana Minerals	\$100,000	\$100,000
FY 2016	Oyster Bed Surge Protection System	Terrebonne Parish	\$500,000	\$2,100,000
FY 2016	Calcasieu Lake & Sabine national wildlife refuge-oyster reef restoration project	The Nature Conservancy	\$300,000	\$200,000
FY 2016	Coastal Forest Restoration Project	Coalition to Restore Coastal Louisiana	\$100,000	\$327,648
TOTAL			\$10,399,265	\$12,916,189

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Appendix F
CPRA FY 2019 Capital
Outlay Requests

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STATE OF LOUISIANA
DIVISION OF ADMINISTRATION
FACILITY PLANNING AND CONTROL
State Agency E-Corts Priority List for Fiscal Year 2019

Agency Priority	Department Priority	Agency Number	Project Request Title	Funding Source	(Year 1) FY2019	(Year 2) FY2020	(Year 3) FY2021	(Year 4) FY2022	(Year 5) Outlying Years	Total by Project
1 of 14	1 of 14	109	CPRA Projects	IAT	\$150,000					\$150,000
				FED	\$55,250,000					\$55,250,000
				NRR STAT DED	\$93,000,000					\$93,000,000
				CPR STAT DED	\$211,522,500					\$211,522,500
2 of 14	2 of 14	109	West Bank and Vicinity , New Orleans, LA Hurricane Protection (BA-66)	GO Bonds	\$0	\$49,857,025	\$49,857,025	\$49,857,025	\$1,346,139,675	\$1,495,710,750
3 of 14	3 of 14	109	Lake Pontchartrain, LA & Vicinity Hurricane Protection Project (PO-63)	GO Bonds	\$0	\$48,575,094	\$48,575,094	\$48,575,094	\$1,311,527,538	\$1,457,252,820
4 of 14	4 of 14	109	St. Mary Backwater Flooding Protection (AT-024)	GO Bonds	\$11,200,000	\$15,000,000	\$4,800,000	\$0	\$0	\$31,000,000
5 of 14	5 of 14	110	Grand Isle Levee Dune Enhancement Project (BA-198)	GO Bonds	\$2,000,000	\$9,100,000	\$3,900,000	\$0	\$0	\$15,000,000
6 of 14	6 of 14	109	Lafitte Area Tidal Protection (BA-75)	GO Bonds	\$12,000,000	\$10,000,000	\$0	\$0	\$0	\$22,000,000
7 of 14	7 of 14	109	Western St. Charles Flood Protection	GO Bonds	\$4,500,000	\$3,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$37,500,000
8 of 14	8 of 14	109	West Shore, Lake Pontchartrain, Louisiana Hurricane Protection Project (PO-62)	GO Bonds	\$1,625,000	\$1,000,000	\$13,279,500	\$13,279,500	\$22,148,000	\$251,332,000
9 of 14	9 of 14	109	Southwest Coastal Louisiana Project (LA-20)	GO Bonds	\$1,050,000	\$17,500,000	\$17,500,000	\$17,500,000	\$1,133,340,600	\$1,186,890,600
10 of 14	10 of 14	109	Lockport to Larose Hurricane Protection Levee	GO Bonds	\$5,000,000	\$10,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$75,000,000
11 of 14	11 of 14	109	Morganza, LA to the Gulf of Mexico Hurricane Protection Project (TE-64)	GO Bonds	\$53,000,000	\$40,000,000	\$40,000,000	\$40,000,000	\$40,000,000	\$213,000,000
12 of 14	12 of 14	109	North Shore, Lake Pontchartrain Flood Protection (PO-167)	GO Bonds	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
13 of 14	13 of 14	109	South Central Coastal Plan (TV-54)	GO Bonds	\$30,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$30,667,279	\$135,667,279
14 of 14	14 of 14	109	Delcambre-Avery Canal Storm Surge Protection (TV-57)	GO Bonds	\$2,500,000	\$25,000,000	\$8,000,000	\$0	\$0	\$35,500,000
TOTALS:					\$487,797,500	\$254,032,119	\$240,911,619	\$224,211,619	\$4,113,823,092	\$5,320,775,949







Please address written comments to:

Coastal Protection and Restoration Authority

Public Comments
150 Terrace Avenue
Baton Rouge, LA 70802

Or email: Coastal@la.gov

Public comments period closes on **February 12, 2018**

www.coastal.la.gov