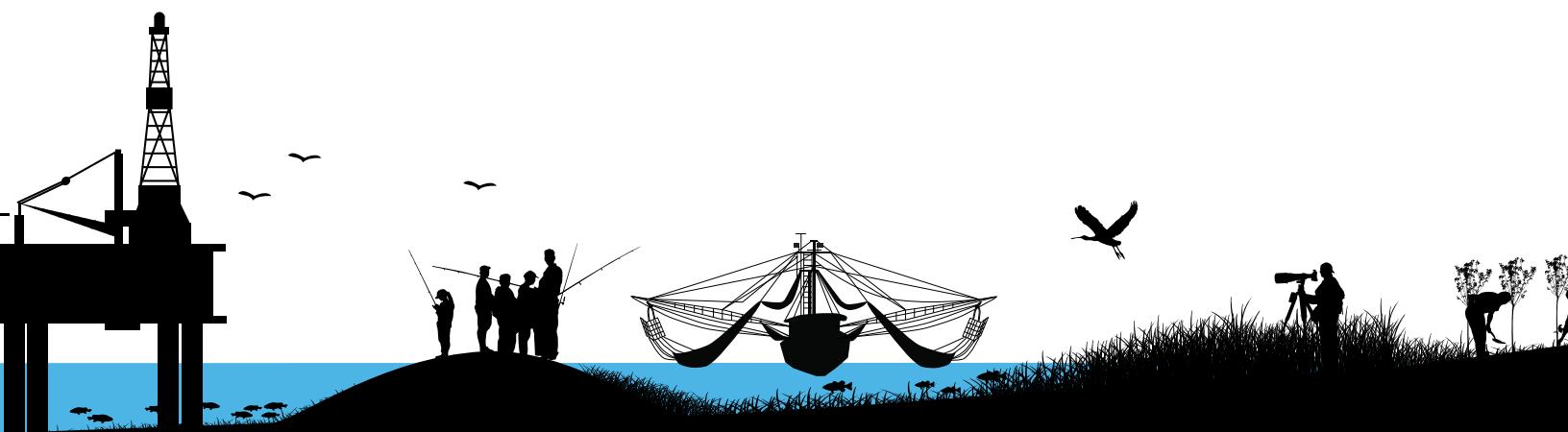




Integrated Ecosystem Restoration & Hurricane Protection in Coastal Louisiana: Fiscal Year 2018 Annual Plan

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 (CPRA) 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. To avoid confusion, the 2012 Louisiana Legislature changed the name of the state agency from OCPR to CPRA.

The CPRA is required by Act 523 of the 2009 Regular Legislative Session, to produce an Annual Plan that inventories projects, presents implementation schedules for these projects, and identifies funding schedules and budgets. This Fiscal Year (FY) 2018 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 2018 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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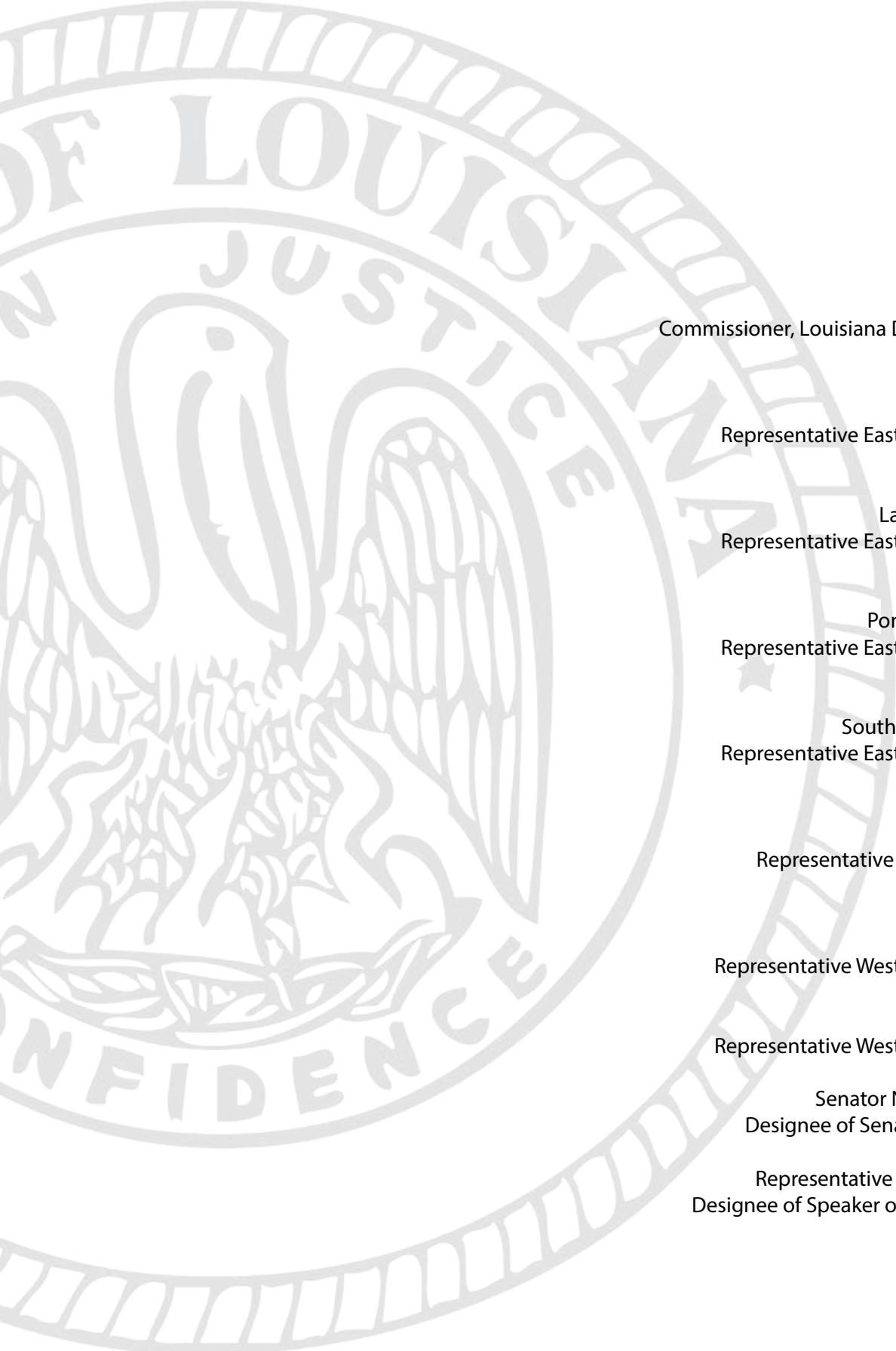
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State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

April 25, 2017

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 2018 Annual Plan*.

The Annual Plan includes three-year revenue and expenditure projections, project implementation schedules, and a program progress assessment. It also identifies immediate actions toward implementation of the Coastal Master Plan. Included in this year's plan are funds from the *Deepwater Horizon* oil spill for restoration projects to address injuries to natural resources in Louisiana, for marsh creation and living shoreline projects, and funds for the continued advancement of two major sediment diversion projects critical to the long-term sustainability of coastal Louisiana. These projects require extremely sophisticated and comprehensive planning, strict adherence to engineering and design schedules, and an adaptive management program to ensure optimal implementation and management.

While restoring our natural assets, we must also protect what we still have. Flood gates like the recently-dedicated Petite Caillou floodgate and rollergate near Cocodrie—part of the ever-advancing Morganza to the Gulf levee system—and the barge gate on Bayou Lafourche at Lockport are examples of critical flood risk reduction projects. In FY 2018, additional flood reduction projects include levee lifts, installation of permanent pump stations, tidal protection at Rosethorne and Jean Lafitte, flood protection improvements at Morgan City, and additional St. Mary Parish backwater flood protection project, to name just a few.

We also acknowledge that while we cannot restore Louisiana's footprint to the time before the levees were built, CPRA's Coastal Master Plan is a bold action plan that recognizes the urgency to reconnect the Mississippi River to the delta. Every single decision we make will be based on reflection and review of those decisions that came before it. Using engineering, ingenuity, and adaptive science, CPRA will implement robust solutions to counter Louisiana's coastal land loss.

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.

I encourage you to read the plan, ask questions about the plan, and become an advocate of the plan. Stand with us to build momentum and consensus around the plan, now and for future generations, to support implementation of the 2017 Coastal Master Plan.

Sincerely,

Johnny Bradberry

Chair, Coastal Protection and Restoration Authority

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Purpose of the Annual Plan

This plan is the annual report card used to track the progress of projects outlined in *Louisiana's Comprehensive Master Plan for a Sustainable Coast*. 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's directive, the State released *Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast* (2007 Coastal Master Plan). The 2007 Coastal Master Plan established four planning objectives as benchmarks for implementing coastal protection and restoration projects and identified large-scale measures needed to achieve a sustainable coast. 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, the first update of the Coastal Master Plan was submitted to the Louisiana Legislature in March 2012. It was unanimously adopted. The update will be submitted in April 2017.

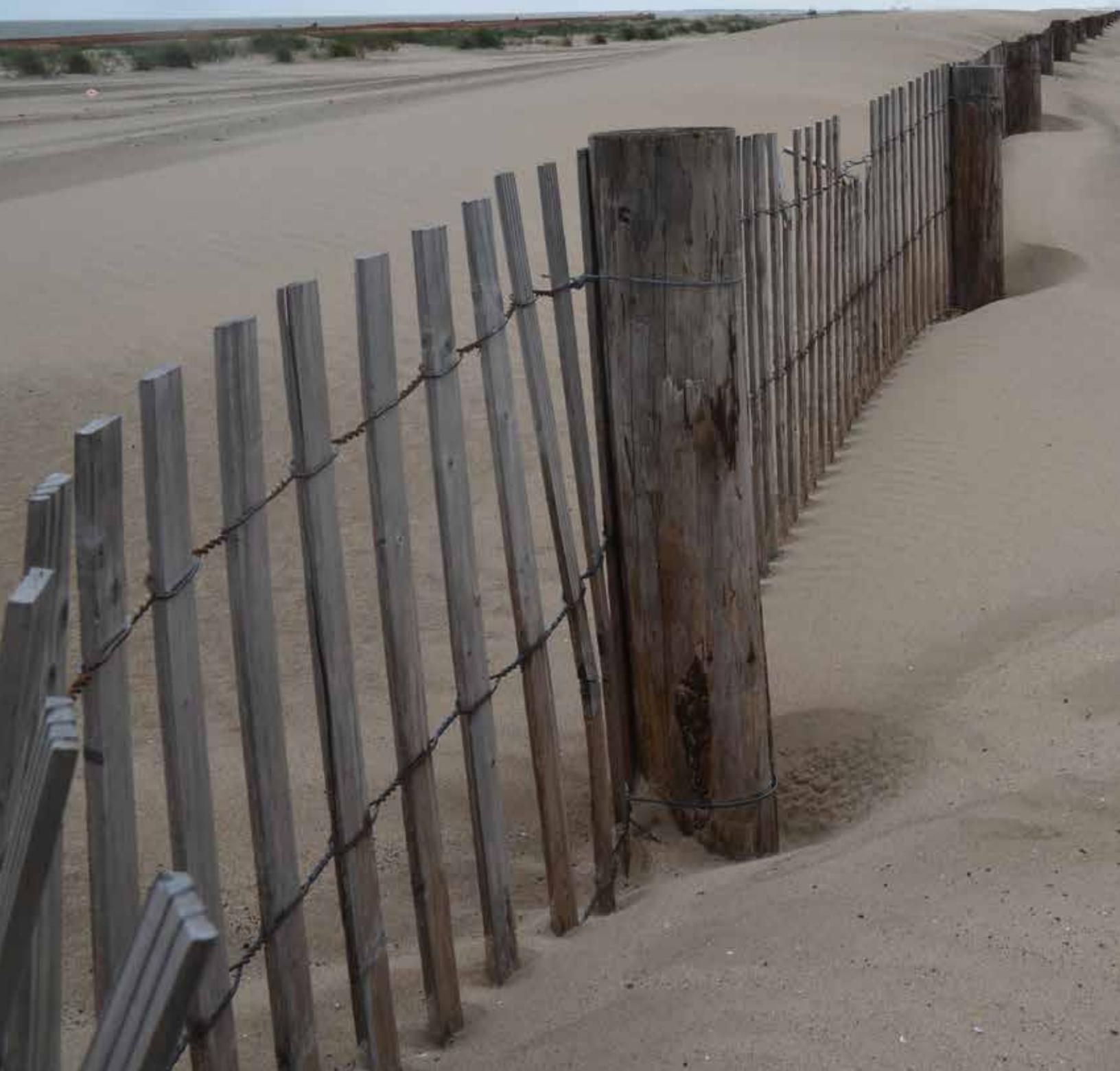
Act 523 of the 2009 Regular Legislative Session directed CPRA to produce an Annual Plan each year that inventories integrated coastal protection projects, presents implementation schedules for these projects, and identifies funding schedules and budgets.*

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 2018 Annual Plan fulfills the legislative mandate of Act 8 by presenting CPRA's three-year program for funding and implementing projects during FY 2018–FY 2020.

Additionally, the FY 2018 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 2017; Section 3 outlines an implementation plan for FY 2018; Section 4 gives fiscal projections for FY 2018 to 2020; and the Appendices provide detailed information on CPRA projects, programs and initiatives.

*La R.S. 49:214.29(4) 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."



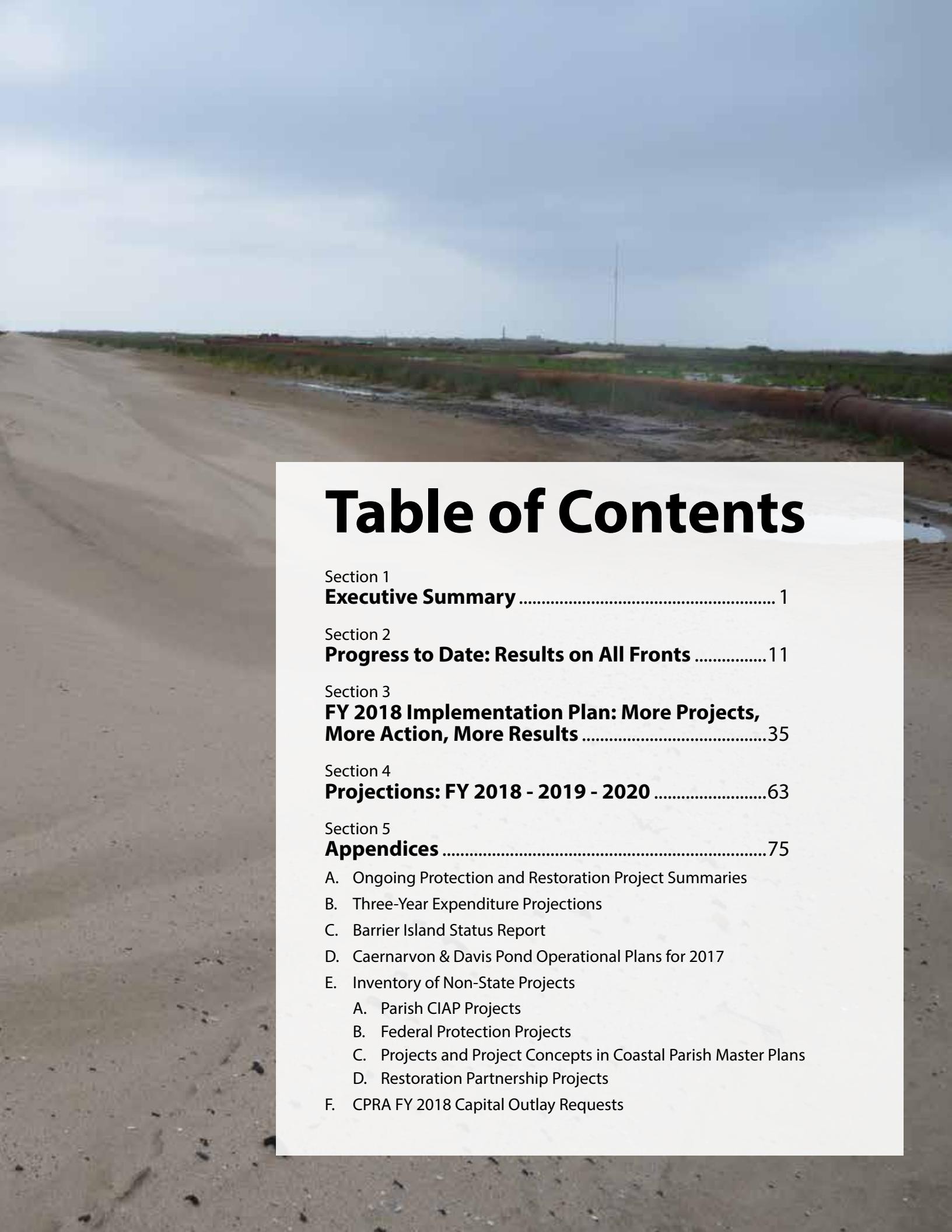


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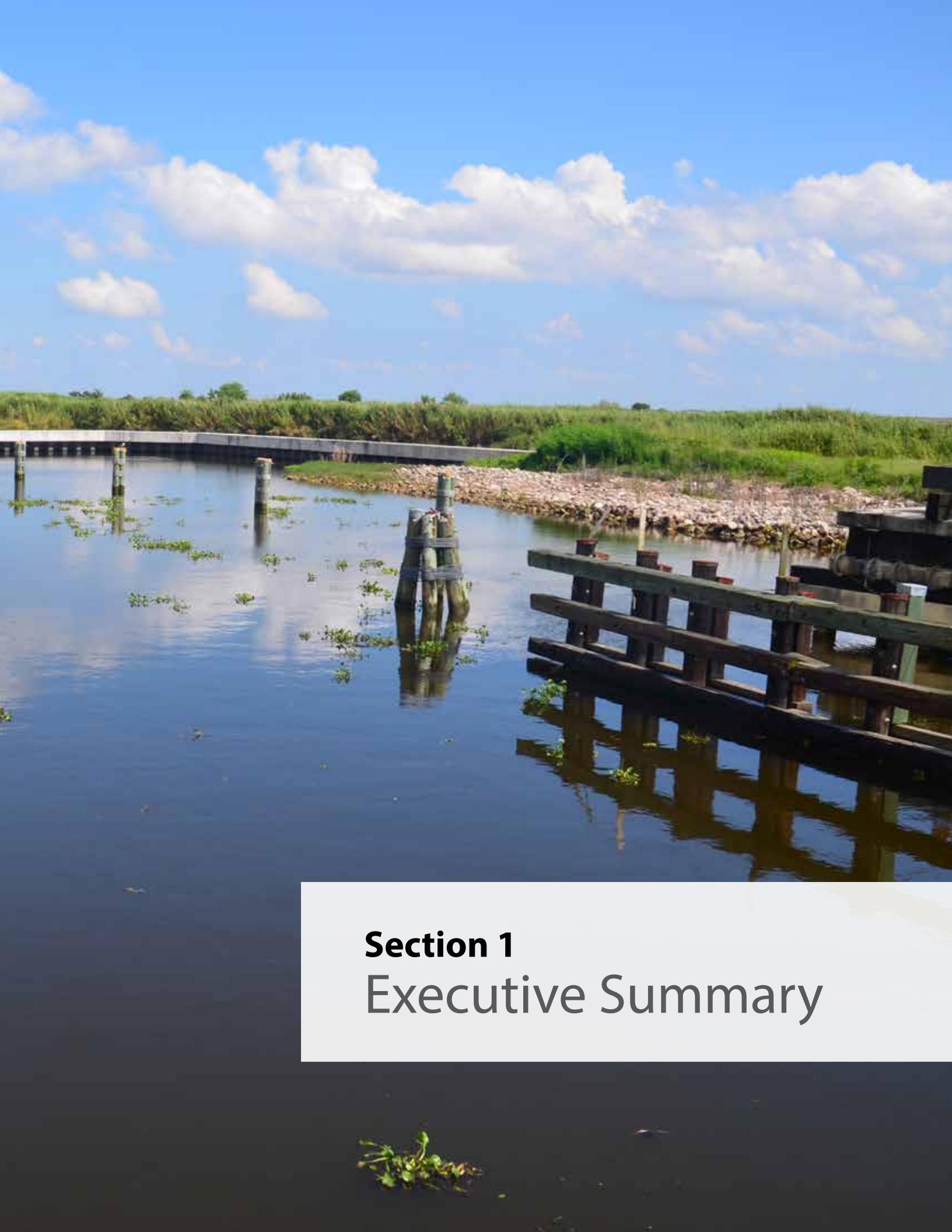
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Section 1

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 17 include:

- **Barataria Basin Landbridge Shoreline Protection – Phase 3 (BA-0027-C):** Completing construction of approximately 22,800 feet of rock dike shoreline to reduce or eliminate erosion along the west bank of Bayou Perot and the north shore of Little Lake. Benefits 5,587 acres of marsh.
- **Mississippi River Long Distance Sediment Pipeline (BA-0043-EB):** This reusable pipeline corridor (that remains available for future restoration projects) helped accomplish a suite of projects in Plaquemines and Jefferson Parishes below Belle Chasse that used sustainable sediment sources to create and nourish approximately 542 acres of marsh in an area where sediment is limited.
- **Bayou Dupont Marsh and Ridge Creation (BA-0048):** This completed project used sediment from the Mississippi River to create 277 acres of marsh, nourish 93 additional acres of marsh, and built 20 acres (11,000 linear feet) of ridge. Project used a total of more than 5.3 million cubic yards of cut and fill sediment.
- **Bayou Dupont Sediment Delivery – Marsh Creation #3 and Terracing (BA-0164):** Created and nourished 138 acres of emergent intermediate marsh using sediment from the Mississippi River, along with creation of 9,679 linear feet of terraces.
- **Bayou Bonfouca Marsh Creation (PO-0104):** Restoring and nourishing approximately 621 acres of interior marsh and reestablishing the Lake Pontchartrain shoreline rim.
- **Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD (BA-0161):** Constructed a barge-gate capable of preventing saltwater intrusion coming up the bayou. Other components of the project include modifications to the pump station and railroad crossing at Donaldsonville, dredging and other structures addressing problems facing the Bayou Lafourche waterway.
- **Jean Lafitte Tidal Protection (BA-0075-1):** This project, currently in construction, will provide flood protection improvements by raising 15,840 linear feet of existing earthen levee. The project will also include approximately 7,900 linear feet of concrete capped, steel sheet pile floodwall, and flood gates.
- **Living Shoreline (PO-0148):** Used 9,000 manmade structures to create 3.1 miles of shoreline protection in Eloi Bay in St. Bernard Parish with the additional goal of oyster reef inducement. Ancillary projects in Plaquemines and Jefferson Parishes.

- **Shell Island West - NRDA (BA-0111):** This completed project has restored the integrity of the Shell Island West barrier island, reduced wave energies within the bay area, and reestablished productive habitat to Bastian Bay and the surrounding area. It created 287 acres of marsh and 319 acres of dune and beach while adding 1.5 miles in length to the eastern lobe of Shell Island (originally restored in 2013 as project BA-0110), and added another 281 acres and 1.2 miles to the western lobe. These islands are part of the Barataria Basin barrier island chain reconstructed in Plaquemines Parish.
- **Caminada Headland Beach and Dune – Increment 2 (BA-0143):** This completed project has restored and protected beach and dune habitat across the Caminada Headland through the direct placement of approximately 5.5 million cubic yards of sandy material from Ship Shoal (an offshore borrow source). A total of 489 acres of beach and dune habitat was restored. The restored shoreline stretches 13 miles eastward from Belle Pass at the mouth of Bayou Lafourche below Port Fourchon to the eastern end of Elmer's Island.
- **Hydrologic Restoration of the Amite River Diversion Canal (PO-0142):** This completed project allows for drainage of the Maurepas Swamp into the Amite River Diversion Canal by dredging three bank openings along with conveyance channels, berms and swamp floor vegetative plantings.
- **South Lake Lery Shoreline and Marsh Restoration (BS-0016):** This project has used 2.1 million cubic yards of dredged sediment to create 396 acres of marsh and restored approximately 32,000 feet of the southern Lake Lery shoreline in Plaquemines Parish.
- **SELA (PO-0057):** Advancement on the Hurricane & Storm Damage Risk Reduction System around greater metropolitan New Orleans to reduce damage from rainfall flooding in Orleans and Jefferson parishes. This includes increasing pump station capacity and improving surface and sub-surface drainage features.
- **Lake Pontchartrain and Vicinity (PO-0063):** Rehabilitation or new construction of more than 128 miles of levees and structures that make up the Lake Pontchartrain and Vicinity Hurricane Protection System. Involves more than 30 projects in St. Charles, Jefferson, Orleans and St. Bernard Parishes to provide 100 year protection levels.
- **LPV Mitigation Project, Manchac WMA Marsh Creation (PO-0146):** Created approximately 110 acres of marsh using more than 800,000 cubic yards of dredged material, with five miles of non-continuous rock breakwaters for shoreline protection in St. John the Baptist Parish.
- **Grand Lake Shoreline Protection – Tebo Point (ME-0021):** Construction of a rock dike in Cameron Parish to protect the south shoreline of Grand Lake from Catfish Lake through Tebo Point, with operations and maintenance to include rock dike previously constructed from Superior Canal to Catfish Lake.

Anticipated Projects

- **Larose to Golden Meadow – Larose Sheetpile (TE-0065-SP):** Constructed approximately 2,400 feet of sheet pile to an elevation of +13 feet along the Gulf Intracoastal Waterway at Larose in Lafourche Parish to increase the level of hurricane protection for the adjacent area.
 - **Mississippi River Delta Strategic Planning – SSPM Expansion (MR-0016-SSPM):** Completing construction of a small scale physical model of the lower Mississippi River housed in a 50,000 square foot building at the Baton Rouge Water Campus.
- 

Projects anticipated to begin or continue construction in Fiscal Year 2018 include:

- Hydrologic Restoration and Vegetative Plantings in the Lac De Allemands Swamp (BA-0034-2)
- Rosethorne Tidal Protection (BA-0075-2)
- Jean Lafitte Tidal Protection (BA-0075-1)
- Lafitte Area Levee Repair (BA-0082)
- WBV HSDRRS Mitigation (BA-0109)
- Previously Authorized WBV Mitigation (BA-0154)
- Kraemer-Bayou Boeuf Levee Lift (BA-0169)
- Spanish Pass Ridge and Marsh Restoration (BA-0191)
- Cameron Creole Watershed Grand Bayou Marsh Creation (CS-0054)
- Oyster Bayou Marsh Creation and Terracing (CS-0059)
- Permanent Canal Closures and Pump Stations (PO-0060)
- Bayou Bonfouca Marsh Creation Project (PO-0104)
- Violet Canal North Levee/Floodwall Realignment (PO-0170)
- Rockefeller Refuge Gulf Shoreline Stabilization (ME-0018)
- Grand Lake Shoreline and Marsh Restoration, Tebo Point (ME-0021)
- Lost Lake Marsh Creation and Hydrologic Restoration (TE-0072)
- Cut-Off Pointe Aux Chene Levee (TE-0078)
- NRDA Caillou Lake Headlands (TE-0100)
- St. Mary Parish Backwater Flood Protection (TE-0116)
- Morgan City Flood Protection Improvements (TV-0055)
- Cole's Bayou Marsh Restoration (TV-0063)

The FY 2018 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 2018 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 2018 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 2018 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 can be accessed online at www.coastal.la.gov.

► Table ES-1: Projected Three-Year Revenues (FY 2018 - FY 2020)

Revenue Sources	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
CPR Trust Fund Annual Revenue ^{1,2}	\$14,600,000	\$15,200,000	\$15,700,000	\$45,500,000
CPR Trust Fund Carried Forward	\$6,751,177	TBD	TBD	\$6,751,177
GOMESA ^{1,3}	\$140,000,000	\$140,000,000	\$140,000,000	\$420,000,000
GOMESA Carried Forward ⁴	\$1,600,000	\$119,750,000	TBD	\$121,350,000
DOTD Interagency Transfer ¹	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
DOTD Interagency Transfer- Projects	\$73,600	\$0	\$0	\$73,600
CWPPRA Federal Funds ⁵	\$96,384,103	\$75,904,989	\$76,500,081	\$248,789,173
Surplus '07, '08, '09 Carried Forward	\$161,284,403	\$26,000,310	\$7,054,375	\$194,339,088
Community Development Block Grants	\$9,806,680	\$11,680	\$0	\$9,818,360
Capital Outlay Funds	\$15,560,000	TBD	TBD	\$15,560,000
NRDA Revenues (<i>Deepwater Horizon</i>)	\$140,820,491	\$38,940,922	\$150,855,241	\$330,616,653
NFWF Revenues (<i>Deepwater Horizon</i>)	\$54,410,295	\$65,827,227	\$519,239,290	\$639,476,812
Proposed RESTORE Revenues (<i>Deepwater Horizon</i>)	\$61,718,000	\$48,206,637	\$132,798,175	\$242,722,812
LDNR Mitigation Funds ⁶	\$500,000	\$500,000	\$500,000	\$1,500,000
LDNR Beneficial Use Funds ⁶	\$250,000	\$250,000	\$250,000	\$750,000
LDWF Interagency Transfer ⁷	\$1,000,000	\$0	\$0	\$1,000,000
MOEX Settlement ⁸	\$704,687	\$131,250	\$704,687	\$1,540,624
Berm to Barrier ⁹	\$98,972	\$14,600	\$21,680	\$135,252
OM&M Federal Funds ¹⁰	\$29,048,815	\$17,423,395	\$15,467,305	\$61,939,515
FEMA Reimbursement for OM&M ^{11,12}	\$1,510,886	\$0	\$0	\$1,510,886
LOSCO Funding ¹³	\$112,272	\$102,272	\$102,272	\$316,816
NAS Research Practice Grant ¹⁴	\$200,000	\$200,000	\$200,000	\$600,000
Project Billing ¹⁵	\$23,380,757	\$24,701,841	\$25,689,914	\$73,772,512
Capital Outlay Request Submitted for HSDRRS 30-Year Payback	\$0	\$0	\$98,000,000	\$98,000,000
Total Projected Revenue	\$763,815,138	\$577,165,122	\$1,187,083,020	\$2,528,063,280

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 2018 GOMESA funds are anticipated to be received between April 2018 (4Q18) and September 2018 (1Q19). Because the funds would arrive no earlier than the final quarter of FY 2018, nearly all 2018 GOMESA funding would be expended no earlier than FY 2019. Projects to receive GOMESA funding will be provided in the FY 2019 Annual Plan to ensure that proper clarity is available regarding the exact amount of available GOMESA funding, and also to ensure consistency with the 2017 Master Plan (which will be in effect at the time of receipt of GOMESA funding).
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 2018 of an initial deposit of \$6.75 million of funds from the MOEX settlement.
9. Used to fund monitoring of constructed Berm to Barrier projects.
10. 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.
11. Represents anticipated reimbursement associated with recovery from past disasters which has been obligated by FEMA.
12. CPRA is pursuing FEMA recovery funding through the FEMA appeals process to restore the form and function of the Coastal Barrier Island Resource System (CBRS) units S01-S08 which were lost as a result of Hurricane Katrina. The cumulative cost of this restoration is estimated to be on the order of \$500 million.
13. Represents reimbursement of expenditures for CPRA (non-DWH) oil spill response activities.
14. Represents funding applied for in December 2016 to fund select Monitoring Data and Interpretations tasks (see Table 4-3).
15. Represents salary and other work-in-kind reimbursements for services performed on projects in funding programs listed in the table above.

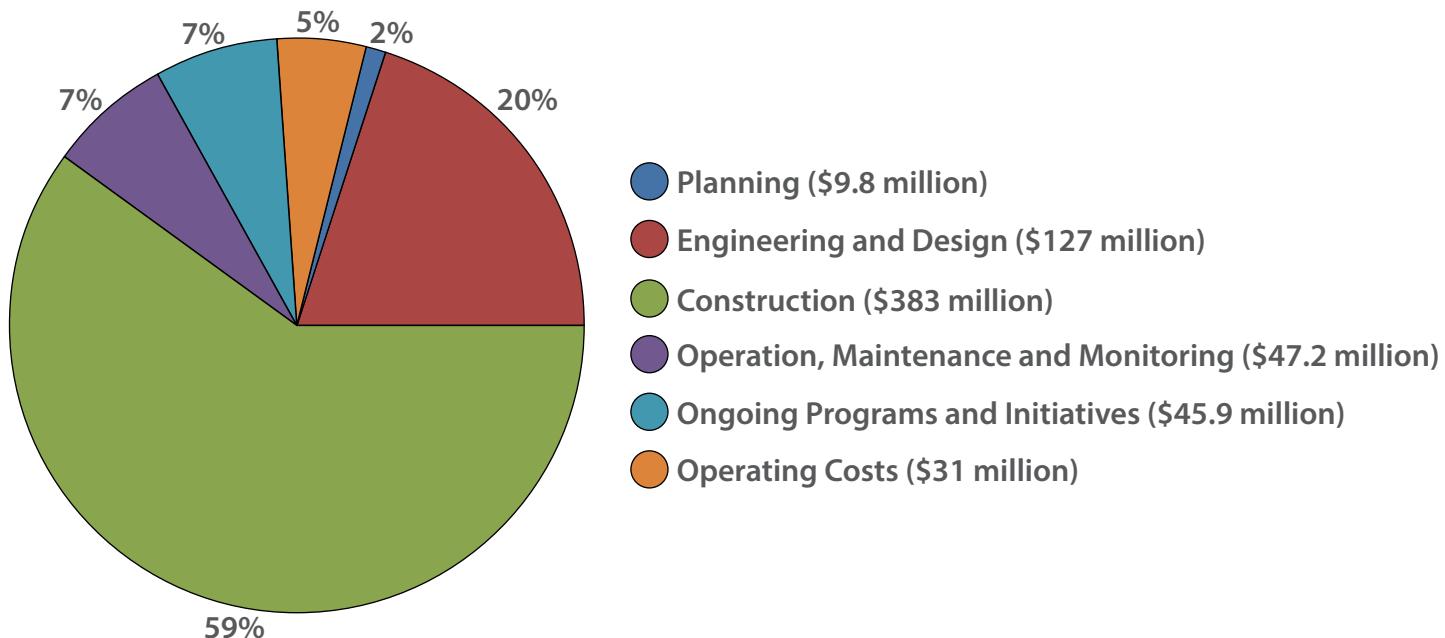
► **Table ES-2: Projected Three-Year Expenditures¹ (FY 2018 - FY 2020)**

Program/Funding Source	FY 2018	FY 2019	FY 2020	Program Total
CWPPRA State Expenditures (not including Surplus expenditures) ²	\$8,509,289	\$14,095,011	\$13,499,919	\$36,104,219
CWPPRA Federal Expenditures ³	\$96,384,103	\$75,904,989	\$76,500,081	\$248,789,173
WRDA Project Expenditures (not including Surplus expenditures)	\$0	\$0	\$0	\$0
Surplus Projects and Program Expenditures	\$161,284,403	\$26,000,310	\$7,054,375	\$194,339,088
Community Development Block Grants	\$9,806,680	\$11,680	\$0	\$9,818,360
HSDRRS 30-Year Payback ⁴	\$0	\$0	\$98,000,000	\$98,000,000
MOEX Project Expenditures	\$704,687	\$131,250	\$704,687	\$1,540,624
DOTD Interagency Transfer- HNC Deepening Expenditures	\$73,600	\$0	\$0	\$73,600
Capital Outlay Project Expenditures	\$15,560,000	TBD	TBD	\$15,560,000
State-Only Project Expenditures (Non-Surplus)	\$188,184	\$199,864	\$199,864	\$587,912
NRDA Expenditures (<i>Deepwater Horizon</i>)	\$140,820,491	\$38,940,922	\$150,855,241	\$330,616,653
NFWF Expenditures (<i>Deepwater Horizon</i>)	\$54,410,295	\$65,827,227	\$519,239,290	\$639,476,812
Proposed RESTORE Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$61,718,000	\$48,206,637	\$132,798,175	\$242,722,812
LDNR Mitigation Expenditures ⁵	\$500,000	\$500,000	\$500,000	\$1,500,000
LDNR Beneficial Use Expenditures ⁵	\$250,000	\$250,000	\$250,000	\$750,000
LDWF Interagency Transfer Expenditures ⁶	\$1,000,000	\$0	\$0	\$1,000,000
OM&M- State Expenditures (not including Surplus expenditures)	\$9,126,372	\$8,673,455	\$6,083,374	\$23,883,201
OM&M- Federal Expenditures ⁷	\$29,048,815	\$17,423,395	\$15,467,305	\$61,939,515
OM&M- Marine Debris Removal (Partially Reimbursed by FEMA) ⁸	\$1,640,130	\$0	\$0	\$1,640,130
GOMESA Expenditures ⁹	\$21,850,000	TBD	TBD	\$21,850,000
NAS Research Practice Grant Expenditures	\$200,000	\$200,000	\$200,000	\$600,000
Operating Costs (see Tables 4-3 and 4-4)	\$30,990,089	\$36,800,160	\$39,790,392	\$107,580,641
Total Planned Expenditures	\$644,065,138	\$333,164,899	\$1,061,142,703	\$2,038,372,740

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 2019 - FY 2020 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. Represents anticipated reimbursement associated with recovery from past disasters which has been obligated by FEMA.
9. FY 2018 GOMESA expenditures include the GOMESA Infrastructure Program (\$14 million) and Adaptive Management expenditures (see Table 4-3). Projects to receive GOMESA funding will be provided in the FY 2019 Annual Plan to ensure that proper clarity is available regarding the exact amount of available funding and also to ensure consistency with the 2017 Master Plan (which will be in effect at the time of receipt of GOMESA funding).

► **Figure ES-1: Projected FY 2018 Expenditures by Project Phase**



Notes

- Construction includes Beneficial Use (\$1.7 million)
- OM&M includes BIMP (\$2.6 million), Repair/Rehabilitation of Projects (\$759,739), Marine Debris Removal (\$1.6 million)

**TOTAL Expenditures
\$644 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, engineering, 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:

Caminada Headland Beach and Dune Restoration Project (BA-0143)

With restoration of the final reach on the eastern end of the headlands, CPRA accomplished its largest restoration project to date. Combined with the first increment of the project (BA-0045), more than 13 miles of beach and dune have been restored, stretching from below Port Fourchon to the eastern end adjacent to Caminada Pass. In all, 8.41 million cubic yards of material was dredged from Ship Shoal in federal offshore waters and barged 30 miles to create 1059 acres of protective headlands. Total cost of the two increments was more than \$216 million. With the seaward barrier restored, future plans include sediment supplementation into the marsh area between the beach and Highway One leading to Grand Isle.



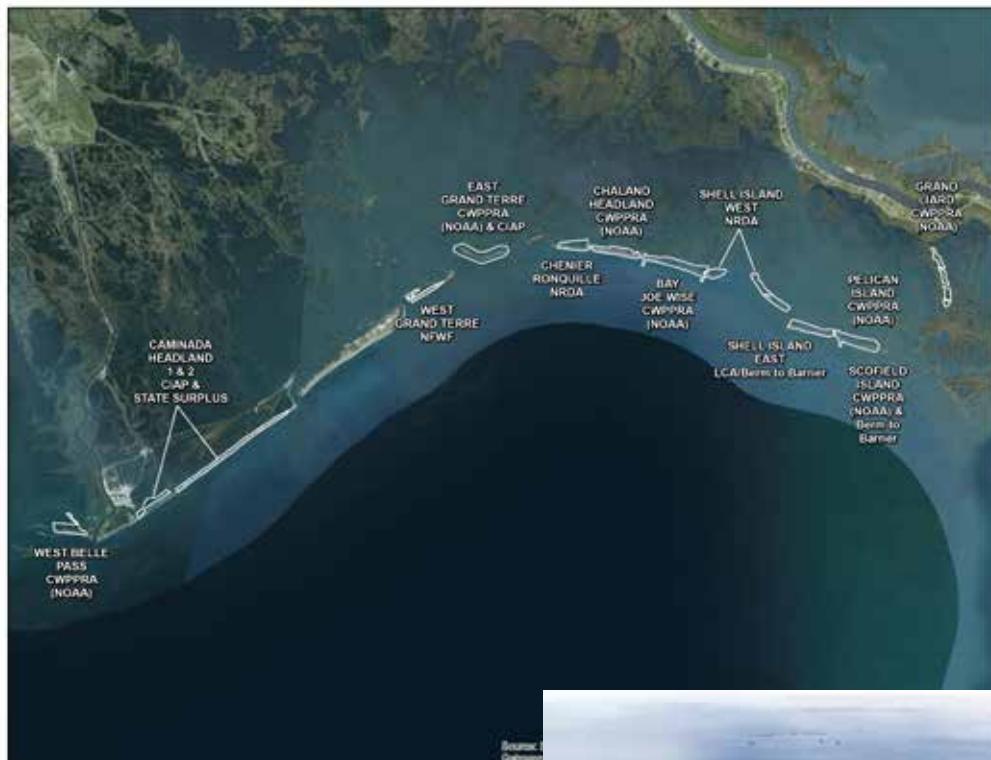
This aerial photograph shows the Caminada Headland beach and dune extending eastward towards Grand Isle at the top of the photo. At a combined cost of more than \$216 million, this restoration project is the largest in CPRA history. The declining wetlands behind the beach will be addressed in a future CWPPRA-funded project.

To restore the 13 miles of headland, CPRA used more than 8.4 million cubic yards of sand to create 1059 acres of beach and dune, roughly an area equivalent of almost 1047 football fields.



Shell Island West - NRDA (BA-0111)

The latest accomplishment in restoring our barrier islands chain is actually an extension of an earlier restoration, doubling Shell Island in size after resurrecting it from open water just three years earlier. That earlier project built a two mile island with a back marsh; this latest project added another 1.5 miles and 600 acres of beach, dune and marsh. An additional 1.2 miles and 133 acres were also added to a non-consecutive section to the west.



Barrier islands are our first line of defense against damaging storm surge. CPRA has been restoring these islands and headlands in a substantial and more sustainable manner.



The extension of Shell Island is seen here as the beach and dune are extended to the west using sand dredged from the Mississippi River and pipelined more than 20 miles to the site. The back marsh is also being extended to the west.

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

A series of projects has been building land along a permitted corridor stretching westward from the Mississippi River below Belle Chasse and Jean Lafitte. The original Bayou Dupont project was the first to build land using sediment dredged from the Mississippi River. This latest project created 138 acres along with 1.8 miles of sediment-capturing terraces.



All of this brown "dirt" is actually sediment dredged from the bottom of the nearby Mississippi River and pumped through more than 13 miles of pipeline to its final destination, turning open water areas into land and marsh.



This and adjacent projects along the "Long Distance Sediment Pipeline" corridor have built more than 1,800 acres of land, roughly the equivalent of 1,648 football fields, all using material dredged from the Mississippi River.

Mississippi River Reintroduction into Bayou Lafourche (BA-0161)

This suite of projects is revitalizing historic Bayou Lafourche, a distributary of the Mississippi that was cut off from the river's flow, then reconnected via water pumped over the levee at Donaldsonville. However, a railroad bridge was restricting adequate flow until \$4 million in CPRA funding helped open the bottleneck by rebuilding the bridge into an open span support structure.

Other components of the Bayou Lafourche project include doubling the pump capacity, dredging the bayou, and constructing a salinity control structure at Lockport.



Culverts under the old railroad bridge restricted the amount of water that could be pumped from the Mississippi River at Donaldsonville. CPRA helped fund the construction of a new open span bridge that now allows the pumps (also funded by CPRA) to send more fresh water down Bayou Lafourche.

When conditions make it necessary, this barge gate at Lockport can be closed to prevent the progression of saltwater up Bayou Lafourche.



Hydrologic Restoration of the Amite River Diversion Canal (PO-0142)

Too much water can be a bad thing, even for swamps and wetlands. Water sitting for too long a time can drown a marsh or even a hardwood swamp. This was the case with portions of the 122,000 acre Maurepas Swamp Wildlife Management Area. The north spoil bank of the Amite River Diversion Canal was acting as a dam, not allowing the swamp to drain the way healthy swamp areas periodically do. Three openings were dredged to allow natural drainage, to be followed with the planting of one million cypress seedlings in areas that were once too waterlogged for natural propagation.



The water line is evident at about the 4-foot height of these tree trunks in the Maurepas Swamp. While other plant species can thrive in a constant water environment, cypress tree seedlings cannot.

Channels dredged through the spoil bank levee not only help drain the swamp, but also allows the periodic flow of fresh river water and nutrients into the swamp basin.



Living Shoreline Demonstration Project (PO-0148)

Oysters are more than a delicacy, they can be a natural form of coastal protection against damaging storm surge and wave action. Restoring our depleted oyster reefs—once massive along our coast—is a difficult but worthwhile pursuit. This project is using 9,000 manmade structures to create 3.1 miles of shoreline protection in St. Bernard Parish. Four different artificial structures are being used to test whether one type is better than the others at inducing oysters to attach, grow and accumulate into a sustainable reef.



The calming effect of even a small foreshore barrier is evident as the energy of the choppy water is dissipated before reaching the marsh edge.



Workers place one of the four types of artificial reef structures designed to attenuate wave action, increase biodiversity along with oyster development, and allow sediment accretion between the shore and the reef.

Deepwater Horizon Oil Spill

In April 2016, the federal court overseeing the 2010 *Deepwater Horizon* oil spill litigation approved a settlement agreement and consent decree resolving civil claims against BP arising from the oil spill. The global settlement is worth more than \$20 billion. Over the next 15 years, Louisiana will receive a minimum of \$8.7 billion for claims related to natural resource damages under the Oil Pollution Act, Clean Water Act civil penalties, and the State's various economic claims.

In addition to the consent decree, which provides the details of the settlement, the *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) Trustees prepared a Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). This document will govern the use of the up to \$8.7 billion in NRDA settlement funds, which includes at least \$5 billion specifically for restoring damages to natural resources in Louisiana.

Details of the Consent Decree

Under the terms of the consent decree, BP must pay the following:

- Up to \$8.7 billion for natural resource damages (includes \$1 billion in early restoration projects);
- \$5.5 billion (plus interest) for Clean Water Act civil penalties (subject to the RESTORE Act); and
- \$600 million for other claims.

Additionally, BP entered into a separate agreement to pay \$4.9 billion to the five Gulf States and up to a total of \$1 billion to several hundred local governmental bodies to settle claims for economic damages suffered as a result of the spill.

A breakdown of Louisiana's share of these funds is as follows:

- A minimum of \$5 billion for natural resource damages (includes \$368 million previously allocated for early restoration projects);
- A minimum of approximately \$787 million for Clean Water Act civil penalties (subject to the RESTORE Act); and
- \$1 billion for state economic damages.

Living Shoreline Demonstration Project (PO-0148)

The PDARP/PEIS includes an ecosystem-level assessment of impacts to the Gulf's natural resources, a proposed programmatic restoration plan, and an examination of the environmental impacts of various restoration alternatives. The document proposes appropriate types of restoration and provides guidance for identifying, evaluating, and selecting future restoration projects to be implemented with the approximately \$5 billion allocated to Louisiana for natural resource damages.

An overview of the Louisiana allocation by major funding category is provided in the table below. Before any of these NRDA settlement funds can be spent on restoration projects, the Louisiana and federal trustees charged with restoring damages to natural resources caused by the *Deepwater Horizon* oil spill must develop project-specific restoration plans for public review and comment.

Section 2 | Progress to Date: Results on All Fronts

An overview of the Louisiana allocation by major funding category is provided in the table below:

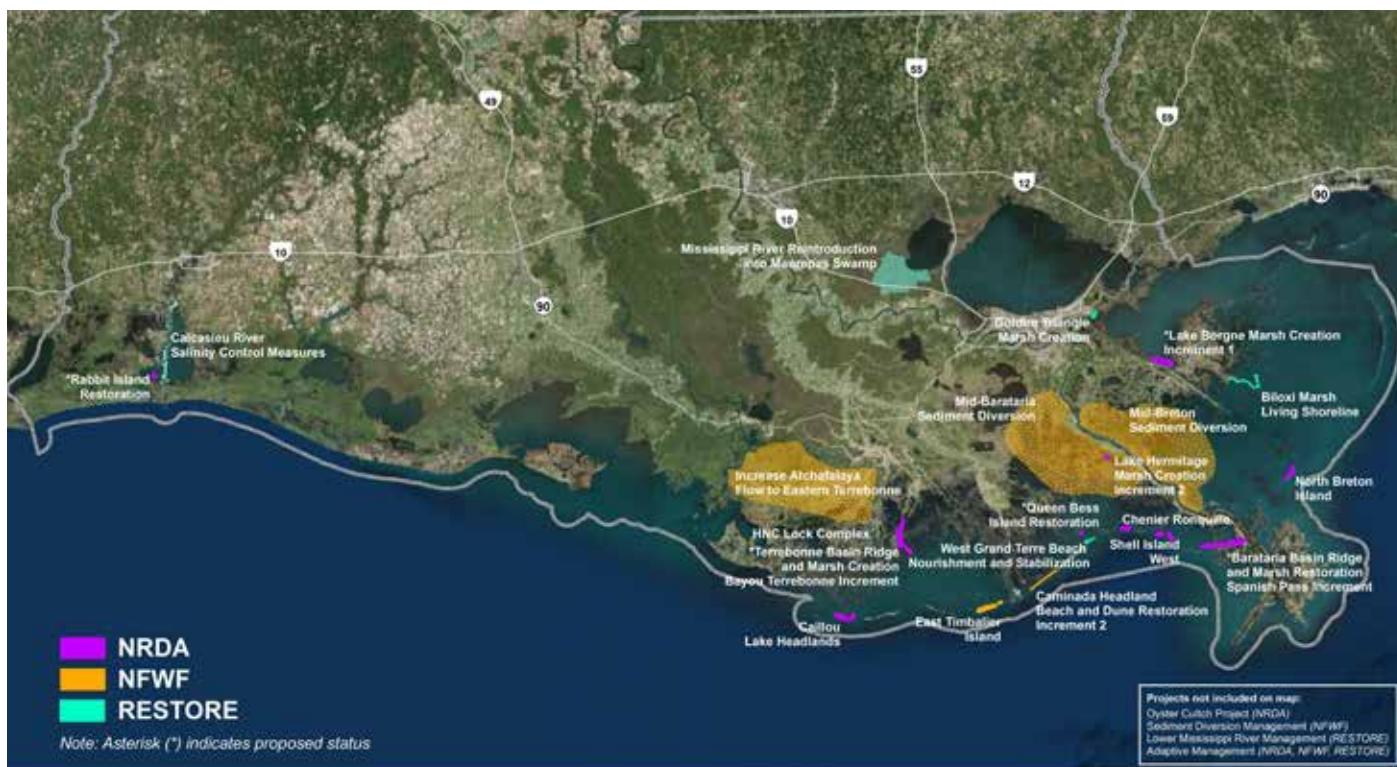
MAJOR RESTORATION CATEGORIES	AMOUNT ALLOCATED TO LA
1. Restore & Conserve Habitat	
Wetlands, Coastal, & Nearshore	\$4,009,062,700
Habitat Projects – Federally Managed Lands	\$50,000,000
<i>Early Restoration</i>	\$259,625,700
2. Restore Water Quality	
Nutrient Reduction (Nonpoint Source)	\$20,000,000
3. Replenish & Protect Living Coastal & Marine Resources	
Sea Turtles	\$10,000,000
Submerged Aquatic Vegetation	\$22,000,000
Marine Mammals	\$50,000,000
Birds	\$148,500,000
<i>Early Restoration - Birds</i>	\$71,937,300
Oysters	\$26,000,000
<i>Early Restoration - Oysters</i>	\$14,874,300
4. Provide & Enhance Recreational Opportunities	
Provide & Enhance Recreational Opportunities	\$38,000,000
<i>Early Restoration – Recreational Opportunities</i>	\$22,000,000
5. Monitoring, Adaptive Management, Administrative Oversight	
Monitoring & Adaptive Management	\$225,000,000
Administration Oversight & Comp. Planning	\$33,000,000
MINIMUM NRD FUNDING ALLOCATED TO LA	\$5,000,000,000

Upon finalization of the draft PDARP/PEIS and Court approval of the consent decree, project-specific restoration plans will be developed for public review and comment.

Combined Settlements

This settlement, combined with prior *Deepwater Horizon*-related settlements, translates into approximately \$8.7 billion over 15 years for Louisiana coastal restoration. Approval of the consent decree and finalization of the PDARP/PEIS will allow the state to move forward with identifying and implementing critical restoration and protection projects, providing approximately \$580 million annually for the coastal program.

In anticipation of receiving oil spill dollars, the CPRA began public discussions related to comprehensive oil spill restoration planning in 2013. Planning efforts and discussions continue to be refined as additional information becomes available. 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.



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 5 years since the 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 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 diversions 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, the project will restore historic deltaic sediment deposition to build, maintain, and sustain critical coastal lands.

Over the next several years, CPRA will work to optimize operations, formulate the final project design, and apply for appropriate construction permits. More specifically, work on the Mid Barataria Environmental Statement (EIS) will begin during the spring of 2017 and engineering and design work will commence later in 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 public scoping meetings, development of a draft EIS which will be released for public comment, and the development of a final EIS which will undergo additional public comment and will be reviewed by the USACE prior to commencement of construction.

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 <http://coastal.la.gov/calendar/>
- Attend a CPRA Board Meeting to engage with CPRA leadership (schedule can be found at coastal.la.gov/calendar)
- Visit coastal.la.gov to learn more about this project and other coastal restoration efforts
- Email us at outreach@la.gov to request a meeting
- Follow CPRA on Social Media for relevant updates

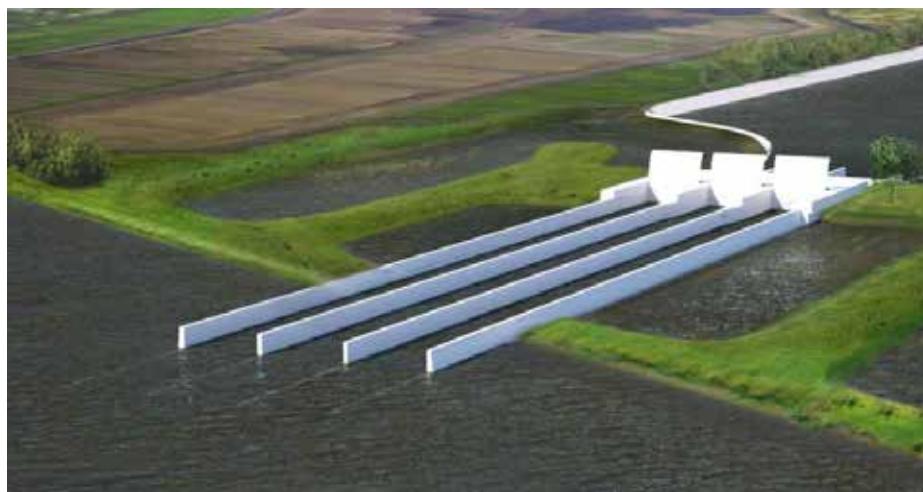
The funds utilized to conduct the studies described and the future engineering and permitting work was made available through criminal settlements associated with the *Deepwater Horizon* oil spill. The settlements included approximately \$1.27 billion to be directed to the National Fish and Wildlife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



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



Mid-Barataria Sediment Diversion Project Layout



Sediment Diversion Conceptual Design

2017 Coastal Master Plan Update

Although not due to the Louisiana Legislature until April 2017, development of the 2017 Coastal Master Plan is underway with the draft plan scheduled to be delivered in January 2017.

The 2017 Coastal Master Plan will be the third Coastal Master Plan prepared by CPRA for approval by the Louisiana State Legislature. This process occurs every five years, and with the development of each plan comes a more refined, improved path forward to create a sustainable coastal Louisiana landscape.

The Coastal Master Plan provides important information to Louisiana's coastal citizens, providing information for them to protect their families, manage businesses, and plan for the future. The 2017 Coastal Master Plan will continue to move the people of Louisiana forward in pursuit of our state's shared protection and restoration goals of reducing coastal storm surge flood risk, promoting sustainable ecosystems, providing habitats for a variety of commercial and recreational activities coast-wide, strengthening communities, and supporting regionally and nationally important business and industry.

As CPRA carries forth the planning efforts detailed in the 2007 and 2012 Coastal Master Plans, the 2017 effort will continue to build on the past and establish clear priorities for the future through an integrated and comprehensive approach. As was the case with previous plans, the 2017 Coastal Master Plan will be 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.

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 appreciates the importance of understanding the cost of 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 is why information to help us better understand the effects that projects actions will have – for example, on our traditional fishing, agricultural, and oil and gas industry related communities – have been quantified and included in our 2017 analysis.

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 will place a greater focus 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 Draft 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.

The appendix includes discussions of land loss rates in a future without action, insurance issues, population shifts, and what the proposed projects in the Draft Master Plan might deliver to residents, in terms of land building as well as reductions in flood risk. The appendix also provides an overview of CPRA's Flood Risk and Resilience Program, as well as information on new economic opportunities driven by the coast. The appendix ends with a summary of coastal Louisiana's significance to the nation. This information can be used by residents, local parish leaders, and others looking for a non-technical summary of master plan themes and findings.

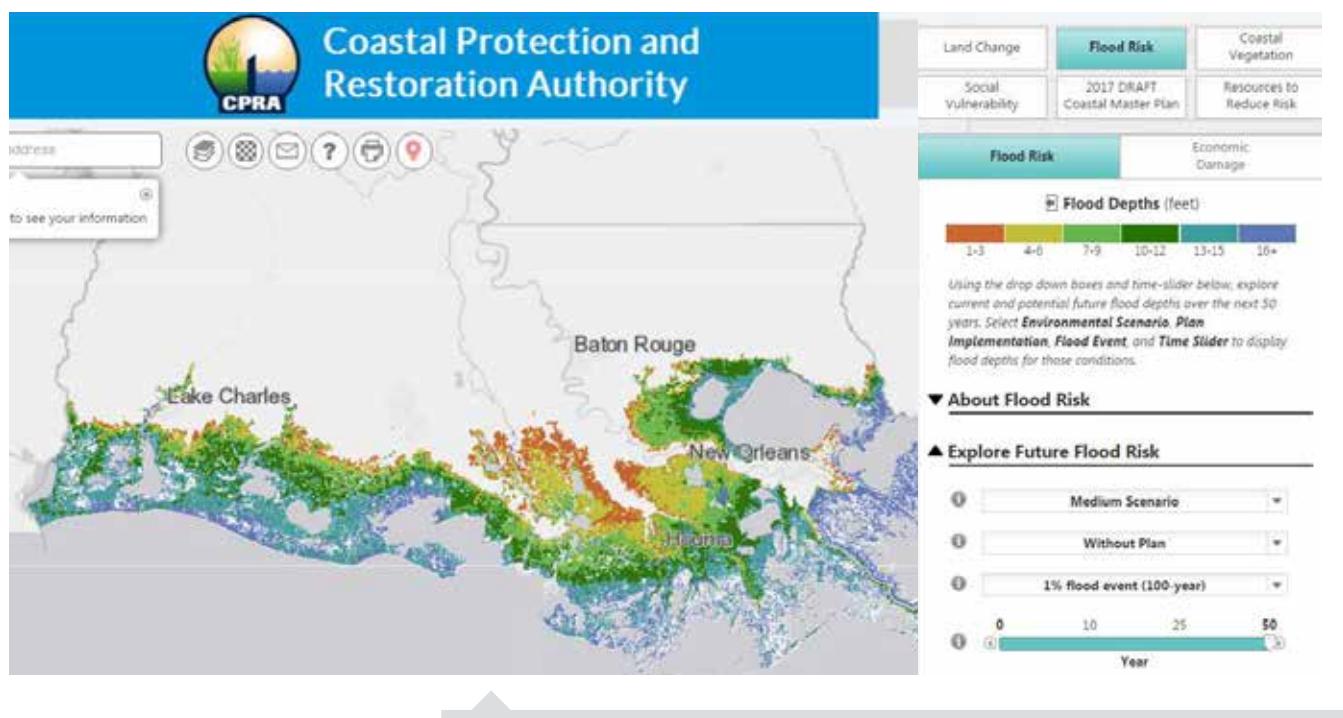
Focusing on Flood Risk Reduction and Resilience

In an effort to use all of the tools available to reduce communities' flood risk, we explored different types of nonstructural measures and refined policies to help communities become more resilient.

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 flood risk now and in the future.

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

This information can be used by 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. You can visit the online tool to explore your own community through the following link: <http://cims.coastal.la.gov/masterplan>.



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 CPRA's 2017 Coastal Master Plan and provides resources to reduce flood risk. This information is for coastal planning purposes, and is not appropriate for site-specific decision making.

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

Incorporating New Project Ideas and Information

The 2017 Coastal Master Plan considers an array of new project ideas not modeled in 2012; these new project ideas were submitted from across the coast by stakeholders and members of the public. Also, a wider range of ecosystem outcomes is included, such as additional fisheries and wildlife species.

To ensure the latest project ideas are included for consideration in the 2017 Coastal Master Plan, CPRA established the New Project Development Program. The program provided opportunities (two solicitation periods; 140 days total) for new projects to be proposed by individuals and organizations, including citizens, academia, parishes, elected officials, agencies, non-government organizations (NGOs), landowners, and businesses/industries. New projects could be proposed that build and/or sustain land, provide significant flood risk reduction, address radical shifts in the coastal landscape, or confront future uncertainty challenges.

Each project submission was screened using the following criteria: size threshold, geographic area, adequate information, consistency with Master Plan objectives and principles, and duplicative effects. Overall, the CPRA received 155 project ideas from 42 project sponsors. Based on this process and other efforts, 148 candidate projects were identified for consideration in the 2017 Coastal Master Plan.

Improving Models Based on Best Available Science

The 2012 Coastal Master Plan was founded on state-of-the-art science and analysis, and the 2017 effort builds upon this further. The improved modeling process provided a deeper understanding of our coastal environment today, as well as the changes that are expected over the next 50 years. In an effort to make the modeling process as transparent and accessible to the public as possible, CPRA posted technical modeling reports in draft form to its website throughout the master plan development process. The CPRA website also provides a full list of technical reports documenting the models used to evaluate projects and alternatives for the 2017 Coastal Master Plan. Additionally, CPRA has posted other resources online related to the development of the plan, such as project definition, planning tool, and modeling appendices, an executive summary, webinar recordings and PowerPoint slides detailing the suite of modeling tools that were developed to support the 2017 Coastal Master Plan.

Based on the New Project Development Program and the improved modeling results, 76 restoration projects are selected in the 2017 Draft Coastal Master Plan along with 12 structural and 32 nonstructural risk reduction projects. The 2017 Coastal Master Plan dedicates more than \$17.7 billion to marsh creation using dredged material, \$5 billion to sediment diversions, and more than \$2 billion to other types of restoration projects that benefit 800 square miles of coast. The plan also dedicates \$19 billion to structural and \$6 billion to nonstructural risk reduction projects that, by the end of 50 years, would reduce expected annual damages from flooding by \$8.3 billion.

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 have met to review and discuss key master plan developments, been 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' flood risk, and the solutions to create a more resilient and sustainable coast.

Learn More and Get Involved

Want to learn more about the 2017 Coastal Master Plan? The team at CPRA is prepared to present at your next community meeting and answer any questions that individuals in your area might have about the 2017 Coastal Master Plan and how it will affect the place you call home. Simply email us at masterplan@la.gov with the subject line: "Community Meeting Presentation" to schedule a presentation. In addition, stay tuned to our calendar of events and follow us on social media to learn about ways to get involved and voice your thoughts. You can also visit our website to learn more about the 2017 Coastal Master Plan: <http://coastal.la.gov/a-common-vision/2017-master-plan-update>.

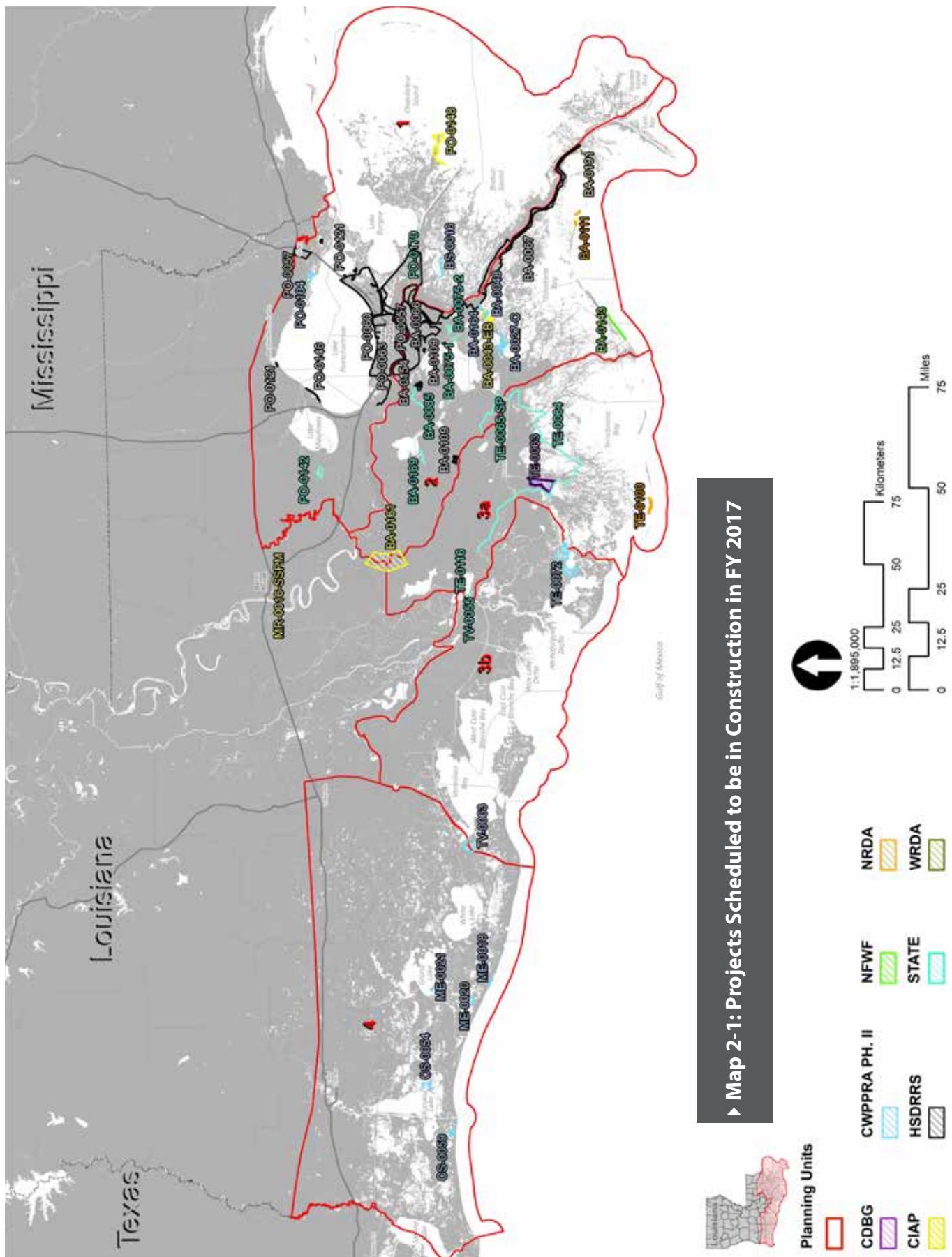


► Table 2-1: Projects Scheduled to be in Construction in FY 2017

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CWPPRA Phase II Projects				
BA-0027-C	Barataria Basin Landbridge Shoreline Protection, Phase 3-CU7 & 8	3-Jun-15	26-Jan-17	\$26,351,988
BA-0048	Bayou Dupont Marsh and Ridge Creation Project	11-Jun-13	5-Jan-17	\$38,324,646
BA-0164	Bayou Dupont Sediment Delivery - Marsh Creation #3 and Terracing	15-Jan-16	31-May-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	01-May-17	15-Aug-18	\$24,655,612
CS-0059	Oyster Bayou Marsh Creation and Terracing	30-Jun-16	31-Aug-17	\$30,866,713
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	17-Apr-17	13-Sep-18	\$35,426,478
ME-0020	South Grand Chenier Marsh Creation Project	03-Mar-17	17-Aug-18	\$23,873,346
ME-0021	Grand Lake Shoreline Protection- Tebo Point	17-May-16	20-Jul-17	\$11,305,616
PO-0104	Bayou Bonfouca Marsh Creation	28-Apr-16	31-Jan-18	\$29,273,984
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	07-Sep-16	18-Jun-18	\$35,876,728
TV-0063	Cole's Bayou Marsh Restoration	20-Jun-17	19-Sep-18	\$24,930,426
CIAP Projects				
BA-0043-EB	Mississippi River Long Distance Sediment Pipeline ²	17-Sep-13	5-Jan-17	\$66,310,461
BA-0161	Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD	16-Jun-15	15-Feb-17	\$26,691,418
MR-0016-SSPM	Mississippi River Delta Strategic Planning- SSPM Expansion	15-Sep-14	11-Apr-17	\$13,520,000
PO-0148	Living Shoreline ²	02-Oct-15	22-May-17	\$15,287,311
State-Only Projects				
BA-0075-1	Jean Lafitte Tidal Protection	19-Feb-14	12-Dec-18	\$29,403,973
BA-0075-2	Rosethorne Tidal Protection	16-Aug-17	28-May-19	\$22,950,000
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	26-Apr-17	30-Apr-19	\$1,200,000
PO-0142	Hydrologic Restoration of the Amite Diversion Canal	19-Apr-16	19-Jan-17	\$3,592,100
PO-0170	Violet Canal North Levee Alignment	31-Jul-17	31-Aug-18	\$1,164,000
TE-0064	Morganza to the Gulf	30-Nov-05	1-Oct-19	\$177,003,835
TE-0065-SP	Larose to Golden Meadow - Larose Sheetpile	26-Jan-15	30-Jun-18	\$8,000,000
TE-0116	St. Mary Backwater Flooding	27-Mar-17	20-Feb-19	\$5,000,000
TV-0055	Morgan City/St. Mary Flood Protection	20-Oct-16	12-Mar-18	\$10,900,000

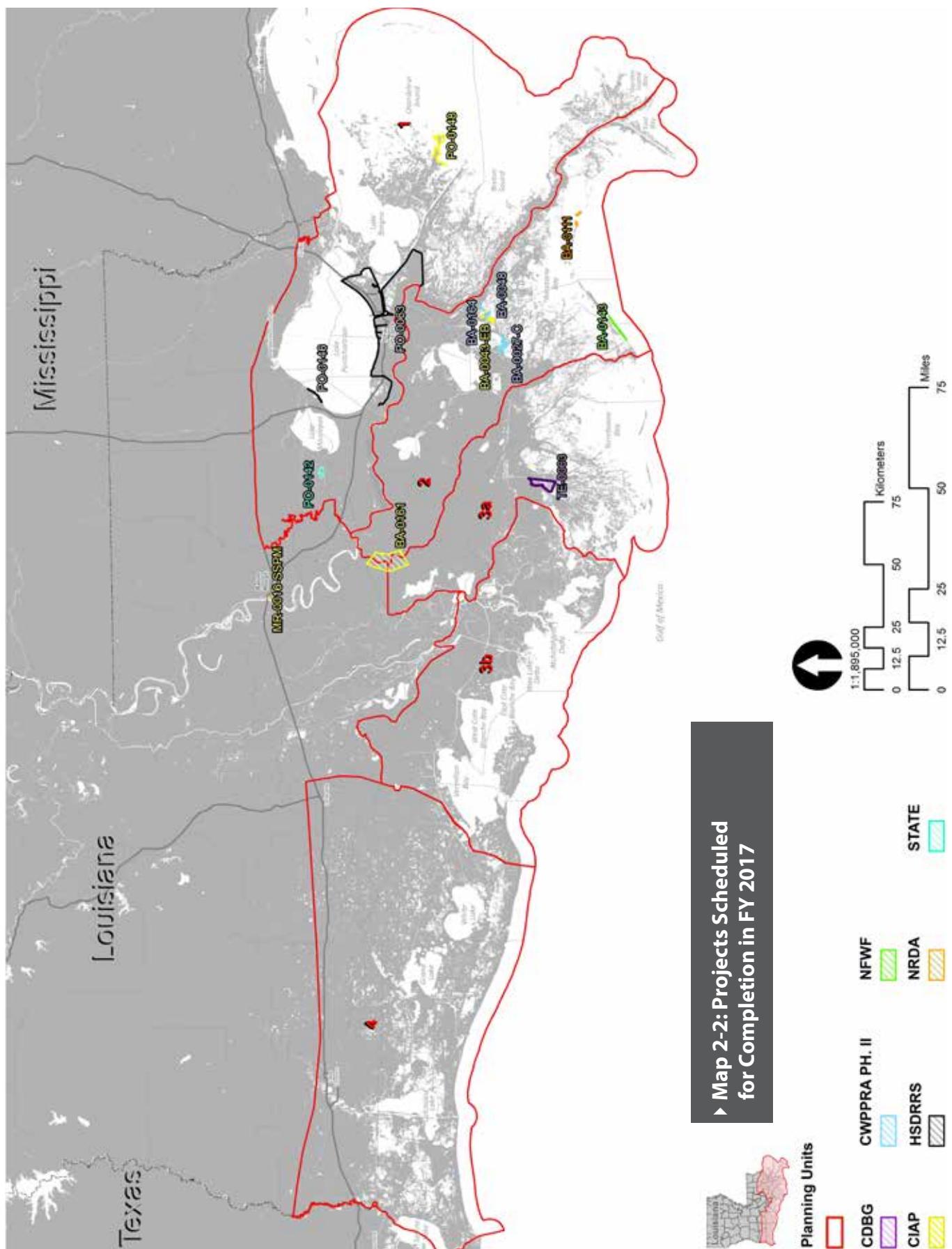
► **Table 2-1: Projects Scheduled to be in Construction in FY 2017**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CDBG Projects				
TE-0063	Falgout Canal Road Levee	05-Aug-15	15-May-17	\$24,803,191
HSDRRS Projects				
BA-0066	West Bank and Vicinity	27-Mar-07	29-Jun-18	\$4,304,525,784
BA-0067	New Orleans to Venice	21-Nov-11	11-Dec-23	\$1,301,523,760
BA-0109	HSDRRS Mitigation- WBV ³	16-Jun-16	15-Jul-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	01-Jan-13	30-Jun-18	\$614,800,000
PO-0063	Lake Pontchartrain and Vicinity	31-Oct-07	10-Apr-17	\$3,852,000,000
PO-0121	HSDRRS Mitigation- LPV ⁴	23-Jul-15	3-Sep-19	\$85,000,000
PO-0146	LPV Mitigation Project, Manchac WMA Marsh Creation ⁴	27-May-11	1-Sep-16	\$40,989,172
NRDA Early Restoration Projects				
BA-0111	Shell Island West- NRDA	31-Mar-15	5-May-17	\$101,307,860
TE-0100	NRDA Caillou Lake Headlands	22-Jul-15	10-Aug-18	\$118,340,766
NFWF Projects				
BA-0143	Caminada Headland Beach and Dune Restoration Increment ²	28-May-14	26-Oct-16	\$147,063,587
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 2017**

Project ID	Project Name	Construction Start Date ¹	Construction Finish Date	Total Project Estimate
CWPPRA Phase II Projects				
BA-0027-C	Barataria Basin Landbridge Shoreline Protection, Phase 3-CU7 & 8	3-Jun-15	26-Jan-17	\$26,351,988
BA-0048	Bayou Dupont Marsh and Ridge Creation Project	11-Jun-13	5-Jan-17	\$38,324,646
BA-0164	Bayou Dupont Sediment Delivery - Marsh Creation #3 and Terracing	15-Jan-16	31-May-17	\$18,733,494
CIAP Projects				
BA-0043-EB	Mississippi River Long Distance Sediment Pipeline ²	17-Sep-13	5-Jan-17	\$66,310,461
BA-0161	Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD	16-Jun-15	15-Feb-17	\$26,691,418
MR-0016-SSPM	Mississippi River Delta Strategic Planning- SSPM Expansion	15-Sep-14	11-Apr-17	\$13,520,000
PO-0148	Living Shoreline	02-Oct-15	22-May-17	\$15,287,311
State-Only Projects				
PO-0142	Hydrologic Restoration of the Amite Diversion Canal	19-Apr-16	19-Jan-17	\$3,592,100
CDBG Projects				
TE-0063	Falgout Canal Road Levee	05-Aug-15	15-May-17	\$24,803,191
HSDRRS Projects				
PO-0063	Lake Pontchartrain and Vicinity	31-Oct-07	10-Apr-17	\$3,852,000,000
PO-0146	LPV Mitigation Project, Manchac WMA Marsh Creation ²	27-May-11	1-Sep-16	\$40,989,172
NRDA Early Restoration Projects				
BA-0111	Shell Island West- NRDA	31-Mar-15	5-May-17	\$101,307,860
NFWF Projects				
BA-0143	Caminada Headland Beach and Dune Restoration Increment 2	28-May-14	26-Oct-16	\$147,063,587
Notes				
1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.				
2. Project cost included in total cost for PO-0063				



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Section 3

FY 2018 Implementation Plan: More Projects, More Action, More Results

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Section 3

FY 2018 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 2018 (July 1, 2017, through June 30, 2018). 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 (<http://coastal.la.gov/>) for additional details about specific projects. Regional maps of projects in planning, design, and/or construction in FY 2018 are presented in Figures 3-1 through 3-3.

Projects in Planning

There are 3 projects in the planning phase in FY 2018, including one restoration project, one navigation project, and one integrated protection and restoration project. These projects, together with other non-project planning initiatives, represent a total state investment of \$9.8 million in FY 2018, 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 42 projects in design for FY 2018, including three protection projects and 39 restoration projects. These projects represent a total state investment of \$127 million in FY 2018. 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 30 projects that will begin or continue construction in FY 2018, including 15 protection projects and 15 restoration projects. These projects represent a total state investment of \$383 million in FY 2018, and nine of these projects are projected to complete construction in FY 2018. Table 3-1 presents additional information about projects set for construction in FY 2018, 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 \$39 million (including federal match dollars) in FY 2018 on operation, maintenance, and monitoring (OM&M). OM&M expenditures in FY 2018 will cover the operation and maintenance of 143 projects and monitoring of 109 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>). Finally, the state will expend approximately \$1.6 million in FY 2018 to engage in marine debris removal in offshore areas. These expenditures are reimbursable by the Federal Emergency Management Agency (FEMA). Figure 3-5 provides a map with locations of all projects with OM&M expenditures in FY 2018. 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 2017 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.

CPRA is seeking approval this legislative session to utilize outcome based performance contracts for the purposes of marsh creation. If approved, CPRA would be able to utilize a competitive selection process to award full-delivery contracts to finance, permit, engineer, construct, and monitor marsh creation projects. The contractor would receive payment only once established success criteria are met. Payment terms could extend for numerous years after the project success has been determined. Outcome based performance contracts shifts project risks onto the contractor and allows CPRA to utilize future revenues to construct projects now. Initial pilot projects would be authorized under the proposed legislation and could utilize funding expected to be awarded in FY 2018 and beyond. If approved, CPRA would initiate outcome based performance contracting as early as FY 2018.

The 2017 Coastal Master Plan recommends 32 nonstructural project areas for nonstructural risk reduction measures, addressing flood risk for over 26,000 structures at a cost of \$6 billion. All nonstructural measures are considered voluntary and may include non-residential floodproofing, residential elevation, or residential acquisition. To assist in the development and implementation of this program, in 2014 CPRA allocated \$2 million in Surplus funding for Nonstructural Program Development, with the objective of developing a coordinated strategy for implementing nonstructural projects identified in the Master Plan for coastal communities. CPRA will continue its nonstructural program development in FY 2018 to ensure that the Master Plan's goal of a robust Flood Risk and Resilience Program to implement recommended projects is realized as additional funding becomes available.

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 2018 on the implementation of 17 CWPPRA Phase 1 projects (engineering and design), 13 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)
- No Name Bayou Marsh Creation and Nourishment (CS-0078) (Phase 1)
- Rockefeller Refuge Gulf Shoreline Stabilization (ME-0018) (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.

The state currently intends to expend funds in FY 2018 on several WRDA authorizations, including:

- Spanish Pass Ridge and Marsh Restoration (BA-0191)
- Southwest Coastal Louisiana Feasibility Study (LA-0020)

Schedules for these projects are presented in Table 3-3. Additional information about these projects is available at www.lca.gov.

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 2018 on 14 state-only projects, including 13 protection projects and one navigation project.

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]);
- 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, an additional \$40 million of 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 14 active state-only projects, 11 are funded for construction and will proceed to construction in accordance with their schedules as presented in Table 3-4. One project is funded for design and following completion of design will proceed to construction upon procurement of construction funds. The remaining projects are 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. 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. Schedules for HSDRRS projects are included in Table 3-6. All of these projects are fully funded for construction and will proceed with construction according to the schedules provided in Table 3-6. The principal issues that affect HSDRRS projects include engineering, constructability, budget and time issues.

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 may be implemented 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 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)
- Provide and Enhance Recreational Opportunities (\$22M)

Natural Resources Damages under the Oil Pollution Act

In February, the *Deepwater Horizon* Trustees released the Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The plan 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 plan 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 October 2016, Louisiana released its first post-settlement project-specific draft restoration plan for public review and comment, and held a public meeting to discuss the plan during the November CPRA Board Meeting. The draft plan informs the public about *Deepwater Horizon* NRDA restoration planning efforts and proposes approximately \$22.3 million in engineering and design (E&D) work for six restoration projects. These projects would restore wetlands, coastal, and nearshore habitats; habitat projects on federally managed lands; and birds. The six proposed projects are as follows:

- Terrebonne Basin Ridge and Marsh Creation Project: Bayou Terrebonne Increment
- Barataria Basin Ridge and Marsh Creation Project: Spanish Pass Increment
- Lake Borgne Marsh Creation Project: Increment One
- Queen Bess Island Restoration Project
- Rabbit Island Restoration Project
- Shoreline Protection at Jean Lafitte National Historic Park and Preserve

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.

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."

- 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)

This latest funding award, \$245 million, is a milestone in advancing implementation of the biggest 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 2017.

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 Economy of the Gulf Coast 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 \$988.2 million to the State of Louisiana, of which \$876.7 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 million):
 - Calcasieu Ship Channel Salinity Control Measures project (~\$260.4 million)
- Spill Impact Component (~\$551.5 million):
 - Houma Navigation Canal Lock Complex project (~\$366 million)
 - Adaptive Management Program (~\$60.9 million)
 - Parish Matching Program (up to \$100 million)
 - Contingency funds (~\$24.6 million)

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

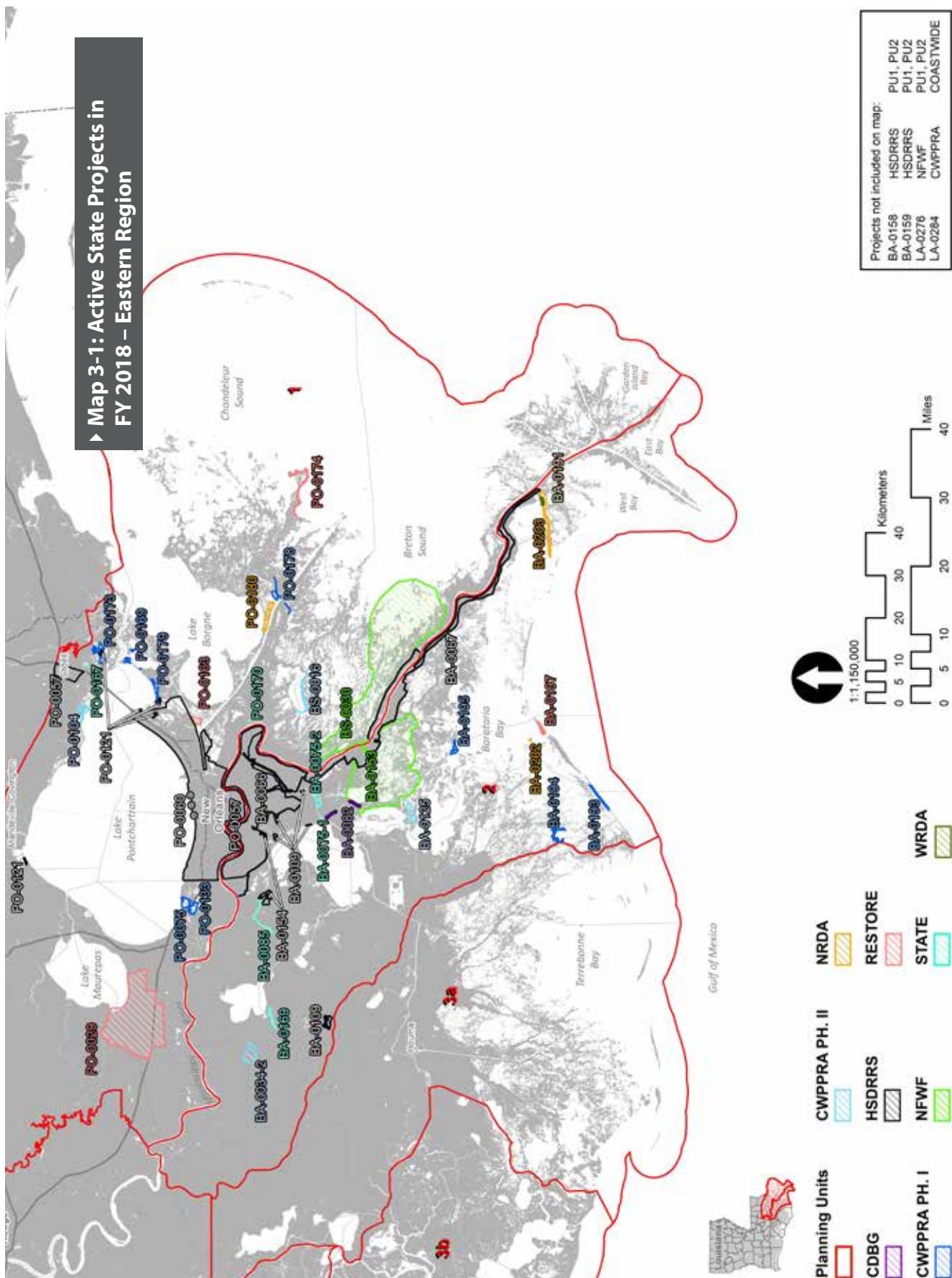
Two additional projects, Jean Lafitte Canal Backfilling (\$8.7 million; implementation) and Bayou Dularge Ridge, Marsh and Hydrologic Restoration (\$5.2 million; planning) are also located in Louisiana. These two projects, submitted for funding by federal members of the Council, will directly benefit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

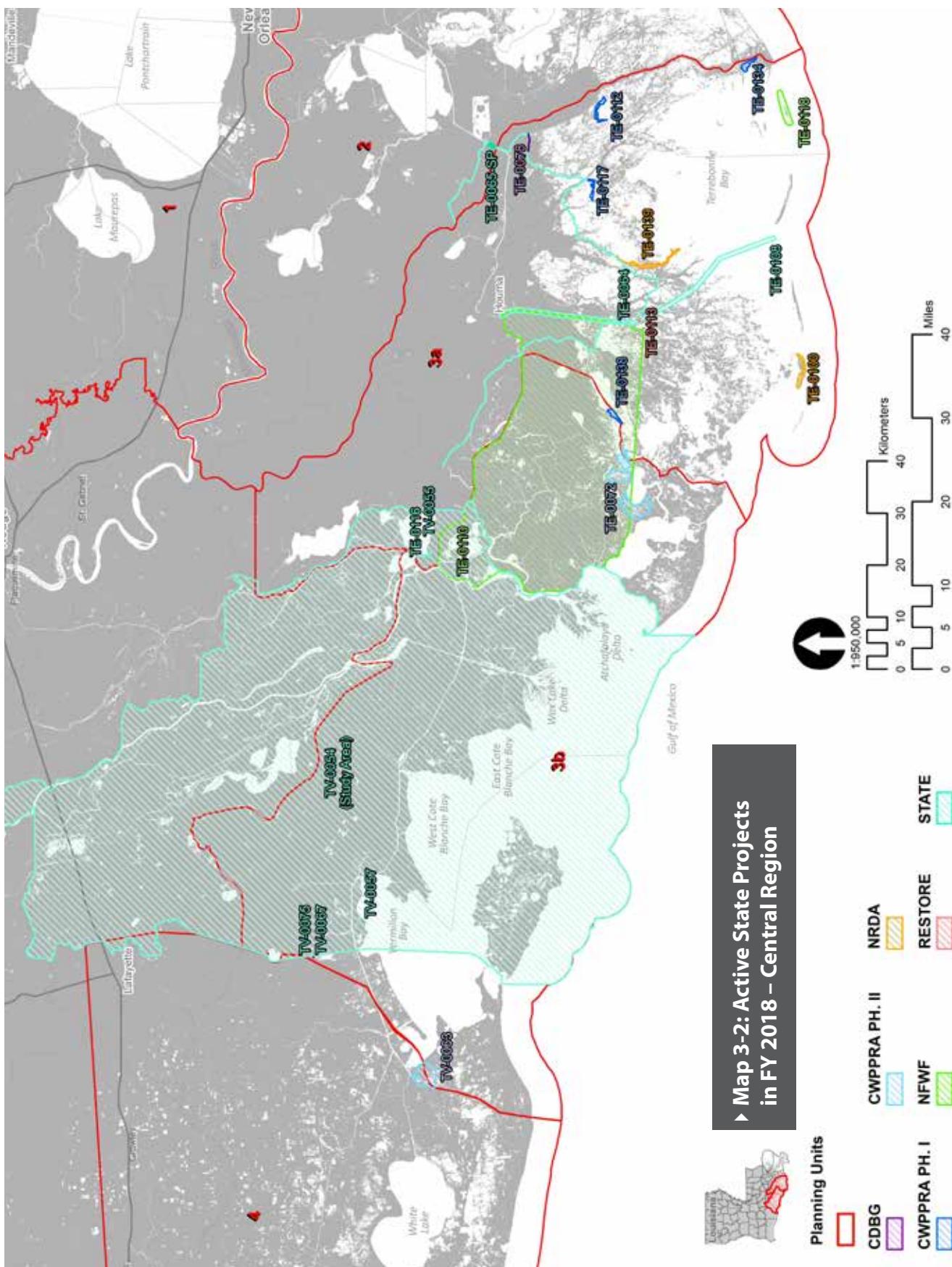
Although the future funding available for Louisiana under this component is unknown, the Council does anticipate that future iterations of the FPL will include significantly larger projects and project lists that reflect the full amount available to be spent for restoration activities. CPRA anticipates 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.

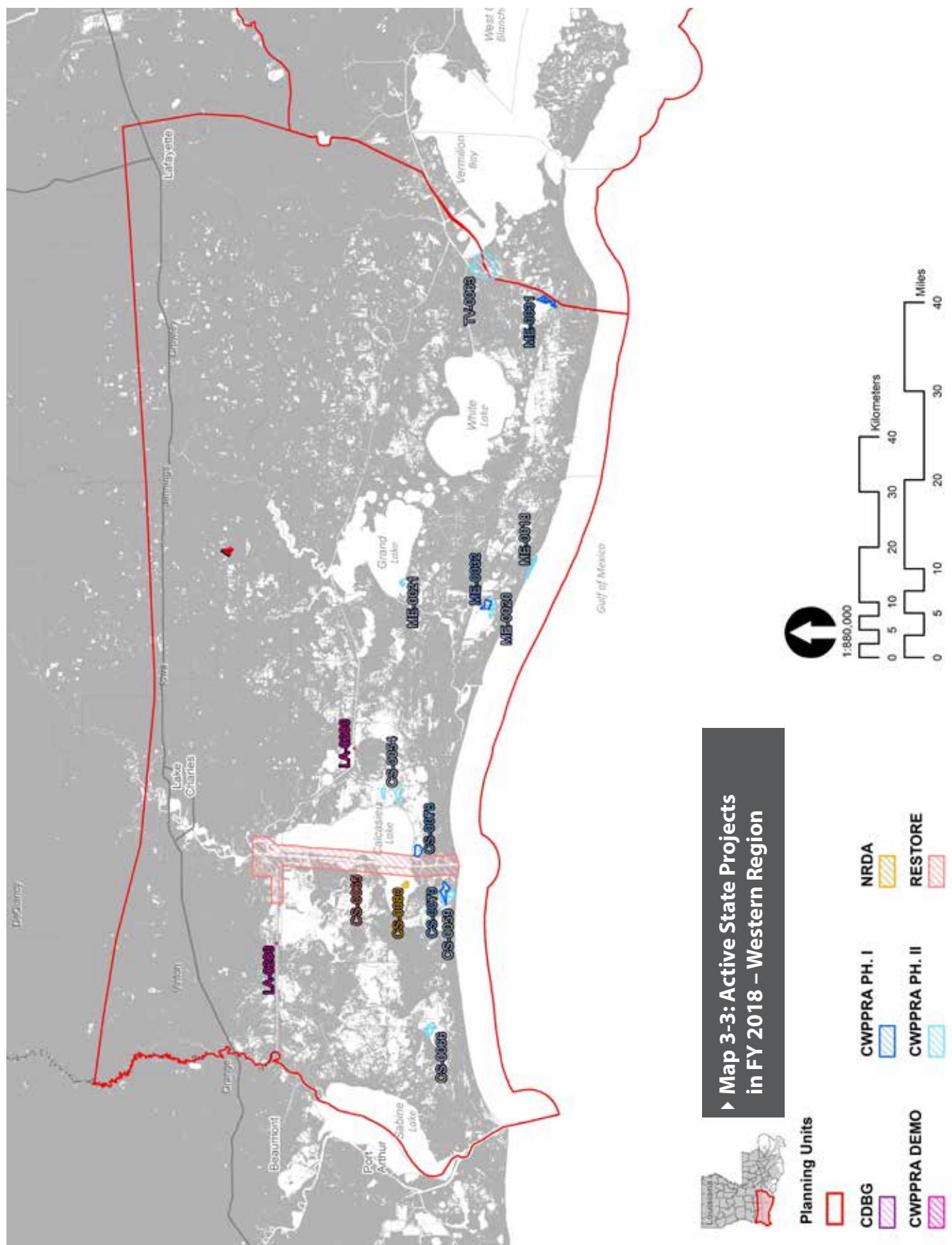
Center of Excellence

In November 2015, the U.S. Department of the Treasury awarded CPRA a \$4 million grant to begin its Center of Excellence research program. This grant funding comes from settlements of the federal Water Pollution Control Act in the wake of the 2010 *Deepwater Horizon* oil spill, which flow through CPRA to the Center. CPRA will provide these funds to the Water Institute of the Gulf, which has been selected as the state's RESTORE Act Center of Excellence, to oversee research efforts designed to advance the state's Coastal Master Plan in areas relating to coastal sustainability, ecosystem research and monitoring.

In November 2016, The RESTORE Act Center of Excellence for Louisiana released a Request for Proposals encouraging coastal researchers, both student and professional, to apply for about \$3 million in competitive grant money. Projects submitted for these two-year awards must support research directly related to the implementation of Louisiana's Coastal Master Plan which guides the state's coastal restoration and protection work. Information on the Center's Research Strategy can be downloaded from the Center's website: www.LA-COE.org.

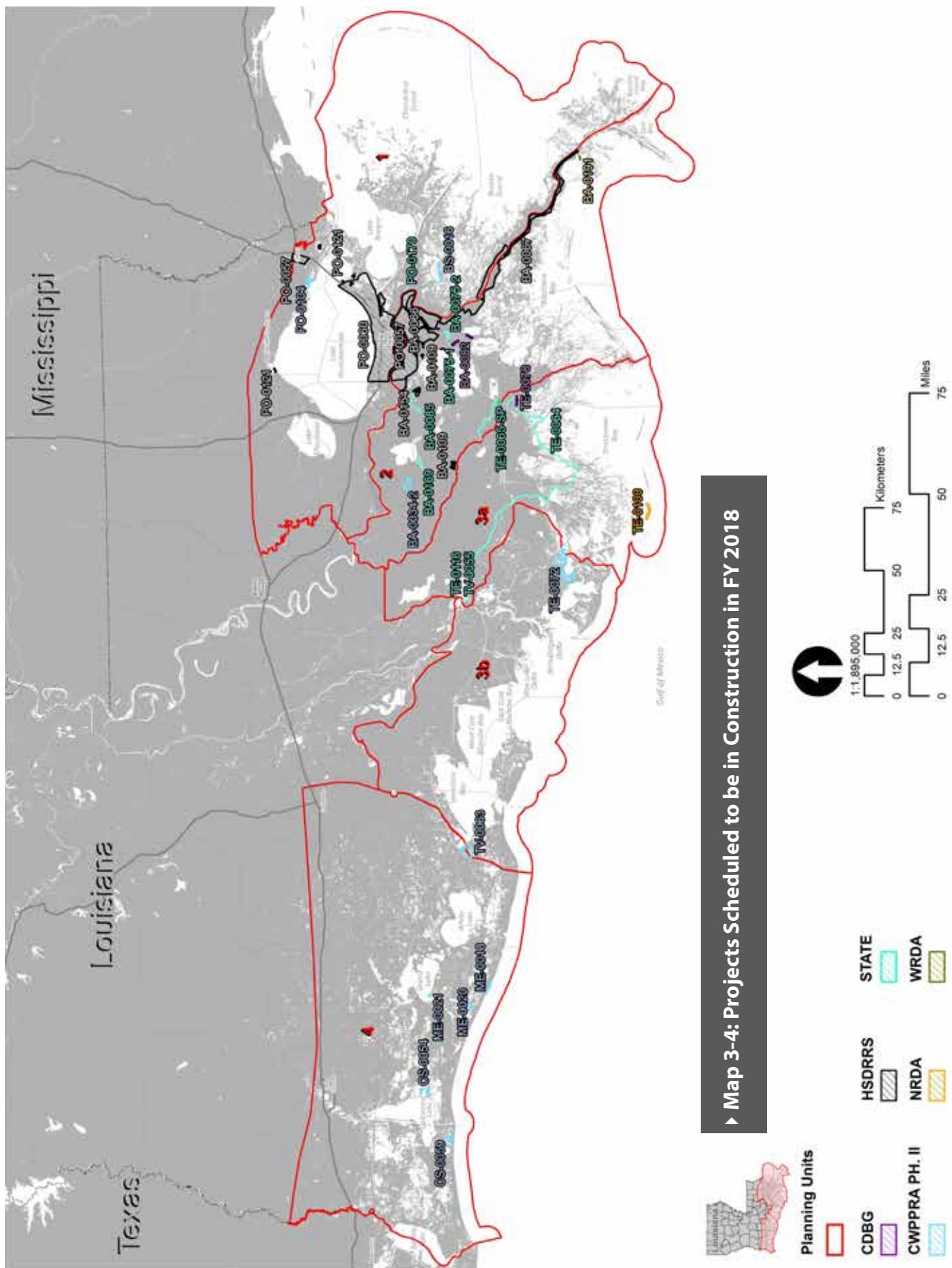






► **Table 3-1: Projects Scheduled to be in Construction in FY 2018**

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	11-Jul-17	31-Jul-18	\$6,188,548
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	01-May-17	15-Aug-18	\$24,655,612
CS-0059	Oyster Bayou Marsh Creation and Terracing	30-Jun-16	31-Aug-17	\$30,866,713
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	17-Apr-17	13-Sep-18	\$35,426,478
ME-0020	South Grand Chenier Marsh Creation Project	03-Mar-17	17-Aug-18	\$23,873,346
ME-0021	Grand Lake Shoreline Protection- Tebo Point	17-May-16	20-Jul-17	\$11,305,616
PO-0104	Bayou Bonfouca Marsh Creation	28-Apr-16	31-Jan-18	\$29,273,984
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	07-Sep-16	18-Jun-18	\$35,876,728
TV-0063	Cole's Bayou Marsh Restoration	20-Jun-17	19-Sep-18	\$24,930,426
State-Only Projects				
BA-0075-1	Jean Lafitte Tidal Protection	19-Feb-14	12-Dec-18	\$29,403,973
BA-0075-2	Rosethorne Tidal Protection	16-Aug-17	28-May-19	\$22,950,000
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	26-Apr-17	30-Apr-19	\$1,200,000
PO-0170	Violet Canal North Levee Alignment	31-Jul-17	31-Aug-18	\$1,164,000
TE-0064	Morganza to the Gulf	30-Nov-05	1-Oct-19	\$177,003,835
TE-0065-SP	Larose to Golden Meadow - Larose Sheetpile	26-Jan-15	30-Jun-18	\$8,000,000
TE-0116	St. Mary Backwater Flooding	27-Mar-17	20-Feb-19	\$5,000,000
TV-0055	Morgan City/St. Mary Flood Protection	20-Oct-16	12-Mar-18	\$10,900,000
CDBG Projects				
BA-0082	Lafitte Area Levee Repair	21-Aug-17	17-Jul-18	\$546,000
TE-0078	Cut-Off/Pointe Aux Chene Levee	26-Jul-17	13-Aug-18	\$8,468,857
HSDRRS Projects				
BA-0066	West Bank and Vicinity	27-Mar-07	29-Jun-18	\$4,304,525,784
BA-0067	New Orleans to Venice	21-Nov-11	11-Dec-23	\$1,301,523,760
BA-0109	HSDRRS Mitigation- WBV ³	16-Jun-16	15-Jul-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	01-Jan-13	30-Jun-18	\$614,800,000
PO-0121	HSDRRS Mitigation- LPV ⁴	23-Jul-15	3-Sep-19	\$85,000,000
NRDA Early Restoration Projects				
TE-0100	NRDA Caillou Lake Headlands	22-Jul-15	15-May-18	\$118,340,766
WRDA Projects				
BA-0191	Spanish Pass Ridge and Marsh Restoration	15-Jul-16	6-Feb-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 PO0063.			



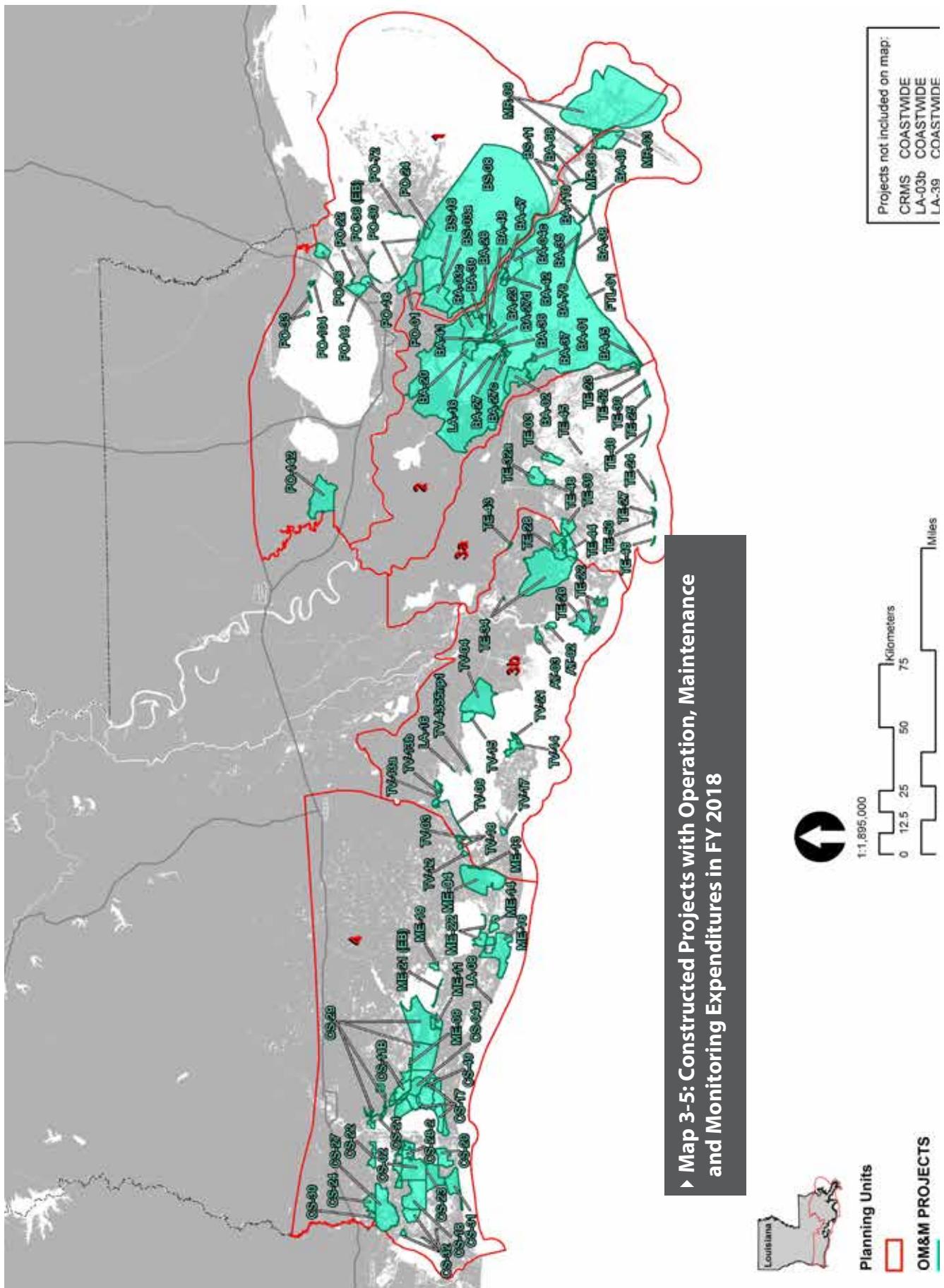


Table 3-2: Projected Three-Year Schedules for Active CWPPRA Projects¹ (FY 2018 - 2020)

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018		Calendar Yr 2019		CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019
CWPPRA Phase I Projects											
BA-0193	Caminada Headlands Back Barrier Marsh Creation Increment 2	2	EPA	D	D	D	D	D	D	W	W
BA-0194	East Leeville Marsh Creation and Nourishment	1	NOAA	D	D	D	D	D	D	D	D
BA-0195	Barataria Bay Rim Marsh Creation and Nourishment	1	NRCS	D	D	D	D	D	D	D	D
CS-0078	No Name Bayou Marsh Creation and Nourishment	1	NOAA	D	D	D	D	D	D	W	W
CS-0079	Oyster Lake Marsh Creation and Nourishment	1	NOAA	D	D	D	D	D	D	W	W
ME-0031	Freshwater Bayou Marsh Creation (CWPPRA)	1	NRCS	D	D	D	D	D	D	D	D
ME-0032	South Grand Chenier Marsh Creation - Baker Tract	1	NRCS	D	D	D	D	D	D	W	W
PO-0075	LaBranche East Marsh Creation	2	NRCS	D	D	D	D	D	D	W	W
PO-0133	Labranche Central Marsh Creation	2	NRCS	D	D	D	D	D	D	W	W
PO-0169	New Orleans Landbridge Shoreline Stabilization & Marsh Creation	1	USFWS	D	D	D	D	D	D	W	W
PO-0173	Fritchie Marsh Creation and Terracing	1	NOAA	D	D	D	D	D	D	D	D
PO-0178	Bayou La Loutre Ridge Restoration and Marsh Creation	1	NRCS	D	D	D	D	D	D	D	D
PO-0179	St. Catherine Island Marsh Creation and Shoreline Protection	1	USFWS	D	D	D	D	D	D	D	W
TE-0112	North Catfish Lake Marsh Creation	2	NRCS	D	D	D	D	D	W	W	W
TE-0117	Island Road Marsh Creation and Nourishment	1	NOAA	D	D	D	D	D	W	W	W
TE-0134	West Fourchon Marsh Creation	1	NOAA	D	D	D	D	D	W	W	W
TE-0138	Bayou DeCade Ridge and Marsh Creation	1	NOAA	D	D	D	D	D	D	D	D
BA-0171	Caminada Headland Back Barrier Marsh Creation	1	EPA	W	W	W	W	W	W	W	W
BA-0173	Bayou Grande Cheniere Marsh and Ridge Restoration	1	USFWS	W	W	W	W	W	W	W	W
BS-0024	Terracing and Marsh Creation South of Big Mar	2	USFWS	W	W	W	W	W	W	W	W
CS-0049	Cameron-Creole Freshwater Introduction	1	NRCS	W	W	W	W	W	W	W	W
PO-0034	Alligator Bend Marsh Restoration and Shoreline Protection	1	NRCS	W	W	W	W	W	W	W	W
PO-0168	Shell Beach South Marsh Creation ¹	1	EPA								
TE-0039-CU2	South Lake Decade Freshwater Introduction - CU2 ¹	1	NRCS								

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
CWPPRA Phase II Projects															
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Lac des Allemands Swamp	2	EPA	C	C	C	C	F	O	O	O	O	O	O	O
BA-0125	Northwest Turtle Bay Marsh Creation	2	USFWS	D	D	D	D	B	C	C	C	C	C	F	O
BS-0016	South Lake Lery Shoreline and Marsh Restoration	C	USFWS	F	O	O	O	O	O	O	O	O	O	O	O
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	1	USFWS	C	C	C	C	F	O	O	O	O	O	O	O
CS-0059	Oyster Bayou Marsh Creation and Terracing	1	NOAA	F	O	O	O	O	O	O	O	O	O	O	O
CS-0066	Cameron Meadows Marsh Creation and Terracing	2	NOAA	D	D	D	D	D	D	B	C	C	C	C	C
LA-0284	Salvinia Weevil Propagation Facility		USFWS	D	D	D	D	D	D	C	O	O	O	O	O
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	1	NOAA	C	C	C	C	F	O	O	O	O	O	O	O
ME-0020	South Grand Chenier Marsh Creation Project	C	USFWS	C	C	C	C	F	O	O	O	O	O	O	O
ME-0021	Grand Lake Shoreline Protection- Tebo Point	C	NRCS	F	O	O	O	O	O	O	O	O	O	O	O
PO-0104	Bayou Bonfouca Marsh Creation	C	USFWS	C	C	F	O	O	O	O	O	O	O	O	O
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	1	USFWS	C	C	C	F	O	O	O	O	O	O	O	O
TV-0063	Cole's Bayou Marsh Restoration	1	NOAA	C	C	C	C	F	O	O	O	O	O	O	O
CWPPRA Demo Projects															
LA-0280	Shoreline Protection, Preservation, and Restoration (SSPR) Panel	2	NOAA	D	D	D	D	D	D	D	D	D	C	C	C
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 2018 - 2020)

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
LCA Projects															
BA-0191	Spanish Pass Ridge and Marsh Restoration ¹	1	USACE	C	C	C	F	W	W	W	W	W	W	W	W
PO-0068	LCA Small Diversion at Convent / Blind River ²	1	USACE	W	W	W	W	W	W	W	W	W	W	W	W
MR-0016	Mississippi River Hydrodynamic and Delta Management Study ²	1	USACE												
Other WRDA Projects															
LA-0020	Southwest Coastal Louisiana Feasibility Study ^{1,2}	1	USACE	W	W	W	W	W	W	W	W	W	W	W	W
Legend				P	Feasibility & Planning				B	Both Design & Construction					
References	1. Project partially funded by Surplus funds.			D	Engineering & Design				F	Construction Complete					
	2. Project currently on hold; schedule to be updated when implementation recommences.			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 2018 - 2020)

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
State Surplus Projects															
BA-0075-1	Jean Lafitte Tidal Protection	1	N/A	C	C	C	C	C	F						
BA-0075-2	Rosethorne Tidal Protection	1	N/A	C	C	C	C	C	C	C	C	F			
BA-0085	St. Charles West Bank Hurricane Protection Levee	1	N/A	C	C	C	C	C	C	C	C	C	C	C	C
BA-0169	Kramer/Bayou Boeuf Levee Lift	1	N/A	C	C	C	C	C	C	C	C	C	F		
PO-0167	St. Tammany Parish Coastal Protection Study	1	N/A	D	D	D	D	D	D	D	D				
PO-0170	Violet Canal North Levee Alignment	1	N/A	B	C	C	C	F							
TE-0064	Morganza to the Gulf	C	USACE	C	C	C	C	C	C	C	C	C	C	F	
TE-0065-SP	Larose to Golden Meadow- Larose Sheetpile	C	N/A	B	B	B	B								
TE-0108	HNC Deepening Section 203 Study	2	USACE	P	P	P	P	P	P						
TE-0116	St. Mary Backwater Flooding	1	N/A	B	B	B	C	C	C	F					
TV-0054	South Central Coastal Plan	-	N/A	P	P	P	P	P	P	P	P	P	P	P	
TV-0055	Morgan City/ St Mary Flood Protection	1	N/A	C	C	F									
TV-0067	Bayou Tigre Flood Control Project	1	HUD	D	D	D	D	D	D	D	D	C	C	C	C
TV-0075	Bayou Tigre Flood Control Complex	1	N/A	D	D	D	D	D	D	D	D	C	C	C	C
TV-0057	Delcambre-Avery Canal (E&D)	1	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	1	USACE												
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 2018 - 2020)

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
BA-0082	Lafitte Area Levee Repair	1	HUD	C	C	C	C	F							
TE-0078	Cut-Off/Pointe Aux Chene Levee	1	HUD	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 2018 - 2020)¹

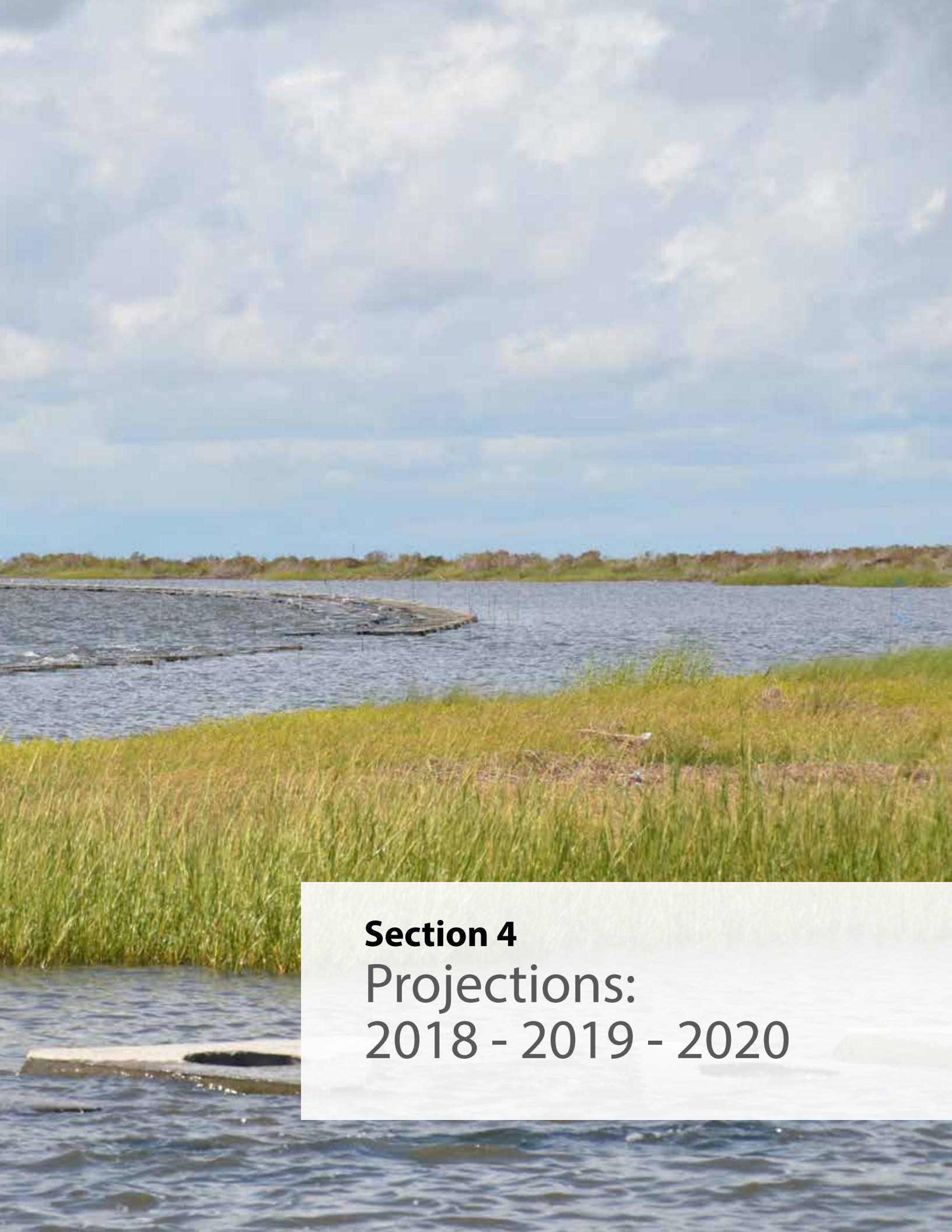
Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
BA-0066	West Bank and Vicinity ^{2,3,4,5}	C	USACE	C	C	C	F								
BA-0067	New Orleans to Venice ^{2,3}	1	USACE	C	C	C	C	C	C	C	C	C	C	C	C
BA-0109	HSDRRS Mitigation- WBV ^{2,3}	2	USACE	B	B	B	B	B	B	C	C	F			
BA-0154	Previously Authorized Mitigation WBV ^{2,3}	2	USACE	C	C	C	C	C	F						
BA-0158	New Orleans to Venice Mitigation - Plaquemines Non-Federal ^{2,3}	2	USACE	D	D	D	D	D	C	C	C	C	C	C	C
BA-0159	New Orleans to Venice Mitigation - Federal ^{2,3}	2	USACE	D	D	D	D	D	C	C	C	C	C	C	C
PO-0057	SELAs- Overall ^{2,3}	C	USACE	C	C	C	C	C	C	C	C	C	C	C	C
PO-0060	Permanent Canal Closures and Pump Stations ^{2,3}	1	USACE	C	C	C	F								
PO-0121	HSDRRS Mitigation- LPV ^{2,3}	2	USACE	C	C	C	C	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							
		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.												
		4.	Schedule does not include HSDRRS Armoring, which is anticipated to continue into 2020.												
		5.	Payments for 30-year payback to commence upon completion of construction activities. According to the USACE, payback will begin in calendar year 2019.												

► Table 3-7: Projected Three-Year Schedules for Active and Proposed Oil Spill Projects (FY 2018 - 2020)

Project ID	Project Name	Tier	Federal Sponsor	CY 2017		Calendar Yr 2018				Calendar Yr 2019				CY 2020	
				1FQ 2018	2FQ 2018	3FQ 2018	4FQ 2018	1FQ 2019	2FQ 2019	3FQ 2019	4FQ 2019	1FQ 2020	2FQ 2020	3FQ 2020	4FQ 2020
NRDA Early Restoration Projects															
BA-0202	Queen Bess Island Restoration	1	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	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
CS-0080	Rabbit Island Restoration	1	N/A	D	D	D	D	D	D	D	D	D	W	W	W
PO-0180	Lake Borgne Marsh Creation- Increment 1	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
TE-0100	NRDA Caillou Lake Headlands	1	N/A	C	C	C	C	F							
TE-0139	Terrebonne Basin Ridge and Marsh Creation- Bayou Terrebonne Increment	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
NFWF Projects															
BA-0153	Mid-Barataria Sediment Diversion	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
BS-0030	Mid-Breton Sediment Diversion	1	N/A	D	D	D	D	D	D	D	D	D	D	D	D
LA-0276	Sediment Diversion Implementation and Program Management	1	N/A	D	D	D	D	D	D	D	D	D	W	W	W
TE-0110	Increase Atchafalaya Flow to Eastern Terrebonne	1	N/A	D	D	D	D	D	D	D	D	D	D	D	D
TE-0118	East Timbalier Island Restoration	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
RESTORE Projects (Proposed)															
BA-0197	West Grand Terre Beach Nourishment and Stabilization	1	N/A	D	D	D	D	D	D	D	D	D	W	W	W
CS-0065	Calcasieu Ship Channel Salinity Control Measures	1	N/A	D	D	D	D	D	D	D	D	D	W	W	W
PO-0029	Mississippi River Reintroduction into Maurepas Swamp	1	N/A	D	D	D	D	D	D	D	D	D	D	D	D
PO-0163	Golden Triangle Marsh Creation	1	N/A	D	D	D	D	D	D	D	D	D	D	D	W
PO-0174	Biloxi Marsh Living Shoreline Project	1	N/A	D	D	D	D	D	D	D	D	D	D	W	W
TE-0113	Houma Navigation Canal Lock Complex	1	N/A	D	D	D	D	D	D	D	W	W	W	W	W
N/A	Lower Mississippi River Management	-	N/A	P	P	P	P	P	P	P	P	P	P	P	P
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: 2018 - 2019 - 2020

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Section 4

Projections: Fiscal Years 2018 – 2019 – 2020

Table 4-1 presents projected state revenues over the next three fiscal years. Tables 4-2 through 4-4 show how the state proposes to spend its coastal budget over the next three fiscal years. Figures 4-1 through 4-3 depict projected expenditures by project phase for FY 2018–FY 2020, 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 2018 (July 1, 2017 through June 30, 2018). The implementation plan incorporates projects that have received funding for planning, design, construction, or OM&M. The state is exploring new funding sources, 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 2018 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 and for continuing state efforts in coastal restoration and protection.
- 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 2020.
- The Gulf of Mexico Energy Security Act (GOMESA) provides four Gulf Coast states, including Louisiana, with 37.5 percent of federal revenue gained from new OCS drilling leases. Full funding from GOMESA will begin in 2018 and is expected to eventually contribute \$120–140 million to Louisiana each year. No end date has been established for GOMESA funding. The state is considering bonding GOMESA funds based on expected revenue from future oil and gas royalty payments, a strategy that could contribute significant funding to the coastal program over the near-term. The state is also considering borrowing GOMESA funds from the federal government based on expected future royalties. Before bonding or borrowing can take place, however, the U.S. Department of the Interior must publish regulations for allocating funds to the state, and the state must estimate the amount of money that can be expected from oil and gas revenues (both short- and long-term). With these estimates, the potential revenue stream can be evaluated.

- Louisiana received \$1.06 billion in 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 2018.
- 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 2018, the CPRA is requesting Capital Outlay funding to supplement implementation of 13 coastal projects. Additional information about this request is presented in Appendix F. Final decisions on Capital Outlay requests will be announced at the close of the 2017 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 2018 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 flood risk reduction projects. The *Deepwater Horizon* oil spill has the potential to be a significant source of funding in the coming years.

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. The CPRA has been granted authority to reprogram dollars from approved funding streams and allocate the 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.

► Table 4-1: Projected Three-Year Revenues (FY 2018 - FY 2020)

Revenue Sources	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
CPR Trust Fund Annual Revenue ^{1,2}	\$14,600,000	\$15,200,000	\$15,700,000	\$45,500,000
CPR Trust Fund Carried Forward	\$6,751,177	TBD	TBD	\$6,751,177
GOMESA ^{1,3}	\$140,000,000	\$140,000,000	\$140,000,000	\$420,000,000
GOMESA Carried Forward ⁴	\$1,600,000	\$119,750,000	TBD	\$121,350,000
DOTD Interagency Transfer ¹	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
DOTD Interagency Transfer- Projects	\$73,600	\$0	\$0	\$73,600
CWPPRA Federal Funds ⁵	\$96,384,103	\$75,904,989	\$76,500,081	\$248,789,173
Surplus '07, '08, '09 Carried Forward	\$161,284,403	\$26,000,310	\$7,054,375	\$194,339,088
Community Development Block Grants	\$9,806,680	\$11,680	\$0	\$9,818,360
Capital Outlay Funds	\$15,560,000	TBD	TBD	\$15,560,000
NRDA Revenues (<i>Deepwater Horizon</i>)	\$140,820,491	\$38,940,922	\$150,855,241	\$330,616,653
NFWF Revenues (<i>Deepwater Horizon</i>)	\$54,410,295	\$65,827,227	\$519,239,290	\$639,476,812
Proposed RESTORE Revenues (<i>Deepwater Horizon</i>)	\$61,718,000	\$48,206,637	\$132,798,175	\$242,722,812
LDNR Mitigation Funds ⁶	\$500,000	\$500,000	\$500,000	\$1,500,000
LDNR Beneficial Use Funds ⁶	\$250,000	\$250,000	\$250,000	\$750,000
LDWF Interagency Transfer ⁷	\$1,000,000	\$0	\$0	\$1,000,000
MOEX Settlement ⁸	\$704,687	\$131,250	\$704,687	\$1,540,624
Berm to Barrier ⁹	\$98,972	\$14,600	\$21,680	\$135,252
OM&M Federal Funds ¹⁰	\$29,048,815	\$17,423,395	\$15,467,305	\$61,939,515
FEMA Reimbursement for OM&M ^{11,12}	\$1,510,886	\$0	\$0	\$1,510,886
LOSCO Funding ¹³	\$112,272	\$102,272	\$102,272	\$316,816
NAS Research Practice Grant ¹⁴	\$200,000	\$200,000	\$200,000	\$600,000
Project Billing ¹⁵	\$23,380,757	\$24,701,841	\$25,689,914	\$73,772,512
Capital Outlay Request Submitted for HSDRRS 30-Year Payback	\$0	\$0	\$98,000,000	\$98,000,000
Total Projected Revenue	\$763,815,138	\$577,165,122	\$1,187,083,020	\$2,528,063,280
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 2018 GOMESA funds are anticipated to be received between April 2018 (4Q18) and September 2018 (1Q19). Because the funds would arrive no earlier than the final quarter of FY 2018, nearly all 2018 GOMESA funding would be expended no earlier than FY 2019. Projects to receive GOMESA funding will be provided in the FY 2019 Annual Plan to ensure that proper clarity is available regarding the exact amount of available GOMESA funding, and also to ensure consistency with the 2017 Master Plan (which will be in effect at the time of receipt of GOMESA funding).			
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 2018 of an initial deposit of \$6.75 million of funds from the MOEX settlement.			
9.	Used to fund monitoring of constructed Berm to Barrier projects.			
10.	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.			
11.	Represents anticipated reimbursement associated with recovery from past disasters which has been obligated by FEMA.			
12.	CPRA is pursuing FEMA recovery funding through the FEMA appeals process to restore the form and function of the Coastal Barrier Island Resource System (CBRS) units S01-S08 which were lost as a result of Hurricane Katrina. The cumulative cost of this restoration is estimated to be on the order of \$500 million.			
13.	Represents reimbursement of expenditures for CPRA (non-DWH) oil spill response activities.			
14.	Represents funding applied for in December 2016 to fund select Monitoring Data and Interpretations tasks (see Table 4-3).			
15.	Represents salary and other work-in-kind reimbursements for services performed on projects in funding programs listed in the table above.			

► **Table 4-2: Projected Three-Year Expenditures¹ (FY 2018 - FY 2020)**

Program / Funding Source	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
CWPRA State Expenditures (not including Surplus expenditures) ²	\$8,509,289	\$14,095,011	\$13,499,919	\$36,104,219
CWPRA Federal Expenditures ³	\$96,384,103	\$75,904,989	\$76,500,081	\$248,789,173
WRDA Project Expenditures (not including Surplus expenditures)	\$0	\$0	\$0	\$0
Surplus Projects and Program Expenditures	\$161,284,403	\$26,000,310	\$7,054,375	\$194,339,088
Community Development Block Grants	\$9,806,680	\$11,680	\$0	\$9,818,360
HSDRRS 30-Year Payback ⁴	\$0	\$0	\$98,000,000	\$98,000,000
MOEX Project Expenditures	\$704,687	\$131,250	\$704,687	\$1,540,624
DOTD Interagency Transfer- HNC Deepening Expenditures	\$73,600	\$0	\$0	\$73,600
Capital Outlay Project Expenditures	\$15,560,000	TBD	TBD	\$15,560,000
State-Only Project Expenditures (Non-Surplus)	\$188,184	\$199,864	\$199,864	\$587,912
NRDA Expenditures (<i>Deepwater Horizon</i>)	\$140,820,491	\$38,940,922	\$150,855,241	\$330,616,653
NFWF Expenditures (<i>Deepwater Horizon</i>)	\$54,410,295	\$65,827,227	\$519,239,290	\$639,476,812
Proposed RESTORE Expenditures (<i>Deepwater Horizon</i>) (not including Surplus Expenditures)	\$61,718,000	\$48,206,637	\$132,798,175	\$242,722,812
LDNR Mitigation Expenditures ⁵	\$500,000	\$500,000	\$500,000	\$1,500,000
LDNR Beneficial Use Expenditures ⁵	\$250,000	\$250,000	\$250,000	\$750,000
LDWF Interagency Transfer Expenditures ⁶	\$1,000,000	\$0	\$0	\$1,000,000
OM&M- State Expenditures (not including Surplus expenditures)	\$9,126,372	\$8,673,455	\$6,083,374	\$23,883,201
OM&M- Federal Expenditures ⁷	\$29,048,815	\$17,423,395	\$15,467,305	\$61,939,515
OM&M- Marine Debris Removal (Partially Reimbursed by FEMA) ⁸	\$1,640,130	\$0	\$0	\$1,640,130
GOMESA Expenditures ⁹	\$21,850,000	TBD	TBD	\$21,850,000
NAS Research Practice Grant Expenditures	\$200,000	\$200,000	\$200,000	\$600,000
Operating Costs (see Tables 4-3 and 4-4)	\$30,990,089	\$36,800,160	\$39,790,392	\$107,580,641
Total Planned Expenditures	\$644,065,138	\$333,164,899	\$1,061,142,703	\$2,038,372,740

Notes

1. Represents proposed expenditures provided that commensurate level of funding is received.
2. Because CWPRA projects compete for funding annually, CWPRA expenditures as presented in Appendix B (which include projected expenditures for approved projects only) do not adequately capture likely CWPRA expenditures in outlying years. The State's estimated CWPRA expenditures for FY 2019 - FY 2020 are therefore based on prior years' expenditures.
3. Represents anticipated Federal reimbursement for CWPRA 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 CWPRA and WRDA OM&M activities led by CPRA in which the State is initially incurring more than its cost share during project implementation.
8. Represents anticipated reimbursement associated with recovery from past disasters which has been obligated by FEMA.
9. FY 2018 GOMESA expenditures include the GOMESA Infrastructure Program (\$14 million) and Adaptive Management expenditures (see Table 4-3). Projects to receive GOMESA funding will be provided in the FY 2019 Annual Plan to ensure that proper clarity is available regarding the exact amount of available funding and also to ensure consistency with the 2017 Master Plan (which will be in effect at the time of receipt of GOMESA funding).

► Table 4-3: Programmatic Projected Three-Year Expenditures (FY 2018 - FY 2020)

Program ID	Program Name	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
Ongoing Program Expenditures¹					
N/A	Beneficial Use Program ²	\$1,709,653	\$2,000,000	\$2,000,000	\$5,709,653
LA-0251	Barrier Island Maintenance Program ²	\$2,644,359	TBD	TBD	\$2,644,359
N/A	Vegetative Plantings	\$400,000	\$400,000	\$400,000	\$1,200,000
PO-0162	Assistance to Levee Authorities	\$0	\$1,000,000	\$1,000,000	\$2,000,000
LA-0028	Restoration Partnerships	\$0	\$1,000,000	\$1,000,000	\$2,000,000
N/A	Project Support	\$2,700,000	\$3,000,000	\$3,000,000	\$8,700,000
Total Ongoing Programs Expenditures		\$7,454,012	\$7,400,000	\$7,400,000	\$22,254,012
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	\$0	\$150,000	\$150,000	\$300,000
LA-0261	Non-structural Program Development ^{2,3}	\$500,000	TBD	TBD	\$500,000
Focused Applied Research					
LA-0257	Louisiana Coastal Engineering, Research and Education ⁴	\$40,000	\$0	\$0	\$40,000
LA-0158	Coastal Science Assistantship Program	\$200,000	\$385,000	\$385,000	\$970,000
N/A	Coastal Innovation Partnership Program	\$0	\$225,000	\$0	\$225,000
Science and Technical Advisory Boards					
LA-0260	Master Plan Advisory Committees	\$0	\$0	\$300,000	\$300,000
Model Development and Refinement					
LA-0250	Master Plan Predictive Models ⁵	\$1,650,000	\$2,500,000	\$4,000,000	\$8,150,000
MR-0016-SSPM	Small Scale Physical Model ⁶	\$500,000	\$500,000	\$500,000	\$1,500,000
System Wide Assessment and Monitoring Program (SWAMP)					
LA-0252	SWAMP Development ⁴	\$600,000	\$0	\$0	\$600,000
N/A	Fisheries ^{6,7}	\$5,800,000	\$6,000,000	\$6,300,000	\$18,100,000
N/A	SWAMP Implementation ^{4,6,7}	\$17,095,000	\$17,800,000	\$22,580,000	\$57,475,000
LA-0226	Barrier Island Comprehensive Monitoring ⁵	\$1,405,300	\$735,300	\$1,927,159	\$4,067,759
LA-0030	CRMS-Wetlands	\$1,250,000	\$1,250,000	\$1,250,000	\$3,750,000
LA-0253	Flood Protection Inspections/Analysis ⁵	\$1,800,000	\$2,700,000	\$2,800,000	\$7,300,000
N/A	Regional Geology and Sediment Management ⁴	\$400,000	\$400,000	\$400,000	\$1,200,000
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 ^{4,6,7,8}	\$1,200,000	\$1,050,000	\$1,050,000	\$3,300,000

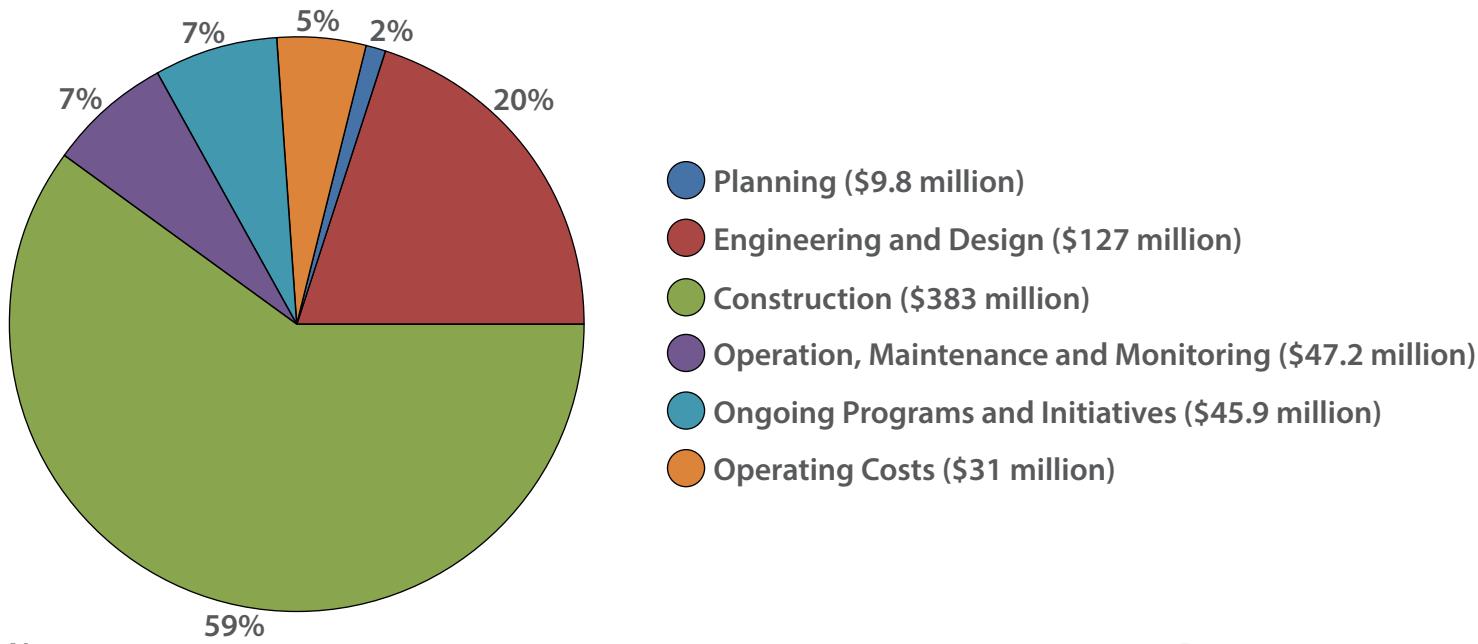
► Table 4-3: Programmatic Projected Three-Year Expenditures (FY 2018 - FY 2020)

Program ID	Program Name	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
Communication and Messaging					
N/A	Workshop and Conference Development	\$150,000	\$150,000	\$150,000	\$450,000
LA-0249	Coastal Education ⁴	\$600,000	\$600,000	\$600,000	\$1,800,000
Total Adaptive Management Expenditures		\$35,840,300	\$37,095,300	\$45,042,159	\$117,977,759
TOTAL Programmatic Expenditures		\$43,294,312	\$44,495,300	\$52,442,159	\$140,231,771
Programmatic Surplus Expenditures (See Table B-5)		\$4,854,012	\$0	\$0	\$4,854,012
Programmatic NRDA Expenditures (See Table B-14)		\$11,550,000	\$13,387,579	\$16,479,325	\$41,416,904
Programmatic NFWF Expenditures (See Table B-14)		\$7,650,300	\$5,780,300	\$4,795,000	\$18,225,600
Programmatic RESTORE Expenditures (See Table B-14)		\$10,040,000	\$9,517,421	\$11,755,675	\$31,313,096
Programmatic GOMESA Expenditures		\$6,250,000	\$8,000,000	\$9,600,000	\$23,850,000
Programmatic NAS Expenditures		\$200,000	\$200,000	\$200,000	\$600,000
Programmatic Operations Expenditures		\$2,750,000	\$7,610,000	\$9,612,159	\$19,972,159
Notes					
<p>1. FY 2018 expenditures for Ongoing Programs are significantly reduced because of lower incoming Trust Fund revenues relative to prior years. Future expenditures are anticipated to return to typical levels as additional funding becomes available.</p> <p>2. FY 2018 expenditures funded by surplus funds.</p> <p>3. FY 2018 expenditures will be used to develop a coordinated strategy for implementing nonstructural projects identified in the Master Plan for coastal communities. This may also include the development of pilot projects in coastal parishes with high levels of risk and vulnerability.</p> <p>4. FY 2018 expenditures funded by RESTORE Adaptive Management Funds.</p> <p>5. FY 2018 expenditures funded by GOMESA funds (provided funding is procured within the fiscal year).</p> <p>6. FY 2018 expenditures funded by NFWF Adaptive Management Funds.</p> <p>7. FY 2018 expenditures funded by NRDA Adaptive Management Funds.</p> <p>8. FY 2018 expenditures funded by NAS Research Practice Grant (see Table 4-1).</p>					

► Table 4-4: State Protection and Restoration Projected Three-Year Operating Expenditures (FY 2018 - FY 2020)

Program	FY 2018	FY 2019	FY 2020	Program Total (FY 2018 - FY 2020)
CPRA	\$23,751,770	\$24,701,841	\$25,689,914	\$74,143,525
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	\$28,240,089	\$29,190,160	\$30,178,233	\$87,608,482

► **Figure 4-1: Projected FY 2018 Expenditures by Project Phase**

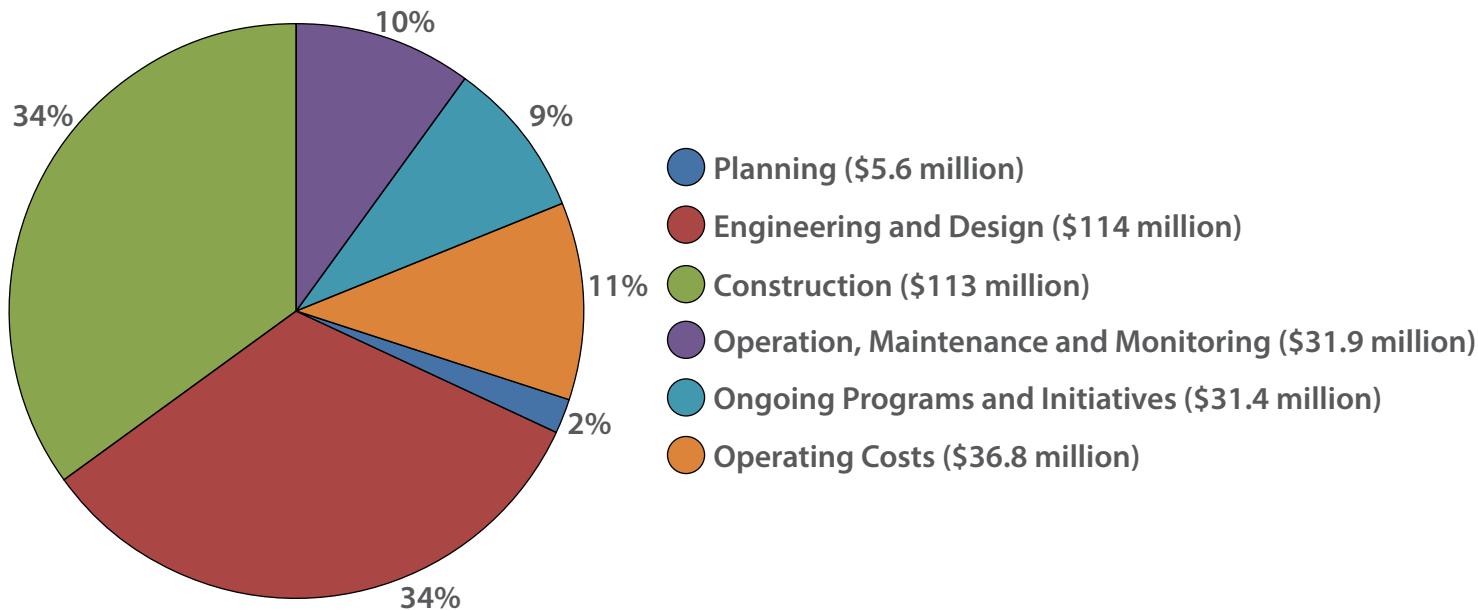


Notes

- Construction includes Beneficial Use (\$1.7 million)
- OM&M includes BIMP (\$2.6 million), Repair/Rehabilitation of Projects (\$759,739), Marine Debris Removal (\$1.6 million)

**TOTAL Expenditures
\$644 million**

► **Figure 4-2: Projected FY 2019 Expenditures by Project Phase**

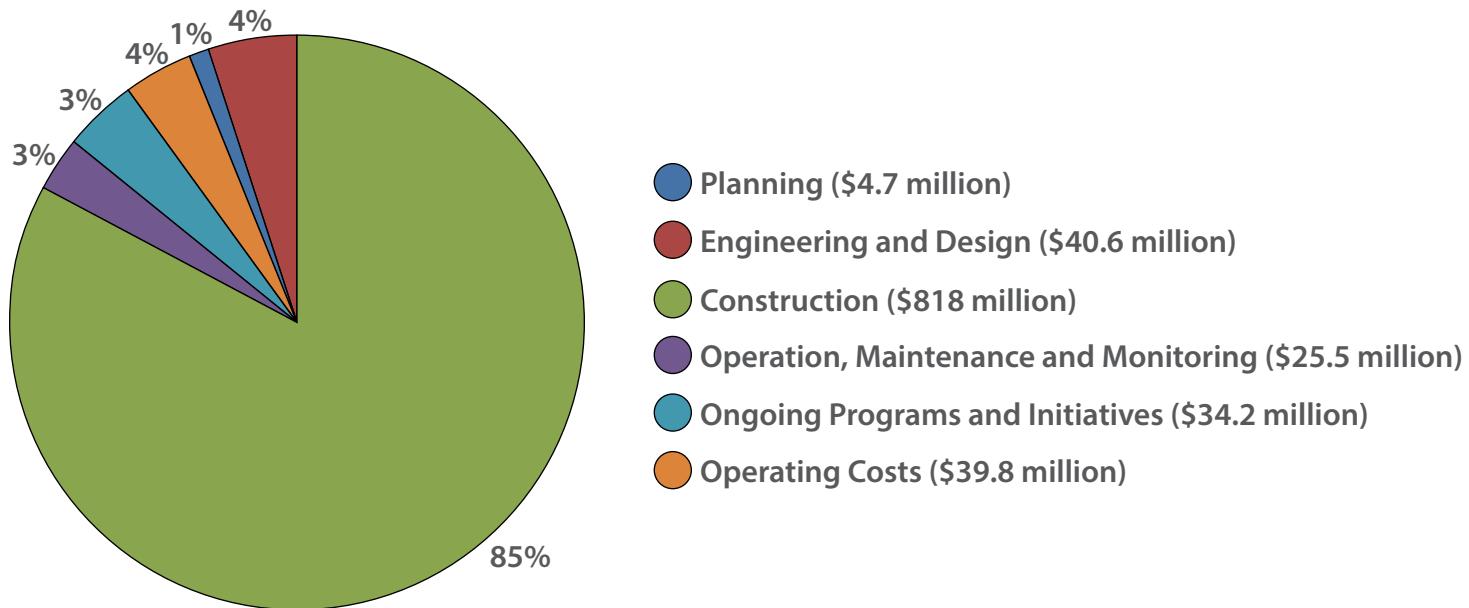


Notes

- Construction includes Beneficial Use (\$2 million)
- Engineering and Design and Construction include CWPPRA adjustment for outlying years (see Table 4-2 for explanation)
- Expenditures do not include GOMESA funding (GOMESA expenditure forecast to be developed following receipt of funding)

**TOTAL Expenditures
\$333 million**

► **Figure 4-3: 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 million)
- Expenditures do not include GOMESA funding (GOMESA expenditure forecast to be developed following receipt of funding)

**TOTAL Expenditures
\$963 million**





Section 5 Appendices

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Appendix A

Ongoing Protection and Restoration Project Summaries

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program										Planning Unit									
Name		State Project Number		Project Type		Federal Sponsor		Parish		Acres Benefited		Construction Completion		Miles or Levee Improved		Total Budget		Project Description	
BERM	Riverine Sand Mining/Surfacing	BA-0040	BH	N/A	PLAQUEMINES	606	N/A	PLAQUEMINES	N/A	2013	\$80,839,484	The goal of this project is to transport sediments from the Mississippi River to restore dune and marsh habitat on Stornell Island.		2					
BERM	Shell Island East	BA-0110	BH	N/A	PLAQUEMINES	626	N/A	PLAQUEMINES	N/A	2014	\$47,679,580	Project was designed under CWP/PPRA and constructed using Berm Barrier Levees.		2					
BERM	Emergency Barrier Berms	N/A	OT	N/A	PLAQUEMINES, SAINT BERNARD	1417	N/A	PLAQUEMINES, SAINT BERNARD	N/A	2011	\$251,000,000	The purpose of this project is to restore the integrity of Shell Island and reduce wave energies within the bay area and reestablish productive habitat in a certain bay and the surrounding area. Shell Island East was constructed using Berm Barrier Levees along a 1.6 miles of coastline. This project was constructed using Berm Barrier Levees along a 1.6 miles of sand levees along several sections 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 all and mitigate the potential impact of the oil spill to the 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 (Ravenel I, 4,700 LF; Shell Island East (Phase 1), 9,000 LF; Pecan Island (Phase 1), 1,700 LF; and Stornell Island (Phase 1), 14,755 LF). Sediment was placed in Ratches IV, V, VI, and VII and was subsequently utilized by a barrier island project BA-110, BA-138, and BA-140, respectively.		1, 2					
CDBG	Lafitte A1a Levee Repair	BA-0082	HP	HUD	JEFFERSON	N/A	4	Pending			\$500,000	This project will repair damages to the existing levees in the Fisher Basin Area. This damage was caused by heavy equipment and vehicle usage on the levee for flood fighting activities during Ike and Gustav. This project will provide for a 4 inch lift on approximately a 5 mile stretch of levee.		2					
CDBG	Rosemont Wetland Assimilation Project	BA-0083	HR	HUD	JEFFERSON	334	N/A	ASCENSION	N/A	2014	\$1,093,769	The Rosemont treatment facility currently discharges treated municipal effluent into Bayou Barataria. This project was intended to utilize secondary treated municipal effluent diverted from the Rosemont treatment facility, to restore and sustain coastal wetland habitats.		2					
CDBG	Madisonville Bulkhead	PO-0087	SP	HUD	ST TAMMANY	N/A	0.1	LAFOURCHE	N/A	2014	\$3,194,355	This project will replace two of the existing jetties and motors at the Walter S. Lehmann Pump Station. This project will also install an emergency generator to operate the pump station during power outages.		1					
CDBG	St. Tammany Parish Watershed Management Study	PO-0151	HR	HUD	ST TAMMANY	N/A	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					
CDBG	Falgout Canal Road Levee	TE-0063	FD	HUD	TERREBONNE	N/A	4.4	2017			\$24,803,191	This project will replace, modify or repair 6 existing water control structures, dredge 33,000 feet of interior channels, and construct 2 new structures to allow freshwater to flow under the existing roadway and proposed levee. The goal of the project is to restore project area saltines to levels that are favorable for fish and intermediate marshes and to improve the efficiency of freshwater flow within the basin area by reestablishing the historical north-south flow.		3A					
CDBG	Cut-Off on the Aux Chene Levee	TE-0078	HP	HUD	LAFOURCHE	N/A	8	Pending			\$8,468,857	This project will fill in the missing gap that is currently in the existing levee system. The 2.5-mile levee will be constructed along Grand Bayou and tie into the existing levee systems on each end.		3A					
CDBG	Franklin Podgat Sinkable Barge and Pump Station (Phase 1)	TV-0052-1	HP	HUD	ST MARY	N/A	0.2	2012			\$4,591,380	This project involves the construction of a sinkable barge structure on Franklin Canal to prevent storm surge from inundating the town of Franklin.		3B					
CDBG	Franklin Podgat Sinkable Barge and Pump Station (Phase 2)	TV-0052-2	HP	HUD	ST MARY	N/A	0.2	2015			\$2,148,866	This project will construct a pump station adjacent to the sinkable barge structure on Franklin Canal (constructed in Phase 1) to prevent storm surge from inundating the town of Franklin.		3B					
CDBG	Flood Control Structure at Boston Canal (Drafted/On)	TV-0058	HP	HUD	VERMILION	N/A	N/A	DEAULHIER	N/A		\$5,600,000	This project involves the flood control structure at the intersection of Boston Canal and the GIWW, which could be closed in the event of a hurricane or tropical storm.		3B					
CDBG	Front Ridge Chenier Terroir Protection Project	TV-0060	TE	HUD	VERMILION	N/A	0.1	Pending			\$2,078,162	This project will construct approximately 65,000 linear feet of marsh terrace south east of Pecan Island in Vermilion Parish.		4					
CDBG	Bayou Tigre Flood Control Project	TV-0067	HP	HUD	VERMILION	N/A	N/A	Pending			\$6,343,862	This project involves the implementation of flood control measures in Bayou Tigre.		4					
CAP	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 footbridge in Morgan City, LA. The alignment will proceed along the unptracted side of the floodway a distance of 1857 feet. And end at the Port of Morgan City's north port. The project goal is to reduce the truck traffic through the residential neighborhoods by rerouting the traffic through the proposed new road. The primary project benefit is to provide more road access to the industrial facilities and the museum through the proposed new road, and decrease the traffic in the residential area.		3B					
CAP	Atchafalaya Long Distance Sediment Pipeline	AT-0015	OT, MC	USFWs	TERREBONNE	N/A	N/A	N/A	N/A		\$1,500,000	The project is to use material dredged from the Mississippi River and transported via new permanent pipeline across the Barataria Basin to create marsh and/or ridge habitat across the Caminada Headland through the direct placement of sediment carrying material in the area of oil intrusion/borrow areas.		3A					
CAP	Lake Calcasieu Shoreline Protection (Phase III)	BA-0015-4/2	SP	USFWs	ST CHARLES	844	N/A	2009			\$2,300,000	This project involved the construction of approximately 7,000 linear feet of shoreline protection near the northwest shore of Lake Calcasieu. The project goal is to restore 2.8 miles and 620 acres of barrier shoreline and 450 acres of marsh by dredging 3.3 million cubic yards of offshore material and rebuilding the island. The project was designed under the CWP/PPRA Program and constructed under the CAP program.		2					
CAP	East Grand Terre Barataria Land Bridge Dedicated Redefining (CAP)	BA-0030	BH	USFWs	PLAQUEMINES	683	N/A	2010			\$25,426,471	The objective of this project is to create and/or nourish 1,200 acres of marsh in conjunction with CWP/PPRA project BA-36.		2					
CAP	Long Distance Mississippi River Sediment Pipeline	BA-0036	MC	USFWs	JEFFERSON	363	N/A	2010			\$18,000,000	The goal of this project is to use material dredged from the Mississippi River and transported via new permanent pipeline across the Barataria Basin to create marsh and/or ridge habitat across the Caminada Headland through the direct placement of sediment carrying material in the area of oil intrusion/borrow areas.		2					
CAP	Caminada Headlands	BA-0045	BH	USFWs	LAFOURCHE	730	N/A	2014			\$70,679,580	The proposed project will restore and protect beach and dune habitat on the head and down habitat in lower Plaquemines Parish to rebuild the continued fragmentation of wetlands system throughout the coast.		2					
CAP	LA 1 Improvements - Fournochon to Lileah Bridge (CAP)	BA-0055	OT	USFWs	LAFOURCHE	N/A	N/A	2010			\$33,000,000	This project is estimated to allow for the continued dredging of a 1,000 foot channel at the point of diversion in the Mississippi River, a pumpstation system with a combined discharge capacity of 1,000 cfs, discharge setting pumping station in Bayou Lafourche at Donaldsonville, modification of wet areas, bank stabilization along Bayou Lafourche, monitoring stations, and dredging of Bayou Lafourche. Increasing the flow down Bayou Lafourche by 1,000 cfs has been modeled to benefit approximately 120,000 - 130,000 acres in the Terrebonne and Barataria Basins through reductions in the salinities and nourishment of wetlands with the introduction and distribution of sediment and nutrients from the river.		2					
CAP	Fringe Marsh Repair	BA-0058	MC	USFWs	PLAQUEMINES	300	N/A	2014			\$8,756,605	This project involves the removal of dredged material from further wave damage while also collecting sediment in order to naturally rebuild the degraded marsh structure of the islands. The project was designated in 2007 following the completion of design activities.		2					
CAP	Mississippi River Water Reinforcement into Bayou Lafourche - BLFWD	BA-0161	FD	USFWs	ASSUMPTION	Not Available	N/A	2016			\$20,000,000	This project consists of a series of submerged wave breaks surrounding shoreline segments in lower Plaquemines Parish to protect the damaged shorelines along the existing island terrains from further wave damage while also collecting sediment in order to naturally rebuild the degraded infrastructure of the islands.		2					
CAP	Shoreline Protection Emergency Restoration	BA-0162-SUPER	SP	USFWs	PLAQUEMINES	40	N/A	Inactive			\$35,780	This project involves the removal of floodgates to allow unimpeded flow of freshwater through the water control structures.		1					
CAP	Barataria Lamoque Frougate Removal (Active)	BS-0013-EB	FD	USFWs	PLAQUEMINES	660	N/A	Inactive			\$2,670,559	This project provides protection for approximately 100 acres of existing island habitat (Grand Isle & Little Isle) and by the installation of construction and design of this project.		2					
CAP	FIFI Island Restoration	CAP/FIFI	SP	USFWs	JEFFERSON	126	N/A	2003			\$751,406	This project involves the creation of approximately 200 acre marsh through beneficial use of dredged material from the CAP of 2001 for the Channel.		2					
CAP	Marsh Creation/Levee Removal (Phase 10 Black Lake)	CS-0055-EB	DW	USFWs	CAMERON	300	N/A	2010			\$10,000,000	This project involves construction an earthen on Trosclair Road, a parish road that is newly used by oilfield traffic. The project is approximately 8 miles long and connects State Highway 7782 from Cameron to State Highway 82 to Oak Grove.		4					
CAP	Trosclair Road Repairs	CS-0047	OT	USFWs	CAMERON	N/A	N/A	2009			\$2,039,592	This project involves construction an earthen on Trosclair Road, a parish road that is newly used by oilfield traffic. The project is approximately 8 miles long and connects State Highway 7782 from Cameron to State Highway 82 to Oak Grove.		4					

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunos.	Total Budget	Project Description		Planning Unit
CIA/P	Bush Canal and Bayou Terrebonne Bank Stabilization	DNR 251-3-0311	Sp	USFWS	TERREDONNE	4,300	N/A	2007	\$3,700,000	This project reconstructed the south bank of Bush Canal using material dredged from the canal. The restored bank was then covered with geosynthetic fabric and armored with stone rip-rap. The result bankline will help to diminish storm surge as well as reduce saltwater intrusion. This project was funded by the CIA/P of 2001	3A	
CIA/P	Performance Evaluation - Barataria Land Bridge Biological Monitoring	LA-0012-22	OT	USFWS	JEFFERSON	N/A	N/A	N/A	\$4,232,618	This research study will be conducted on the Barataria Land Bridge Dredging Project (BA-36) and will assess the effect of dredged sediment application on soil-vegetation-hydrologic dynamics within deteriorating marshy brackish marshes.	2	
CIA/P	Performance Evaluation - Freshwater Bayou	LA-0012-3	OT	USFWS	VERMILION	N/A	N/A	N/A	\$296,029	This study focuses on the projected vertical elevation change of the dredge slurry fill due to immediate and long term settlement and consolidation. We can determine revised methods and processes to help improve our ability to predict settlement and consolidation. A laboratory, field samples and construction monitoring shall be performed to verify the accuracy of settlement and consolidation analysis and to inform the final design.	3A	
CIA/P	CIA/P Performance Evaluation - Barataria Island Studies	LA-0012-5	OT	USFWS	JEFFERSON, LAFOURCHE	N/A	N/A	N/A	\$558,606	Evaluation of Tidal Pass Opportunity for Protection of East Grand Terre and Development of Barataria Island Comprehensive Monitoring Plan and restoration sampling protocols.	2	
CIA/P	CIA/P Performance Evaluation - Caminada Atchafayuda Subsidence Study	LA-0012-6	OT	USFWS	JEFFERSON, LAFOURCHE	N/A	N/A	N/A		Research to be conducted on the Caminada Headland in order to quantify the amount of consolidation in the substrate underlying barrier islands resulting from placement of sand for island restoration.	2	
CIA/P	CIA/P Performance Evaluation - Bonnet Area Management and Monitoring Initiative	LA-0012-7	OT	USFWS	COASTWIDE	N/A	N/A	N/A		The Bonnet Area Monitoring and Management (BAMM) was initiated to understand the evolution of barrier islands for restoration projects (islands, meadows, and/or forest) over time, with a particular focus on the shifting rates and types of sediment and gradient of the post-storm area's new land edge profile. The study involves the collection of bathymetric, geophysical, ground truth, and water quality data from several barrier areas to understand not only the above objectives but also the morphic conditions at depth of cut or borrow areas.	COASTWIDE	
CIA/P	Coastal Forest Conservation	LA-0013	PP, OT	USFWS	COASTWIDE	40,000	N/A	N/A	\$813,512	A program to preserve existing coastal forest via purchase of free title or conservation servitudes from willing land owners.	4	
CIA/P	Rockefeller Shoreline Protection Demo (CIA/P)	ME-0018-EB	Sp	USFWS	CAMERON	23	N/A	2009	\$8,500,000	The project involves the construction of three types of shoreline protection structures as a demonstration to determine which type(s) of structures are most suitable in protecting the shoreline of approximately 37,800 linear feet of shoreline protection on the south shore of Grand Lake from Superior Canal to the Point.	4	
CIA/P	Mississippi River Delta Strategic Planning - SSPM Expansion	MRI-16-SSPM	OT	USFWS	EAST BATON ROUGE	N/A	N/A	2010	\$9,129,919	This project involves the construction of a new expanded Small Scale Physical Model (SSPM) capable of modeling smaller flows and with increased near岸 coverage in comparison to the previous SSPM. The project will also include the construction of a new facility educational and research hub to provide insight and qualitative understanding of critical aspects of their impacts of major diversions of water and sediments, future conditions, and navigation impacts.	1, 2, 3A	
CIA/P	Grand Lake Shoreline Protection (CIA/P)	ME-0021-EB	Sp	USFWS	CAMERON	495	N/A	2010	\$10,166,136	This project involves the construction of approximately 37,800 linear feet of shoreline protection on the south shore of Grand Lake from Superior Canal to the Point.	4	
CIA/P	Violet Dredge	PO-0025-EB	FD	USFWS	ST BERNARD	13,200	N/A	N/A	\$1,170,982	This project involves the diversion of freshwater from the Mississippi River into Lake Borgne to restore Mississippi Sound, Central Wetlands, and Iberia Marsh areas. The feasibility study for this project is being put as part of the MRGO Ecosystem Restoration FS.	1	
CIA/P	Orleans Land Bridge SP & Marsh Creation	PO-0036-EB	Sp	USFWS	ORLEANS	140	N/A	2013	\$20,869,000	This project provides shoreline protection on the northwest arm of Lake Borgne west of Abigayle Point.	1	
CIA/P	East LaBrache Shoreline Protection	PO-0043	Sp	USFWS	ST CHARLES	No Available	N/A	2015	\$3,753,816	Through various funding mechanisms involving CWBNO, and JAP all but approximately 8,000 linear feet of the East LaBrache shoreline has been protected. Saint Charles Parish has a grant \$1,753,816 of CJA funding to construct 1,400 linear feet of shoreline protection (PC-03 East LaBrache Shoreline Protection). The State has contributed additional \$2,000,000 in CJA funding to construct shoreline protection for the most critical areas.	1	
CIA/P	Central Wetlands Demonstration	PO-0073	HR	USFWS	ST BERNARD	10-20	N/A	2016	\$3,500,000	This demonstration project leverages the beneficial use of F-Enter as an alternative to chlorine to treat effluent at the SWBIO St. East Bath Sewer Treatment Plant.	1	
CIA/P	Central Wetlands - Riverbank	PO-0073-1	HR	USFWS	ST BERNARD	346	N/A	2015	\$2,000,000	This project involves the discharge of effluent from the Central Wetlands plant to the discharge into the Central Wetlands. This would allow vegetation to prosper once again in the area, and would also save St. Bernard the cost of running a sewer line from the Outfall plant to the Munster Pant.	1	
CIA/P	Central Wetlands - EBSTP A.2	PO-0073-2	HR	USFWS	ST BERNARD, ORLEANS	473	N/A	Inactive	\$4,500,000	This project involves the introduction of freshwater from the SWBNO's East Bank Sewer Treatment Plant to combat salt water intrusion from MRGO and thus attempt to replenish the once thriving Central Wetlands. The project involves piping treated effluent from the EBSTP to St. Bernard Parish and vegetation plantings to mouth and sustain marsh.	1	
CIA/P	Central Wetlands Demonstration Expansion	PO-0073-3	HR	USFWS	ORLEANS	17,2	N/A	2016	\$4,500,000	The Central Wetlands Demonstration Expansion project would restore up to 17 acres of critical wetlands in the area designated A-1 using wetlands restoration of treated wastewater effluent and other beneficial use of autochthonous from the East Bank Wastewater Treatment Plant, other sediment from the Living Shoreline project in LaFourche Parish, and Iberia Parish.	1	
CIA/P	Living Shoreline	PO-0148	Sp	USFWS	ST BERNARD, JEFFERSON, ORLEANS	5,340	N/A	2017	\$26,500,000	The primary project involves the construction of bioengineered oyster reefs along coastal fringe marsh in St. Bernard Parish. The installation will take place from the mouth of Bayou La Loutre around Bayou La Loutre and Iberia Parish.	1, 2	
CIA/P	Rainey Audubon Wildlife Sanctuary Earth & Erreas	RAINEY	MC	USFWS	VERMILION	640	N/A	2005	\$951,869	The project consists of constructing approximately 55,000 linear feet of terraces. The terraces were created by dredging in shallow open water areas and piling the spoil on one side of the narrow area. An additional 3,391,163 was contributed from the CJA/P of 2001.	3B	
CIA/P	GWYB Bank Restoration of Critical Areas of Terrebonne (CIA/P)	TE-0043-EB	Sp	USFWS	TERREBONNE	1,180	N/A	2011	\$7,274,676	The project objective is to restore critical lengths of deteriorated channel banks and stabilize/armor selected critical lengths of deteriorated flame banks with hard shoreline stabilization materials.	3B	
CIA/P	Freshwater Bayou Bank Stabilization	TV-0011-B-EB	Sp	USFWS	VERMILION	223	N/A	2014	\$13,568,304	The goal of this project is to stop erosion along the bank of Freshwater Bayou Canal and to protect the lower wetlands from saltwater intrusion, increase tidal exchange, and reduce induced erosion. This will be achieved by constructing a rock like along critical areas of the eastern and western banks of the canal.	3B	
CIA/P	Port of Iberia Bridge Replacement - Port Road over Commercial Canal	TV-0028	OT	USFWS	IBERIA	N/A	N/A	2013	\$625,792	This project involves the replacement of the bridge on David Dubois Road over Commercial Canal at the Port of Iberia. The Port of Iberia handles a substantial amount of OCS produced products and the large equipment used in transporting these products take a major toll on the ports bridges and roadways.	3B	
CIA/P	Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal	TV-0030	OT	USFWS	IBERIA	N/A	N/A	2013	\$1,056,013	This project involves patching and overlaying 3,310 feet (about 1 mile) of Admiral Doyle Road around the Acadiana Regional Airport in Iberia Parish from its intersection with LA 321 to the end of the four lane section. The project provides improved access to both the airport and the Port of Iberia, both of which support OCS facilities and commerce.	3B	
CIA/P	Acadiana Regional Airport Street Improvements - Admiral Doyle Drive	TV-0031	OT	USFWS	IBERIA	N/A	N/A	2016	\$1,114,942			

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immovated	Project Description		Planning Unit
									Total Budget		
CWPPRA	Atchafalaya Sediment Delivery	AT-0002	SD	NMFS	ST MARY	2232	N/A	1998	\$2,532,147	The objective of this project is to enhance natural delta growth by re-opening Natural Channel and Castle Pass. Natural Channel was established with a 10-foot wide, 10-foot deep, 8.80-foot long channel and Castle Pass with a 90-foot wide, 10-foot deep, 2,000-foot long channel. Material dredged (700,925 cubic yards) as a result of construction was strategically placed at elevations mimicking natural delta slopes.	3B
CWPPRA	Big Island Mining	AT-0003	DW	NMFS	ST MARY	1560	N/A	1998	\$7,077,404	The project includes creating a new western delta lobe behind Big Island to enhance the accretion of land beyond the west bank of the Atchafalaya River. Construction included dredging of a main channel and five branch channels designed to mimic natural channel bifurcations. Dredged material was strategically placed at elevations mimicking natural delta lobes. Re-opening the channels is allowing continued natural sediment transport and marsh growth.	3B
CWPPRA	Castle Pass Channel Sediment Delivery (Deauthorized)	AT-0004	SD	NMFS	ST MARY	589	N/A	Deauthorized	\$1,717,893	This project investigates dredging a system of distributary channels to create 569 acres of marsh through sediment placement and natural deposition.	3B
CWPPRA	GIWW (Gulf Intracoastal Waterway to Crowley Hydrologic Restoration)	BA-0002	HR	NRCS	LAFOURCHE	175	N/A	2000	\$12,389,356	The project includes the construction of a new western delta lobe behind Big Island to enhance the accretion of land beyond the west bank of the Atchafalaya River. Construction included dredging of a main channel and five branch channels designed to mimic natural channel bifurcations. Dredged material was strategically placed at elevations mimicking natural delta lobes. Re-opening the channels is allowing continued natural sediment transport and marsh growth.	2
CWPPRA	Nauma Outfall Management	BA-0003-C	OM	NRCS	JEFFERSON	634	N/A	2002	\$2,285,972	The project manages the outfall of four existing eight spouts by controlling the movement of the diverted waters. The spouts direct sedimentladen water from the Mississippi River into the westbank wetlands to reduce saltwater intrusion and enhance wetland productivity.	2
CWPPRA	West Pointe à la Hache Outfall Management (Deauthorized)	BA-0004-C	HR	NRCS	PLAQUEMINES	646	N/A	Deauthorized	\$6,620,516	The project goal is to optimize use of fresh water and sediment supplied by existing spouts by reducing channelized flow and routing the diverted flow to nourish marshes. Project was reauthorized in 2015.	2
CWPPRA	Lake Sabine Shore Protection Demonstration	BA-0015	SP	NMFS	ST CHARLES	N/A	N/A	1998	\$5,056,506	The objective of this project is to maintain the shoreline along a section of Lake Sabine and help re-establish the natural hydrology of interior marsh. Phased I of the project was constructed to demonstrate the effectiveness of four separate bays as a segmented approach to restore marsh to a prior soil environment. Phase II of the project included the installation of 8,000 feet of continuous rock structure along the western section of the lake.	2
CWPPRA	Fourchon Hydrologic Restoration (Deauthorized)	BA-0018	HR		LAFOURCHE	N/A	N/A	Deauthorized	\$7,703	The goal of this project was to restore tidal exchange to 2,400 acres of impounded wetlands. The project was officially deauthorized by the CWPPRA Task Force in January of 2009, as the request of the landowner.	2
CWPPRA	Bauchat Bay Waterway Wetland Restoration	BA-0019	MC	USACE	JEFFERSON	510	N/A	1996	\$1,170,000	The project beneficially used dredge material to enlarge Queen Bess Island.	2
CWPPRA	Barataria Bay Waterway West Side Shoreline Protection	BA-0020	HR, SP	NRCS	JEFFERSON	510	N/A	2003 - 2012	\$28,886,616	The goal of this project is to restore the natural hydrologic conditions of the area and reduce shoreline erosion. The goal was partly accomplished through constructing a series of wave control structures. Construction unit 1 consists of 1,800 ft of rock rip rap, embayment, 15,100 ft concrete sheet pile, bulk and marsh creation.	2
CWPPRA	Baou Père Barataria Rigolettes Marsh Restoration (Deauthorized)	BA-0021	MC	NMFS	JEFFERSON	1065	N/A	Deauthorized	\$20,964	This project was authorized to protect deteriorated intermediate trairak marsh located between Lake Savador and Little Lake by using dredged material to re-establish the shoreline. Due to an unstable and rapidly eroding site, the project was deemed uneasible and was officially deauthorized by the CWPPRA Task Force in January of 1998.	2
CWPPRA	Baou L'ours Ridge Hydrologic Restoration (Deauthorized)	BA-0022	HR	NRCS	LAFOURCHE	737	N/A	Deauthorized	\$371,232	This project was proposed to restore marsh areas to the marsh by reinforcing breached areas of the Bayou L'ours Ridge through a series of earthen closure and two water control structures. The project was officially deauthorized by the CWPPRA Task Force in April of 2002 because of funding issues.	2
CWPPRA	Barataria Bay Waterway West Side Shoreline Protection	BA-0023	SP	NRCS	JEFFERSON	1789	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 tumultuous water exchange and subsequent erosion. A rock dike was constructed along 400 linear feet of the west bank of the Barataria Bay Waterway.	2
CWPPRA	Myrtle Grove Station (Deauthorized)	BA-0024	FD	NMFS	PLAQUEMINES	N/A	N/A	Deauthorized	\$431,802	The goal of the project is to reduce saltwater intrusion and to nourish existing marsh. This will be accomplished by diverting water through a spout from the Mississippi River to adjacent wetlands. This project was officially deauthorized by the CWPPRA Task Force in October 2007 because a larger diversion was authorized at the same location (see BA-33).	2
CWPPRA	Barou Lafourche Spillway (Deauthorized)	BA-0025-A	FD	EPA	LAFOURCHE	428	N/A	Deauthorized	\$4,592	The goal of this project is to reduce marsh loss attributed to Barou Lafourche by introducing nutrient and sediment laden river water through lane spout closures. This project was authorized on the 11th PBL as BA-25b.	2
CWPPRA	Mississippi River Reinstitution (into Barou Lafourche) (Deauthorized)	BA-0025-B	FD	EPA	ASCENSION, LAFOURCHE, TERREBONNE	85,000	N/A	Deauthorized	\$9,619,586	The goal of this project is to restore and reinstate Barataria Bay water via Barou Lafourche. This project was originally authorized on the 5th PBL as BA-25. This project was officially deauthorized by the Bureau Act Task Force in October 2007; however, engineering and design will be completed by the CWPPRA Task Force in 2008.	2
CWPPRA	Barataria Bay Waterway East Side Shoreline Protection	BA-0026	SP	NRCS	JEFFERSON	217	N/A	2001	\$5,224,477	The objective of this project is to repair the banks of the BWWW to protect the adjacent marsh from excessive tidal action and saltwater intrusion. The project consists of 7,800 (3 miles) of levee construction with dredged material on the levee, and 17,600 (3.3 miles) of rip rap armor.	2
CWPPRA	Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2	BA-0027	SP	NRCS	JEFFERSON	1304	N/A	2009	\$31,288,622	The objective of the project is to select a cost-effective erosion control technique to stop the erosion on the southwestern shoreline of Bayou Perot and the southeastern shoreline of Bayou Choctaw. The length of protection is estimated to be approximately 7,000 feet of Bayou Perot and approximately 1,000 feet of Bayou Choctaw.	2
CWPPRA	Barataria Basin Landbridge Shoreline Protection, Phase 3	BA-0027-C	SP	NRCS	JEFFERSON, LAFOURCHE	5587	N/A	1998, 2008, 2017	\$46,231,597	The project tested sections of different shoreline protection types, such as, concrete piers/wall, rock and light rock. These projects will consist of 31,500 feet of foreshore rock, 41,000 feet of shoreline protection.	2
CWPPRA	Barataria Basin Landbridge Shoreline Protection Phase 4	BA-0027-D	SP	NRCS	JEFFERSON	589	N/A	2006	\$17,703,216	This project consists of 31,500 feet of foreshore rock, 41,000 feet of shoreline protection, and 10,000 feet of concrete pier wall.	2
CWPPRA	Dredged Material Disposal Site on Grand Terre Island	BA-0028	VP	NMFS	JEFFERSON	127	N/A	2001	\$526,314	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 CWPPRA Task Force in February of 2005 because it was determined to be uneasible.	2
CWPPRA	La Highway 1 Marsh Creation (Deauthorized)	BA-0029	MC	EPA	LAFOURCHE	146	N/A	Deauthorized	\$250,257	The material will be used to create dune and marsh habitat and extend the island's efficacy. Dredged material was constructed using CHP-2007 funds.	2
CWPPRA	East/Middle Grand Terre Islands Restoration (Transferred)	BA-0030	MC	NMFS	JEFFERSON	403	N/A	Transferred	\$2,211,739	This project involved the creation of dunes and marsh platform on the north side of the Oak of Mexico to add onto Bayou Wise. Santa Barbara sand was used to stabilize the dunes.	2
CWPPRA	Delta Building Diversion at Myrtle Grove (Transferred)	BA-0033	SD	USA/CE	JEFFERSON, PLAQUEMINES	8391	N/A	Transferred	\$327,422	The objective of this project is to divert Mississippi River water and sediment for the treatment of new emergent wetlands. The project will involve installation of gated box culverts on the west bank of the Mississippi River in the vicinity of Barou Dupont, the Barataria Bay Waterway, and the Wilkinson Canal, or a combination of these actions. This project was transferred to the LCA Program.	2
CWPPRA	Mississippi River Reinstitution Into Northwest Barataria Basin (Transferred)	BA-0034	FD	EPA	ST JOHNS THE BAPTIST, ST JAMES	5134	N/A	Transferred	\$17,098,768	The goal of this project is to create marsh in a area of the Mississippi River in northwest Barataria Basin wetlands with gains of soil 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
CWPPRA	Hydrologic Restoration and Vegetative Plantings of a Lagoon at Remond's Swamp	BA-0034-2	HR, VP	USFWS	ST JOHNS THE BAPTIST, ST JAMES	5134	N/A	Pending	\$14,355,710	Project features include the implementation of spoil bank gardens, culverts, and other hydrologic improvements for the impounded swamps to reverse the impoundment effects that are currently serious impediments to swamp health.	2
CWPPRA	Pass Chaland to Grand Bayou Pass	BA-0035	BH	NMFS	PLAQUEMINES	359	N/A	2009	\$46,411,530	This project involved the creation of dunes and marsh platform on the north side of the Oak of Mexico to add onto Bayou Wise. Santa Barbara sand was used to stabilize the dunes.	2
CWPPRA	Dedicated Dredging on the Barataria Basin Landbridge	BA-0036	MC	USFWS	JEFFERSON	2800	N/A	2010	\$36,281,893	Approximate 5,300,000 cubic yards of material was placed in two contained marsh tracts areas to construct approximately 1,210 acres of inland marsh at a mean elevation of 2.5 NAVD 88. Approximately 3,901,000 cubic yards of marsh area to marsh at a mean elevation of 1.5 NAVD 88.	2
CWPPRA	Little Lake Shoreline Protection/Beach Dredging Near Round Lake	BA-0037	MM, SP	NMFS	LAFOURCHE	713	N/A	2007	\$44,331,412	This project is designed to protect a wetlands which currently experience high rates of shoreline erosion. This project proposes approximately 2,000 feet of little lake shoreline, and rounds a additional 53.2 acres of inland wetlands, and rounds a additional 53.2 acres of inland wetlands.	2
CWPPRA	Pelican Island and Pass La Mer to Chaland Pass Restoration	BA-0038	BH, VP	NMFS	PLAQUEMINES	1117	N/A	2012	\$52,389,369	The objectives of this project are to enhance storm-tailored surge and wave protection, prevent overtopping during storms, and increase the volume of sand within the active barrier system. This project was first authorized on the 9th PBL as Barer Island Restoration Grande Terre to SWY Pass (BA-32). Construction of the Pass La Mer to Chaland Pass Restoration segment was completed in 2007.	2

ONGOING PROTECTION AND RESTORATION SUMMARIES

CWRA Program	Name	State Project Number	Project Type	Federal Sponsor	Miles of Levee Benefited	Acre's Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Mississippi River Sediment Delivery System: Bayou Dupont	BA-0039	MC	EPA	JEFFERSON, PLAQUEMINES	577	N/A	\$31,631,908	The goal of this project is to create restore 193 acres of trach marsh by delivering via pipeline, dredged material from the Mississippi River to an adjacent area within the Barataria Basin, and planting marsh vegetation.	2
CWPPRA	Riverine Sand Mining Confid Island Restoration (Transferred)	BA-0040	BH	NMFS	PLAQUEMINES	234	N/A	\$40,851,272	The goals of this project are to repair breaches and tidal inlets on shoreline, reinforce eroding shoreline with sand, and increase the island width with back barrier marsh creation to increase longevity. This project was transferred to the Barrier to Barrier Program for construction.	2
CWPPRA	South Shore of the Pen Creation	BA-0041	SP, MC	NRCS	JEFFERSON	211	N/A	\$21,639,575	This project involves the construction of approximately 1,000 feet of concrete walls and panel wall and 10,900 feet of rock revetment along the south shore of the Pen and Bayou Dupont. Dealt a need for dredging was used to create approximately 74 acres of marsh, and furnish an additional 17 acres of marsh, within the triangular area bounded by the south shore of the Pen, the Barataria Bay, Calcasieu River, and the Cane River.	2
CWPPRA	Lake Hermitage Marsh Creation	BA-0042	TE, SP, MC	USFWS	PLAQUEMINES	438	N/A	\$40,538,484	The goals of the project are to create approximately 438 acres of wetlands, reduce tidal exchange in marshes surrounding Lake Hermitage using materials dredged from the Mississippi River.	2
CWPPRA	West Points a la Hache Marsh Creation	BA-0047	MC	NRCS	PLAQUEMINES	203	N/A	\$5,671,108	The goal of this project is to reestablish marsh using sediment hydraulically dredged from the Mississippi River and pumped via barge to the project area. The project was constructed as part of EB-0042.	2
CWPPRA	Bayou Dupont Protection and Ridge Creation Project	BA-0048	MC	NMFS	JEFFERSON	317	N/A	\$8,324,446	This marsh and ridge creation project will nourish approximately 18 acres of marsh and create 15 acres of maritime ridge by long distance pumping of Mississippi River sediment.	2
CWPPRA	Grand Land Marsh and Ridge Restoration	BA-0068	BH	NMFS	PLAQUEMINES	502	N/A	\$41,372,785	This project will create 238 about acres of marsh, nourish about 140 acres of marsh, and build about 20,000 ft of ridge.	2
CWPPRA	Chenebere Ronquille Barrier Island Restoration (Transferred)	BA-0076	BH	NMFS	PLAQUEMINES	398	N/A	\$51,145,769	The project goal is to maintain shoreline integrity and create and restore same marsh on Chenier Ronquille. This project involves dedicated dredging from nearshore Gulf deposits to create same marsh in open water areas and nourish existing marshes and barrier shoreline in project area. Intensive dune plantings in the project area were also proposed. This project was transferred to NRDAs for construction.	2
CWPPRA	Northwest Tule Bay Marsh Creation	BA-0125	MC	USFWS	JEFFERSON	407	N/A	\$24,448,757	This project involves the creation of approximately 423 acres and nourish approximately 373 acres of marsh using sediment dredged from Tule Bay or Little Lake. Existing canal spoil banks, emergent marsh, and limited segments of coastal dunes will be used to guide the distribution of the dredged material. Contaminant dikes will be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands.	2
CWPPRA	Bauro Dupont Sediment Delevee, Marsh Creation, and Restoration	BA-0164	MC	EPA	PLAQUEMINES, JEFFERSON, LAFOURCHE	302	N/A	\$39,529,163	This project involves the creation of approximately 300 acres of the barrier intertidal marsh and nourishment of 130 acres of emergent marsh behind 300 acres of the Calcasieu River. The Calcasieu River is a major tributary of the Mississippi River.	1
CWPPRA	Carrinuda Headlands Back Barataria Marsh Creation	BA-0171	MC	EPA	LAFOURCHE	430	N/A	\$32,284,094	The goal of this project is to create approximately 312 acres of marsh habitat in a open water areas and nourish marsh along the eastern site of the Barataria/Saint Charles Canal.	2
CWPPRA	Bayou Ondis, Chenebere Marsh and Ridge Restoration	BA-0173	MC	USFWS	PLAQUEMINES	264	N/A	\$30,311,402	In addition to taving one of the highest strands rarest rats in Louisiana, Carrinuda Headland has suffered significant shoreline losses due to recent hurricanes. As the beach and dune continue to migrate landward, overwash sediment is lost into newly formed open water areas. Carrinuda Headland restoration measures thousands of acres of wetlands and critical infrastructure to the north, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system. This project will create and/or nourish 443 acres of back barrier marsh and create a platform upon which the beach and dune can migrate. This project will work synergistically with existing Carrinuda Headland dune and back barrier marsh projects.	2
CWPPRA	Banter Marsh Creation Increment 2	BA-0193	BH	EPA	JEFFERSON, LAFOURCHE	444	N/A	\$25,977,605	The project goal is to create approximately 251 acres of marsh and nourish 172 acres of saline marsh east of Legueille.	2
CWPPRA	East Leveeville Marsh Creation and Nourishment	BA-0194	MC	NDAA	LAFOURCHE	482	N/A	\$34,880,876	The goal of the project is to create approximately 251 acres of marsh and nourish 266 acre of marsh (517 acres total) with dredged material from Barataria Bay.	2
CWPPRA	Barataria Bay Routh Marsh Creation and Nourishment	BA-0195	MC	NRCS	PLAQUEMINES, JEFFERSON	517	N/A	\$23,545,626	The primary objective of this project is to enhance a marsh by increasing the utilization of freshwater nutrients, and sediments provided by the Mississippi River through the Caernarvon Freshwater Diversions Structure.	2
CWPPRA	Caernarvon Diversion Outfall Management	BS-00034	OM	NRCS	PLAQUEMINES	802	N/A	\$4,330,000	This project was designed to direct the flow of Mississippi River nutrients and sediment into the deteriorating wetlands on the Breton Sound Basin that are not directly benefited by the Caernarvon Freshwater Diversions project. Because of the failure in secure landings, the project was officially deauthorized by the CWPPRA Task Force in January of 1998. This project was reauthorized on the 4th PPL as BS-12.	1
CWPPRA	White's Ditch Outfall Management (Deauthorized)	BS-00044	OM	NRCS	PLAQUEMINES	N/A	Deauthorized	\$32,862	The project goal is to construct a goal-lined opening through the rocks at the head of the Jupeach 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.	1
CWPPRA	Grand Bay Crevasse (Deauthorized)	BS-00007	SD	USA OE	PLAQUEMINES	N/A	Deauthorized	\$55,747	The project was officially deauthorized by the CWPPRA Task Force in July of 1998 because of lardigns issues.	1
CWPPRA	Upper Oak River Freshwater Siphon (Deauthorized) Phase 1	BS-0009	FD	NRCS	PLAQUEMINES	N/A	Deauthorized	\$56,476	The primary goal of this project was to reverse the trend of intense marsh deterioration in the project area due to saltwater intrusion through installation of freshwater siphons outfall channel. These strategies would have provided resilience, nutrients, and salinity gradients to enhance marsh health. The project was officially deauthorized by the CWPPRA Task Force in January of 2003 because of abundant issues.	1
CWPPRA	Delta Building Division North of Fort St. Philip (Drafted)	BS-0010	SD	USA OE	PLAQUEMINES	543	N/A	\$1,178,640	The goal of this project was to create approximately 630 acres of new marsh across the percent cover of year vegetation increases the area of shallow open water habitats, and decrease mean salinity in the project area. This CWPPRA project was transferred to the CAP Program.	1
CWPPRA	Delta Management at Fort St. Philip	BS-0011	SNT	USFWS	PLAQUEMINES	267	N/A	\$3,199,948	The objective of this project is to enhance the delta-building process occurring due to the crevasses at Fort St. Philip. Six artificial vegetated terraces were constructed to enhance a sediment retention and reduce wave energy in one of the receiving bay days.	1
CWPPRA	White Ditch Reconstruction and Outfall Management (Deauthorized)	BS-0012	OM, FD	NRCS	PLAQUEMINES	189	N/A	\$1,595,677	The goal of this project was to provide utilization of freshwater, sediments, and nutrients from Mississippi River by renewing operation of existing siphon and adding another. The project was officially deauthorized by the CWPPRA Task Force in 2013.	1
CWPPRA	Bayou Lamour Freshwater Diversions (Transferred)	BS-0013	FD	EPA	PLAQUEMINES	620	N/A	\$556,703	The goal of this project was to create approximately 630 acres of new marsh across the percent cover of year vegetation increases the area of shallow open water habitats, and decrease mean salinity in the project area. This CWPPRA project was transferred to the CAP Program.	1
CWPPRA	Bethelina Mississippi River Reintroduction Project	BS-0015	FD	EPA	PLAQUEMINES	640	N/A	\$33,716,887	The goal of the project was to reintroduce Mississippi River water to adjacent wetlands through an uncontrolled diversion with a pipe of approximately 10,000 cfs, restoring natural deltaic growth and habitats. The project was deauthorized by the CWPPRA Task Force in 2013.	1
CWPPRA	South Lake Leray Shoreline and Marsh Restoration	BS-0016	VP, MC	USFWS	PLAQUEMINES	652	N/A	\$3,929,152	This project involves dredging sediment to create 396 acres of marsh and restore approximately 32,000 feet of southern Lake Leray shoreline.	1
CWPPRA	Bertrandville Siphon (Deauthorized)	BS-0018	FD	EPA	PLAQUEMINES	1813	N/A	\$22,578,508	The goal of the project was to create and sustain marsh through a MS River reintroduction (2,000 cfs maximum siphon) into the open water near Bertrandville. The project was transferred to the CWPPRA Task Force in 2013.	1
CWPPRA	Tensering and Marsh Creation South of Big Bayou	BS-0024	MC, TE	USFWS	PLAQUEMINES	383	N/A	\$22,774,368	This project involves the construction of approximately 65,000 linear feet of terraces (31 acres) with in-situ material to reduce fetch and turbidity and capture suspended sediment. Sediments will be hydraulically dredged from Lake Leray and pumped into a pipeline to create and restore approximately 334 acres of wetland in the project area.	2
CWPPRA	Cameron-Creole Maintenance	CS-0004A	HR	NRCS	CAMERON	2602	N/A	\$4,644,371	The project area falls within the Cameron-Creole watershed management area, which has been adversely impacted by saltwater intrusion and loss of elevation due to subsidence. Nutrient-rich waters from the Calcasieu River and Lake Calcasieu enter the area through the Calcasieu River and Lake Calcasieu. The project will provide drainage for the area.	4
CWPPRA	Brown Lake Hydrologic Restoration (Deauthorized)	CS-0009	MM	NRCS	CALCASIEU, CAMERON	916	N/A	\$1,097,828	The project investigated the restoration of the natural hydrology of the Brown Lake area. The project was deauthorized by the CWPPRA Task Force.	4
CWPPRA	Sweet Lake/Mallow Lake Hydrologic Restoration	CS-0011-B	SP	NRCS	CAMERON	247	N/A	\$3,929,152	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 tidal exchange, and to build a erosion and trap sediment needed to rebuild marsh along the northern lakes and northwestern shores of Sweet Lake. This project includes construction of rock embankments on the GIWW to close off the area to plant regeneration.	4
CWPPRA	Cameron Creole Plugs	CS-0017	HR	USFWS	CAMERON	865	N/A	\$4,184,539	The project goal is to restore historic water circulation patterns within the Cameron-Creole Watershed. This objective will be accomplished by slowing the rapid movement of saline waters that enter the watershed from Calcasieu Lake. The project consisted of the installation of two sets of permeable planks in open water areas.	4

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRAs Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunos.	Total Budget	Project Description		Planning Unit
										West	East	
CWPPRA	Sabine National Wildlife Refuge Erosion Protection	CS-00118	SP	USFWS	CAMERON	5542	N/A	1995	\$1,602,656	The goal of this project is to protect 13,000 acres of fresh marsh from deterioration associated with the anticipated failure of the existing west levee. The original design was to reinforce the existing 5.5 miles of eroded levee. The project was redesigned to include 1,000 feet of levee reconstruction and 5.5 miles of new armor. Vegetation plantings were used to reduce erosion from boat traffic.	4	
CWPPRA	West Hackberry' Appearane Planting Demonstration	CS-00119	VP	NRCS	CAMERON	N/A	N/A	1994	\$256,250	The goal of this demonstration project is to reduce erosion from interior open water wave energy using vegetation plantings consisting of California bulrush (<i>Schoenoplectus californicus</i>). In addition, wave-stilling hay bale fence were used to protect the vegetation plantings.	4	
CWPPRA	East Mud Lake Marsh Management	CS-00220	MM	NRCS	CAMERON	1520	N/A	1996	\$6,036,741	The project involves the creation of a hydrologic regime conducive to restoration, protection, and enhancement of the Mud Lake area using various types of water control structures and vegetative plantings. Structural components include culverts with flap gates, two variable crest walls, three earthen dikes, overflow banks and berms of existing levees.	4	
CWPPRA	Highway 384 Hydrologic Restoration	CS-00221	MM	NRCS	CAMERON	650	N/A	2000	\$1,586,228	The project purpose is to restore the natural hydrology of the project area and eliminate undesirably high salinities and severe water fluctuations, temporarily reduce the potential future marsh losses.	4	
CWPPRA	Clear Marsh Bank Protection	CS-00222	SP	USACE	CALCASIEU	1067	N/A	1997	\$3,086,088	The project is to add north of the Calcasieu Intracoastal Waterway (GIWW) approximately 10 miles northwest 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	
CWPPRA	Replace Sabine Refuge Water Control Structures at Headwaters Canal West Cove Canal and Hog Island Gully	CS-00223	MM	USFWS	CAMERON	953	N/A	2001	\$5,709,299	This project involved the replacement of existing structures at Sabine National Wildlife Refuge with structures that have substantially greater discharge potential and reduced management flexibility.	4	
CWPPRA	Perry Ridge Shore Protection	CS-00224	SP	NRCS	CALCASIEU	1203	N/A	1999	\$2,289,090	The project reduces tidal soi, wave action from boats, and other excessive energy impacts on interior marshes and the possibility of saltwater intrusion by placing rip-rap along low areas on the northern spit/bank of the GIWW from Perry Ridge to Vinton Tranche.	4	
CWPPRA	Plowed Terraces & Headwaters Canal West Demonstration	CS-00225	SNT	NRCS	CAMERON	N/A	N/A	2000	\$325,641	This objective of this demonstration project is to develop and demonstrate a non-traditional procedure for constructing barren terraces in shallow open water areas. Thirty-eight earthen terraces are served as wave-stilling, sediment-trapping structures and provided a medium base for the establishment of emergent vegetation.	4	
CWPPRA	Consort Demonstration (Deauthentified)	CS-00226	MC	EPA	CAMERON	N/A	N/A	Deauthorized	\$255,390	This project was authorized to evaluate the effectiveness of using tree firriments as compostable material, using compost amended materials in providing a growth medium for emergent vegetation, and determining settlement rates of the compost amended materials and tree firriments. The project officially deauthorized due to lack of funding.	4	
CWPPRA	Black Bayou Hydrologic Restoration	CS-00227	HR	NMFS	CALCASIEU, CAMERON	3594	N/A	2003	\$6,170,284	The project goals are to reduce wetland loss resulting from hydrologic changes including reduced freshwater inflow, increased magnitude and duration of tidal fluctuations, increased salinities, higher water levels, and increased water exchange. This project included the construction of spoil banks, weirs, plugs, and culverts designed to allow flow freshwater from the GIWW to east all way down the GIWW into the wetlands and to create a hydrologic head that increases freshwater retention time and reduces saltwater intrusion.	4	
CWPPRA	Sabine Refuge Marsh Creation, Cycles 4-5	CS-00228-4-5	MC	USAID	CAMERON	460	N/A	2015	\$1,638,449	The Sabine Refuge Marsh Creation 4-5 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River, Ship Channel temporary pipeline into a marsh creation site within the Sabine National Wildlife Refuge.	4	
CWPPRA	Sabine Refuge Marsh Creation, Cycles 1-3	CS-00228-1	MC	USAID	CAMERON	662	N/A	2002, 2010	\$24,627,399	The Sabine Refuge Marsh Creation Cycles 1-3 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River, Ship Channel temporary pipeline into a marsh creation site within the Sabine National Wildlife Refuge.	4	
CWPPRA	Black Bayou Culverts Hydrologic Restoration	CS-00229	HR	NRCS	CALCASIEU	540	N/A	2007	\$16,899,059	This project involved the construction of 10 box culverts (10 ft x 10 ft) with flap gates in the embankment of Highway 384 in Cameron Parish.	4	
CWPPRA	GIWW - Perry Ridge West Bank Stabilization	CS-00300	SP	NRCS	CALCASIEU	1132	N/A	2001	\$2,256,216	The project consists of installing rock along the bank of the GIWW to prevent further erosion.	4	
CWPPRA	Holy Beach Sand Management	CS-00301	SP	NRCS	CAMERON	330	N/A	2003	\$14,130,233	The purpose of this project is to protect existing coastal wetlands by restoring and maintaining the integrity and functionality of the remaining chenieroid ridge. This objective was accomplished through beach renourishment, installation of sand fencing, vegetation planting, and monitoring of the shoreline response. This project was originally authorized on the 5th P.L. as the complex project: Holy Beach Project LSC-01.	4	
CWPPRA	East Sabine Lake Hydrologic Restoration C11	CS-00322-CU1	TE, IHR	USFWB	CAMERON	281	N/A	2009	\$4,944,870	The objectives of this project are to protect and restore areas of marsh, and restore the historical hydrologic regime to the Sabine National Wildlife Refuge. This was to be accomplished using shoreline protection, terraces, vegetation plantings, and water control structures to reduce tidal scour, shoreline erosion, turbidity, and salinity. However, design of the water control structures has been discontinued and the remaining construction lands was used to build additional marshes.	4	
CWPPRA	Cameron-Creole Freshwater Introduction	CS-00449	VP, FD	NRCS	CAMERON	473	N/A	Pending	\$14,037,045	The purpose of this project is to restore and protect approximately 319 acres of critically important marsh and the numerous functions provided by those acres. The proposed project will restore a portion of the historic meandering channel of Kason Bayou and provide direct protection to Louisiana State Highway 27, this is the region's only northward hurricane evacuation route. The project has been transferred to the Chenes Plain Coastal Protection and Restoration Authority.	4	
CWPPRA	Kalgo Bayou Marsh Creation and Hydrologic Restoration	CS-00553	MC, SP	NRCS	CAMERON	274	N/A	Transferred	\$17,882,765	This project involves the construction of 334 acres of marsh and the reestablishment of Old North Bayou via dredged material from the Gulf of Mexico. The project also involves the construction of 35,000 linear feet of terraces (18 acres) to reduce wind generated wave fetch.	4	
CWPPRA	Cameron-Creole Watershed Grand Bayou Marsh Creation	CS-00554	MC	USFWB	CAMERON	534	N/A	Pending	\$22,918,887	Project goals include creating 609 acres of brackish marsh and nourishing 1,400 acres of marshland in the Cameron Prairie National Wildlife Refuge and adjacent brackish marshes in Catassou Lake to benefit fish and wildlife resources in the Cameron Prairie National Wildlife Refuge and adjacent brackish marshes of the Calcasieu Estuary.	4	
CWPPRA	Oyster Bayou Marsh Creation and Terrestrial	CS-00559	MC, SNT	NMFS	CAMERON	489	N/A	Pending	\$21,031,354	The project consists of reengineering marsh and associated edge habitat and creating terraces in order to reduce wave/sea erosion.	4	
CWPPRA	Cameron Meadows Marsh Creation and Terriating	CS-00666	MC, TE	NMFS	CAMERON	401	N/A	Pending	\$28,935,820	This project involves the construction of Old North Bayou via dredged material from the Gulf of Mexico. The project also contributes to coastal wetland loss by promoting the consumption of nutria meat.	4	
CWPPRA	No Name Bayou Marsh Creation and Nourishment	CS-00778	MC	NMFS	CAMERON	497	N/A	Pending	\$8,090,745	The project goal is to create and nourish approximately 533 acres of emergent saline marsh within the Cameron-Creole watershed along the Calcasieu Lake arm using sediment from upland disposal sites of the Calcasieu River.	4	
CWPPRA	Oyster Lake Marsh Creation and Nourishment	CS-00779	MC	NOAA	CALCASIEU	661	N/A	Pending	\$37,542,910	The primary goals of this project is to create and nourish approximately 661 acres of saline marsh. Sediment will be moved from the offshore disposal area used for CS-00778 and placed in this project area to a rate approximately 175 acres per year. The area will be planted with smooth cordgrass vegetation.	4	
CWPPRA	Nutria Harvest for Wetland Restoration Demonstration	LA-0003-A	OT	USFWB	COASTWIDE	N/A	N/A	2003	\$880,220	This project involves the Louisiana Department of Wildlife and Fisheries to establish an economic incentive program to trap and control nutria which are contributing to coastal wetland loss.	COASTWIDE	
CWPPRA	Coastaline Nutria Control Program	LA-0003-B	MM	NRCS	COASTWIDE	14963	N/A	N/A	\$8,090,745	Project goals are to harvest approximately 400,000 nutria annually. Damage inflicted by nutria is estimated to be reduced 25 to 45%.	COASTWIDE	
CWPPRA	Floating Marsh Creation Demonstration	LA-0005	OT	NRCS	TERREBONNE	N/A	N/A	2006	\$1,080,891	The purpose of this demonstration project was to develop and test unique and previously untested technologies for creating floating marshes in areas that are not conducive to construction with rock.	3A	
CWPPRA	Shoreline Protection Construction Improvements	LA-0006	SP	USACE	VERMILLION	0	N/A	2006	\$1,056,000	The purpose of this project is to investigate the potential to improve the foundation of rock dikes. The project was paired with the South White Lake Shoreline Protection (ME-22) project.	2, 3B	
CWPPRA	Bon Secour Oyster Reef Demonstration	LA-0008	SP	NMFS	CAMERON	4.5	N/A	2012	\$2,16,692	This project is intended to evaluate the Oysterbreak structure to prevent beach erosion and increase habitat diversity associated with natural oyster reefs.	4	
CWPPRA	Saltmarsh Containment System for Marsh Creation Demonstration	LA-0009	MC	NRCS	S T CHARLES	N/A	N/A	2013	\$2,323,073	This demonstration project utilizes an unit overtidal sediment containment system for marsh creation.	3A	
CWPPRA	No-nutria Nutriasis Demo	LA-0016	SP	NRCS	IBERIA, JEFFERSON, LAFOURCHE	N/A	N/A	2015	\$1,108,699	The goals of this project are to facilitate a consistent and responsive planting effort in coastal areas that are not feasible to plant directly due to "hot" spots of strong currents or artificial islands.	COASTWIDE	
CWPPRA	Coastwide Planting	LA-0039	VP	NRCS	COASTWIDE	779	N/A	N/A	\$1,2,589,725	The proposed demonstration project would stabilize existing shoreline features and attenuate shoreline retreat and potentially enhance interior marshes and an accretion platform behind the structure. The goal of this project is to provide a cost effective construction alternative to fibran for shoreline protection.	COASTWIDE	
CWPPRA	Shoreline Protection, and Restoration (GPFR) Panel	LA-0280	SP	NOAA	COASTWIDE	N/A	N/A	N/A	\$2,669,829		COASTWIDE	

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRAs										Planning Unit	
Program		Name		State Project Number		Project Type		Federal Sponsor		Project Description	
Miles or Levee Imprived.	Construction Completion	Total Budget	Planning Unit								
CWPPRA Salinity Wall Propagation Facility	LA-0284	OT	USFWS	COASTWIDE	26	N/A	N/A	\$5,052,748	The goal of this project is to operate a seawall propagation facility in Jeanerette, LA, that previously operated by LSU in Houma, to make coastal Louisiana more sustainable for change in hydrology in coastal Louisiana. The project includes the installation of 10,000 linear feet of rock breakwater (revet) along the west shoreline of Freshwater Bayou Canal, where needed, to protect this shoreline from further erosion, and the installation of a gated water control structure on the 4.5 sediment arm. Canal to reduce ponding in the area known as Freshwater Bayou Wetlands. The project has been extended for another 20 years.	COASTWIDE	
CWPPRA Freshwater Bayou Wetland Protection	ME-0004	SP	NRCS	VERMILLION	14381	N/A	1998	\$9,871,230	This demonstration project's purpose was to investigate the ability of vegetation plantings of smooth cordgrass (Spartina alterniflora) to colonize a newly-accreted mudflat, thereby establishing a wetland between the Gulf of Mexico and coastal wetlands. This project was officially deauthorized by the CWPPRA Task Force in October of 1986 because no plants were established.	4	
CWPPRA Dewitt-Roller Vegetative Plantings Demonstration (Deauthorized)	ME-0008	VP	NRCS	VERMILLION	102	N/A	1994	Deauthorized	\$32,147	This project protects the emergent wetlands of the Cameron Prairie National Wildlife Refuge adjacent to the GWW, enhances the emergent wetlands protected by constructing approximately 2.5 miles of rock dike parallel to the existing spit bank, and terminates the encroachment of the GWW into the refuge.	4
CWPPRA Cameron Prairie National Wildlife Refuge Shoreline	ME-0009	SP	USFWS	CAMERON	640	N/A	1994	\$1,227,173	The project consists of replacing the existing Humble Canal structure to restore water management capabilities to the area.	4	
CWPPRA Humble Canal Hydrologic Protection	ME-0011	HR	NRCS	CAMERON	378	N/A	2003	\$1,530,812	The objective of this demonstration project was to stabilize one mile of the White Lake shoreline and prevent branching into Deep Lake. The project was initiated to determine if a California bulrush (Typha domingensis) cultivation would affect a damming high energy wave action. This project was officially deauthorized by the CWPPRA Task Force in October of 1986 because no plants were established.	4	
CWPPRA Southwest Shore White Lake Demonstration (Deauthorized)	ME-0012	SP	NRCS	IBERIA	N/A	N/A	1996	Deauthorized	\$4,1777	The project consists of replacing the existing Humble Canal structure to restore water management capabilities to the area.	4
CWPPRA Freshwater Bayou Bank Stabilization	ME-0013	SP	NRCS	VERMILLION	511	N/A	1998	\$8,913,357	The post of this project is to stabilize one mile of the White Lake shoreline and prevent branching into Deep Lake. The project was initiated to determine if a California bulrush (Typha domingensis) cultivation would affect a damming high energy wave action. The project was achieved by constructing a rock dike along critical areas of the eastern and western banks of the canal. This was achieved by constructing a rock dike along critical areas of the eastern and western banks of the canal. The project was extended for another 20 years.	4	
CWPPRA Pecan Island Tearing	ME-0014	TE	NMFS	VERMILLION	437	N/A	2003	\$2,390,984	The goal of this project is to convert areas of open water back to vegetated marsh. Project features included the construction of Shallow Submittional, all California Bulrush (Typha domingensis) and Common Reed (Phragmites australis).	4	
CWPPRA Freshwater Introduction South	ME-0016	HR	USFWS	IBERIA	296	N/A	2006	\$6,742,505	The purpose of this project is to introduce fresh water into brackish marsh habitat south of La. Highway 82 through use of water intrusion, increase tidal exchange and wave-induced erosion. This was achieved by constructing a rock dike along critical areas of the eastern and western banks of the canal. The project was extended for another 20 years.	4	
CWPPRA Little Pecan Bayou Hydrologic Restoration (Deauthorized)	ME-0017	HR	NRCS	CAMERON	144	N/A	Deauthorized	\$1,303,713	The purpose of this project is to construct a continuous tree shore breakwater along the Gulf of Mexico shoreline, approximately 50.661 feet from Beach Point to Joseph Harbor.	4	
CWPPRA Rockefeller Refuge Gulf Shoreline Stabilization	ME-0018	SP	NMFS	CAMERON	863	N/A	Pending	\$26,776,463	The purpose of the project was to prevent the coalescence of Grand and White Lakes through the installation of 11,000 feet of hard shoreline stabilization and construction of terraces.	4	
CWPPRA Grand White Lakes Landbridge	ME-0019	SP	USFWS	CAMERON	213	N/A	2004	\$3,536,830	The objective of this project is a reduction in salinity in target marshes via fresh water introduction from Upper Mud Lake via the Dr. Miller Canal and culvert under Hwy 82. Restoration of 402 acres of brackish marsh from shallow open water and nourishment of 51 acres of marsh (total 453 acres) in two cells (176 and 277 acres) via 1.15 M cubic yards of dredged material from a Gulf of Mexico borrow site.	4	
CWPPRA South Grand Chenier Hydrologic Restoration	ME-0020	HR, MC	USFWS	VERMILLION	440	N/A	Pending	\$23,873,346	This project involves the construction of a rock dike to protect the south shoreline of Grand Lake to Tebo Point and perform long-term O&M on this site as well as a separate portion from Superior Canal to Calish Lake constructed using CAFP 2007 funds.	4	
CWPPRA Grand Lake Shoreline Protection, Fatto Point	ME-0021	SP	NRCS	CAMERON	495	N/A	Pending	\$11,305,616	This project involved the construction of a rock dike along the south shoreline of White Lake to reduce erosion and maintain shoreline integrity.	4	
CWPPRA South White Lake Shoreline Protection	ME-0022	SP	USACE	VERMILLION	844	N/A	2006	\$19,673,361	The purpose of this project was to introduce fresh water from the lakes subbasin in north, under Hwy 82 and into the lakes subbasin south of Hwy 82. The project was officially deauthorized by the CWPPRA Task Force in January of 2011.	4	
CWPPRA South Pecon Island Freshwater Introduction (Deauthorized)	ME-0023	FD	NMFS	CAMERON	98	N/A	Deauthorized	\$4,438,693	The post of the project is to nourish and stabilize 4.900 linear feet of gunnery shoreline with sediment between Dewitt Canal and Big Constance Lake, and create approximately 421 acres of marsh platform, mud flat, and shallow water, extending approximately 384 feet seaward. The project is not funded until the Phase ILSA template is finalized with the USA CE.	4	
CWPPRA Southwest Louisiana Gulf Shoreline Nourishment and Protection	ME-0024	OT	USACE	IBERIA	888	N/A	Pending/On Hold	\$17,144,234	The purpose of this project is to create new wetland habitat, restore degraded marsh, and reduce wave erosion. Material dredged from the Gulf of Mexico will be utilized to create and nourish approximately 420 acres of marsh. Retention levee will be dredged and approximately 1,756 linear feet of tidal creek will be constructed by tracing marsh bighton on the marsh platform for estuarine fisheries access. Smooth cordgrass will be planted on 26-foot centers throughout the area total 39,265 plants.	4	
CWPPRA Freshwater Bayou March Creation	ME-0031	MC	NRCS	VERMILLION	401	N/A	Pending	\$26,758,528	The project consists of a conveyance channel for high-saline uncontrolled diversion of freshwater and sediments from the Mississippi River. The diversion channel was designed to be controlled in two phases. (1) Initial construction of a interim channel to accommodate a discharge of 20,000 cubic feet per second (cfs) at the mouth of the river and marsh development areas, (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 time based on diversion observations.	4	
CWPPRA South Grand Chenier Marsh Creation - Baker Tract	ME-0032	MC	NRCS	CAMERON	393	N/A	Pending	\$26,691,833	The project consists of deepening the inner of the existing 50 foot wide gap in the Mississippi River channel bank armor. The existing invert was lowered to -4.0 feet NGVD. In addition, an existing earthen channel leading to the open water area beyond the banks were enlarged. Approximately 125,000 cubic yards of material were excavated from the outlet channel and east adjacent to the channel in marsh contribute to marsh inundation.	2	
CWPPRA West Bay Sediment Diversion	MR-0003	SD	USACE	PLAQUEMINES	9831	N/A	2003	\$50,863,303	The objective of this project was to create and restore marsh in the Mississippi River between Pass-a-Louvre and Raphael Pass. This was officially deauthorized by the CWPPRA Task Force in July of 1998 due to high costs attributed to relocating underground utilities in the area.	1	
CWPPRA Channel Armor Gap Crevasse	MR-0006	SD	USACE	PLAQUEMINES	2097	N/A	1997	\$858,985	The project consists of deepening the inner of the existing 50 foot wide gap in the Mississippi River channel bank armor. The existing invert was lowered to -4.0 feet NGVD. In addition, an existing earthen channel leading to the open water area beyond the banks were enlarged. Approximately 125,000 cubic yards of material were excavated from the outlet channel and east adjacent to the channel in marsh contribute to marsh inundation.	1	
CWPPRA Pass-a-Louvre Crevasse (Deauthorized)	MR-0007	SD	USACE	PLAQUEMINES	1043	N/A	Deauthorized	\$119,835	The objective of this project was to create and restore marsh in the Mississippi River between Pass-a-Louvre and Raphael Pass. This was officially deauthorized by the CWPPRA Task Force in July of 1998 due to high costs attributed to relocating underground utilities in the area.	1	
CWPPRA Beneficial Use of Hopper Dredging Material Demonstration (Deauthorized)	MR-0008	DM	USACE	PLAQUEMINES	N/A	N/A	Deauthorized	\$58,309	The goal of this project was to utilize dredged material to create emergent wetlands through the beneficial use of material dredged from a sediment trap located between miles 1 and 1.5 above Head of Passes in the Mississippi River. The proposed sediment trap will consist of a 120' x 100' trap converted to shallow open water pond. Due to design problems, the project was officially deauthorized by the CWPPRA Task Force in November of 2000.	2	
CWPPRA Delta Wide Crevasses	MR-0009	SD	NMFS	PLAQUEMINES	2386	N/A	1999	\$4,729,318	The objective of this project is to promote the formation of emergent freshwater and intermediate marsh in shallow open water areas of the Pass-a-Louvre Wetland Area and the Delta National Wildlife Refuge by either cleaning existing spays or creating new ones.	1	
CWPPRA Dustpan Maintenance Dredging Operations for Marsh Creation in the Mississippi River Delta Demonstration	MR-0010	DM	USACE	PLAQUEMINES	N/A	N/A	2002	\$1,909,020	This project demonstrated the beneficial use of dredged material from routine maintenance of the Mississippi River Navigation Channel by using a dustpan hydraulic dredge to create and restore adjacent marsh. Approximately 40 acres of deteriorated marsh had been converted to shallow open water water restored with approximately 22,000 cubic yards of dredged material.	2	
CWPPRA Periodic Introduction of Sediment and Nutrients at Selected Diversions (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 vertical pipeline dredge to provide increased sediment concentrations, but also the subsidence effects in the outfall area. The project was subsequently deauthorized by the CWPPRA Task Force.	1	
CWPPRA Mississippi River Sediment Trap (Deauthorized)	MR-0012	MC	USACE	PLAQUEMINES	1190	N/A	Deauthorized	\$354,790	This project was realigned on the 12th I-FPL to create emergent wetlands through the beneficial use of material dredged from a sediment trap located between miles 1 and 1.5 above Head of Passes in the Mississippi River. The proposed sediment trap will consist of a 120' x 100' trap converted to shallow open water pond. Due to design problems, the project was officially deauthorized by the CWPPRA Task Force in 2000 due to the high cost to implement the project.	1.2	
CWPPRA Benton's Bay Diversions (Deauthorized)	MR-0013	SD	USACE	PLAQUEMINES	4580	N/A	Deauthorized	\$976,560	The objective of this project was to create vegetated wetlands in shallow open water areas in Benton's Bay. The project would divert sediment to a new inlet to create a marsh and maintain approximately 16.982 acres of fresh to intermediate marsh over the 20-year project life. The project was deauthorized by the CWPPRA Task Force in 2013.	1	

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles or Levee Immovated	Construction Completion	Total Budget	Project Description	
										Deauthorized	Inactive
CWPPRA	Spaniard Foss Diversion (Deauthorized)	MR-0014	SD	USACE	PLAQUEMINES	433	N/A	Deauthorized	\$310,151	The goal of this project was to create permanent marsh by diverting Mississippi River water and sediment from Grand Pass into open water reserving saltwater. The project was deauthorized by the CWPPRA Task Force in 2013.	2
CWPPRA	Venice Ponds Marsh Creation and Crevasses (Native)	MR-0015	MC	EPA	PLAQUEMINES	511	N/A	Inactive	\$23,144,276	The goals of the project are to create, maintain, nourish, and expand existing deteriorating wetlands through dredging and filling, hydric soil restoration, levee construction, and invasive management. The project was designated as inactive by the CWPPRA Task Force in 2013.	2
CWPPRA	Fritchie Marsh Restoration	PO-0006	HR	NRCS	ST TAMMANY	1040	N/A	2001	\$2,201,674	The purpose of the project is to relieve inundation of the passes to wetland areas in the area and to improve habitat for wildlife and fisheries by increasing the flow of fresh water into the marsh and improving the outlet.	1
CWPPRA	Violet Freshwater Distribution (Deauthorized)	PO-0009-A	HR	NRCS	ST BERNARD	247	N/A	Deauthorized	\$128,626	The objective of the overall management plan was to optimize the use of freshwater and sediment supplied by the existing sources by managing water flow through the area. This would be accomplished by reducing the channelized flow and routing the diverted flow across marshes or through shallow water areas instead of through larger channels. This project was officially deauthorized by the CWPPRA Task Force in 2010 because of inauthentic issues.	1
CWPPRA	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration Phase 1	PO-0016	HR	USFWS	ORLEANS	3800	N/A	1996	\$1,680,193	The Lake Pontchartrain National Wildlife Refuge Refuge from the surrounding marsh complex and establishes a large freshwater impoundment. This project established a means for removing the excess water during the spring and summer.	1
CWPPRA	Bayou LaBranché Wetland Creation	PO-0017	MC	USAID	ST CHARLES	487	N/A	1994	\$3,934,000	The project involved dredging sediments from Lake Pontchartrain to create vegetated wetlands in an area roughly bounded by I-10, Lake Pontchartrain, canals, railroad lines, and lake front/harbor areas.	1
CWPPRA	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration Phase 2	PO-0018	HR	USFWS	ORLEANS	1280	N/A	1997	\$1,692,552	The construction of U.S. Highway 90, canals, railroad lines, and lake front/harbor areas protection levees has impounded the marsh in the project area. Project features consist of three 30-foot pumps, which operate to maintain water levels at 0.5 feet above or below marsh elevation to promote vegetative growth in the project area.	1
CWPPRA	Mississippi River Gulf Outlet (MRGO) Disposal Area Marsh Protection	PO-0019	MM	USAID	ST BERNARD	755	N/A	1999	\$318,445	The objective of this project is to preserve vegetated wetlands by retaining the lateral and rear dikes of the Mississippi River Gulf Outlet (MRGO) disposal areas. Rapsols to a 28,000 linear-foot dike, in conjunction with the installation of metal box bays with a single 40-inch pipe, were used to control and divert water flow away from dredged machines and dredging.	1
CWPPRA	Red Mud Demonstration (Deauthorized)	PO-0020	MC	EPA	ST JOHN THE BAPTIST	N/A	N/A	Deauthorized	\$520,129	This project was authorized to determine whether red mud produced as a by-product of aluminum production in combination with common sand, and beach sediment, could be used to alleviate problems with fill materials, liners, and contaminants in the water source. The project was officially deauthorized by the CWPPRA Task Force in August 2007.	1
CWPPRA	Eden Isles East Marsh Restoration (Deauthorized)	PO-0021	HR	NMFS	CAMERON	1453	N/A	Deauthorized	\$39,925	The project intended to restore 5.56 acres of degraded marsh to a variety of marsh types to support a variety of creation. These structures, and backfill terraces planted with smooth cordgrass Spartina alterniflora. This would force the flow of freshwater and nutrients through a delineated marsh area to abate ale-specific marsh loss. The project was officially deauthorized by the CWPPRA Task Force in January 1998.	1
CWPPRA	Barou Chevere Shoreline Protection	PO-0022	SP	USAID	ORLEANS	212	N/A	2001	\$2,589,403	The project consists of constructing a 5,000-foot earthen, erodible dike to contain dredged material from Lake Pontchartrain. The project was designed about 150-acres of marsh.	1
CWPPRA	Hopeau-Hydrologic Restoration	PO-0024	HR	NMFS	ST BERNARD	106	N/A	2005	\$2,281,287	This project is designed to abate site-specific wetland loss by replacing collapsed culverts installed in the 1950s near Vass, Louisiana. Replacement of these structures would allow more rapid drainage of the area, improve fisheries access, reduce wetland loss, and protect approximately 0.666 acres of marsh.	1
CWPPRA	Bayou Bemerue Pump Station Diversions and Terracing (Deauthorized)	PO-0025	MC	NMFS	TERREBONNE	442	N/A	Deauthorized	\$212,152	The project intended to combine the use of existing pump stations with the construction of a diversion channel, water control structures, and backfill terraces planted with smooth cordgrass Spartina alterniflora. This would force the flow of freshwater and nutrients through a delineated marsh area to abate ale-specific marsh loss. This project was officially deauthorized by the CWPPRA Task Force in October 2007 due to uncertainty of benefits and cost of landowner support.	1
CWPPRA	Opportunistic Use of the Bonne Care Spillway (Deauthorized)	PO-0026	FD	USACE	PLAQUEMINES	177	N/A	Deauthorized	\$83,932	This project intended to abate high salinity stress on the vegetated marshes surrounding Lake Pontchartrain. This objective was to be accomplished through the removal of prins from the Bonne Care Spillway structure during high flow periods in the Mississippi River to allow no more than 4,000 cubic feet per second of water to flow from the river into Lake Pontchartrain. This project was officially deauthorized by the CWPPRA Task Force in October 2007 due to uncertainty of benefits and cost of landowner support.	1
CWPPRA	Chandeleur Islands Marsh Restoration	PO-0027	VP	NMFS	ST BERNARD	88	N/A	2001	\$8,39,927	The objective of this project was to accelerate the recovery of barrier island areas devastated by Hurricane Georges in 1998 through vegetation plantings. The overwash areas, which encompass 364 acres, are located at 22 miles along the Chandeleur Sound side of the island chain and were planted with smooth cordgrass Spartina alterniflora.	1
CWPPRA	LaBranché Wetlands Terracing, Faitting, and Shoreline Protection (Deauthorized)	PO-0028	VP	NMFS	ST CHARLES	489	N/A	Deauthorized	\$306,836	Located along Lake Pontchartrain, this project intended to reduce emergent marsh loss along the shoreline by restoring and creating 489 acres through marsh terracing, shoreline protection, and vegetation planting. This project was officially deauthorized by the CWPPRA Task Force in October 2007.	1
CWPPRA	Lake Borgne Shoreline Protection	PO-0030	SP	EPA	ST BERNARD	229	N/A	2008	\$28,808,775	The goal of this project is to maintain the integrity of the narrow strip of marsh that separates Lake Borgne from the Mississippi River wave energy and storm surges. This land helps protect the communities of Shell Point, and hopefully from direct exposure to lake wave energy and storm surges. The goal was accomplished through construction of a continuous marsh rock breakwater.	1
CWPPRA	Lake Borgne and MRGO Shoreline Protection (Deauthorized)	PO-0032	SP	USAID	ST BERNARD	93	N/A	Deauthorized	\$1,089,193	The objective of this project was to preserve the marsh between Lake Borgne and the Mississippi River Gulf Outlet (MRGO). By constructing a one-mile dike along the Lake Borgne shoreline and the northern bank of the MRGO. The Lake Borgne segment of this project was constructed by the USACE with funds from the 3rd supplemental, and the remaining portion of the project was deauthorized by the CWPPRA Task Force in October 2007.	1
CWPPRA	Goose Point/Foint Plateau Marsh Creation	PO-0033	MC	USFWS	ST TAMMANY	436	N/A	2009	\$15,379,442	The goal of this project is to create about 437 acres of marsh and nourish about 114 acres of degraded marsh along the northern shoreline of Lake Pontchartrain.	1
CWPPRA	Aigator Bend Marsh Restoration and Shoreline Protection	PO-0034	TE, VP, SP	NRCS	ORLEANS	121	N/A	Pending	\$29,718,052	The goal of this project is to provide shoreline protection in Lake Borgne, starting at Alligator Point, using rock, dunes and vegetative plantings.	1
CWPPRA	LaBranché East Marsh Creation	PO-0075	MC	NRCS	ST CHARLES	715	N/A	Pending	\$33,555,033	Project features consist of the creation of 729 acres of marsh and the nourishment of 202 acres of existing marsh using dedicated dredging from Lake Pontchartrain.	1
CWPPRA	Bayou Bonnac Marsh Creation	PO-0104	MC	USFWS	ST TAMMANY	424	N/A	Pending	\$19,273,984	The primary goal of the project is to create 532 acres and nourish 42 acres of low salinity brackish marsh in open water areas adjacent to Bayou Bonnac with sediment pumped from Lake Pontchartrain.	1
CWPPRA	LaBranché Central Marsh Creation	PO-0133	MC	NRCS	ST CHARLES	731	N/A	Pending	\$13,409,208	Project features include the creation of 762 acres of marsh and the nourishment of 240 acres of existing marsh using dredge sediment from Lake Pontchartrain.	1
CWPPRA	Shoal Beach South Marsh Creation	PO-0168	MC	EPA	ST BERNARD	634	N/A	Pending	\$27,346,152	The project would create and nourish 634 acres of emergent brackish marsh to stabilize the embankment of new marsh from the MRGO. 34.3 acres of marsh would be created and 391 acres would be nourished using material from Lake Borgne.	1
CWPPRA	New Orleans Landbridge Shoreline Stabilization and Marsh Creation	PO-0169	MC, BS	USEWS	ORLEANS	271	N/A	Pending	\$17,778,172	The project is to restore and enhance 277 acres of brackish marsh (163 acres marsh creation and 102 acres nourishment) and to enhance 5.44 miles linear feet of shoreline through the construction of an earthen shoreline item.	1
CWPPRA	Fritchie Marsh Creation and Terracing	PO-0173	MC	NOAA	ST TAMMANY	366	N/A	Pending	\$27,020,163	The project is to create and nourish approximately 340 acres of emergent brackish marsh and create 36.610 feet of earthen terrace (26 acre-feet) in the Fritchie Marsh area between the city of Slidell and the Riglettes using sediment from Lake Borgne.	1
CWPPRA	Bayou LaLoutre Ridge Restoration and Marsh Creation	PO-0178	MC	NRCS	ST BERNARD	167	N/A	N/A	\$31,012,138	The project is to create an approximate 31.7 ac ridge feature with material from bucket dredging Bayou La Loutre. Additionally dredged material from Lake Borgne will create 63 acres of marsh and nourish approx. 256 acres along Lena Lagoon.	1
CWPPRA	St. Cathrine Island Marsh Creation and Shoreline Protection	PO-0179	MC	USFWS	ORLEANS	219	N/A	N/A	\$25,324,715	The primary goals of this project are to protect a portion of the Lake Pontchartrain shoreline and restore/protect interior marsh habitat with the placement of dredged material.	2
CWPPRA	Grand Bayou Hydrologic Restoration (Deauthorized)	TE-0010	HR	USFWS	LAFOURCHE	199	N/A	Deauthorized	\$1,452,357	The objective of the project was to maintain emergent wetlands in this area by providing supplemental freshwater, nutrients, and sediment from the Atchafalaya River via the Gulf Intracoastal Waterway (GIWW). Project features included a water control structure on Bayou Pointe au Chien just south of its junction with St. Louis Canal, the relief structure on Grand Bayou, and the pipeline structure on Grand Bayou Canal. The project was officially deauthorized by the CWPPRA Task Force.	3A
CWPPRA	Faibout Canal Planting Demonstration	TE-0017	VP	NRCS	TERREBONNE	N/A	N/A	1996	\$206,522	The goal of this demonstration project, smooth cordgrass (Spartina alterniflora) suited to the salinity and habitat type of the Faibout Canal area was planted along the canal and protected by six types of wave-attling devices.	3A
CWPPRA	Timbalier Island Planting Demonstration	TE-0018	VP	NRCS	TERREBONNE	N/A	N/A	1996	\$300,492	For this demonstration project, sand fences were installed and vegetation suited to the salinity and habitat type of Timbalier Island was planted in several areas on the island to trap sand and buffer wind and wave energy.	3A

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunos.	Total Budget	Project Description		Planning Unit
										Deauthorized	Deauthorized	
CWPPRA	Lower Bayou La Carche Hydrologic Restoration (Deauthorized)	TE-0019	M	NMFS	TERREBONNE	N/A	Deauthorized	\$89,625	\$89,625	The project would have reduced marsh loss rates and improved fish and wildlife habitat at quality by restoring natural north-south water exchange with estuarine water bodies and by reducing flow through the numerous dredged canals in the area. Because of problems with banknotes and notification, the project was officially deauthorized by the CWPPRA Task Force in 1996.	3A	
CWPPRA	Isles Dernieres Restoration East Island	TE-0020	BH	EPA	TERREBONNE	449	N/A	1999	\$8,762,416	The project objective is to restore the coastal dunes and wetlands of the eastern Isles Dernieres barrier island chain. Approximately 3.9 million cubic yards of sand were dredged from Lake Pontchartrain and used to build a restoration dune which washes landward all the way to create an elevated marsh platform. Sand fences and vegetation were also installed to stabilize the sand and minimize wind-driven transport.	3A	
CWPPRA	Point Au Fer Canal Plugs	TE-0022	V,P, MC	NMFS	TERREBONNE	375	N/A	1997	\$5,544,367	This project is intended to reduce saltwater intrusion into the Point au Fer marshes without reducing freshwater discharge from the Atchafalay Basin. Phase I of the project, completed in 1997, involved the plugging of two major marsh canal/pipeline canals on the eastern half of the island. Under Phase II, a rock shoreline stabilization structure was constructed in 2000 along a thin stretch of beach separating the Gulf of Mexico from the Atchafalay Basin.	3B	
CWPPRA	West Belle Pass Headland Restoration	TE-0023	SP	USAOE	LA FOURCHE	474	N/A	1998	\$6,226,754	The project reduces the impact of natural wave action on the west side of Bayou Lafourche with the use of berms and dunes to reduce wave energy and reduce erosion on the west side of Belle Pass. A water control structure was placed in the Evans Canal and plugs on the canals.	3A	
CWPPRA	Isles Dernieres Restoration Trinité Island	TE-0024	BH,MC	EPA	TERREBONNE	776	N/A	1999	\$10,774,974	The project objectives are to restore the Trinity Island dunes and marsh wetlands of the Isles Dernieres chain, enhance the physical health of the island, and protect the lower Atchafalay Estuary.	3A	
CWPPRA	East Tumbler Island Sediment Restoration	TE-0025	BH	NMFS	TERREBONNE	1913	N/A	2001	\$3,720,721	The objective of this project is to strengthen and thus increase the life expectancy of East Tumbler Island. The project called for the removal of 2.7 million cubic yards of sediment and placement of the material in three embankments along the landward shoreline of East Tumbler Island. The project also included aerial seeding of the dune platform, installation of sand fences, and dune vegetation plantings.	3A	
CWPPRA	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	TE-0026	MC	NMFS	TERREBONNE	509	N/A	1999	\$6,810,133	The objectives of this project are to restore the marshes west of Lake Chapeau. Re-establish the hydrologic separation of the Lake Chapeau and Alligator Bayou watersheds and establish a natural drainage pattern within the Lake Chapeau area. To accomplish this, the natural drainage system was dredged from Altamaha Bay and a marsh canal was plugged, and spoil banks were approximately 160 acres of marsh.	3B	
CWPPRA	Whiskey Island Restoration	TE-0027	BH, MC	EPA	TERREBONNE	657	N/A	2000	\$7,108,586	The project created and restored beaches and back island marshes on Whiskey Island. The project cleared 523 acres of back island marsh and filling in the rear of the bay. A bay was used to create marsh, oilfield access canals were plugged, and spoil banks were approximately 2 feet to create 160 acres of marsh.	3A	
CWPPRA	Brady Canal Hydrologic Restoration	TE-0028	HR	NRCS	TERREBONNE	297	N/A	2000	\$7,993,752	The project created and restored beaches and back island marshes on Whiskey Island. The project cleared 523 acres of back island marsh and filling in the rear of the bay. The shore was completed in July 1996 and additional vegetation seed/planting was done in Spring 2000.	3B	
CWPPRA	Racoon Island Breakwaters Demonstration	TE-0029	BH	NRCS	TERREBONNE	N/A	N/A	1997	\$1,795,388	The objective of this project is to maintain the fragile highly-tampered transition marshes between the fresh and estuarine zones by enhancing freshwater sediment, and nutrient delivery into the area.	3A	
CWPPRA	East Tumbler Island Sediment Restoration	TE-0030	BH	NMFS	TERREBONNE	215	N/A	2000	\$7,600,150	This project attempts to restore the marshes and increase the effectiveness of East Tumbler Island by placing dredged material along its landward shoreline. Additional work has been planned on the existing breakwaters front of the island, which will help protect the seabed area from erosion.	3A	
CWPPRA	Filotari Marsh Fencing Demonstration (Deauthorized)	TE-0031	SP	NRCS	TERREBONNE	N/A	N/A	Deauthorized	\$106,960	The purpose of this demonstration project was to determine the effectiveness of different fencing techniques used to conserve and enhance nesting habitat. There was difficulty in finding an appropriate site for demonstration, and addressing engineering constraints. The restoration techniques that were originally suggested for this project were not feasible. The project was officially deauthorized by the CWPPRA Task Force in 2001.	3A	
CWPPRA	North Lake Bourdaisus Basin Freshwater Introduction and Hydrologic Treatment	TE-0032A	FD	USFWS	TERREBONNE	603	N/A	Pending	\$26,875,956	The project aims to introduce freshwater from the HNC through an enlarged Bayou Peiton channel across Baou Grand Canal and through a dewatered channel.	3A	
CWPPRA	Bayou Boeuf Pump Station (Deauthorized)	TE-0033	HR	EPA	TERREBONNE	N/A	N/A	Deauthorized	\$3,452	The purpose of this project was to link the wetlands protection/restoration objectives of the CWPPRA with flood protection and navigation needs generally covered by WRDA. The project components consisted of implementing a long-term water management strategy for the Vene Basin, and evaluating a long-term river water delivery strategy from Atchafalay River to Terrebonne wetlands. The project was officially deauthorized by the CWPPRA Task Force in 1998.	3A	
CWPPRA	Penc Bayou Natural Resources Plan Implementation 1	TE-0034	FD, HR, SP	NRCS	TERREBONNE	675	N/A	2011	\$17,628,814	The objective of this project is to diversify freshwater flow from the northern western to southern eastern sub-project areas coupled with protection measures to reduce inundation of dale marsh areas in overall pendant Basin of Terrebonne Parish.	3B	
CWPPRA	Marsh Creation East of the Atchafalay River - Avoca Island (Deauthorized)	TE-0035	MC	USAOE	ST MARY	434	N/A	Deauthorized	\$66,869	The purpose of this project was to benefit use of dredged material from the C-boat Canal and placing it in the Avoca Island area. Although the project would have benefited 434 acres at a cost of \$6,438,400, the cost of the project was estimated to be considerably higher than originally planned, making it economically unfeasible. The project was officially deauthorized by the CWPPRA Task Force in 1998.	3B	
CWPPRA	Thin Mat Balancing Marsh Enhancement Demonstration	TE-0036	MC	NRCS	TERREBONNE	N/A	N/A	2000	\$538,101	The objective of this project is to induce the development of thick-mat, continuously floating marsh from the thin-mat dominant vegetation. Project monitoring is intended to determine the effect of water movement and sediment availability on these marshes.	3B	
CWPPRA	New Cut Dune and Marsh Restoration	TE-0037	BH, MC	EPA	TERREBONNE	386	N/A	2008	\$12,869,325	The objective of this project was to close the breach between East and Trinity Sloughs that was originally created by Hurricane Camille (1974) and subsequently enlarged by Hurricane Juan (1985) and Hurricane Opal (1995). The project involved the creation of barrier island dunes and marsh habitat and lengthening the structural integrity of the eastern Isles Dernieres by restoring the littoral drift and adding sediment into the nose-cone of the system.	3A	
CWPPRA	South Lake Decade Freshwater Introduction	TE-0039	SP	NRCS	TERREBONNE	202	N/A	2011	\$5,223,806	This project involves the construction of a water control structure in the southern bank of Lake Decade. The structure increases the amount of freshwater entering the marshes south of the lake. In addition, shoreline protection was implemented adjacent to the proposed structure, and a weirs in a levee to a buried culvert was removed.	3A	
CWPPRA	Tumbler Island Dune and Marsh Restoration	TE-0040	BH, MC	EPA	TERREBONNE	663	N/A	2004	\$16,662,199	Tumbler Island is marginally stable to the west of the marsh. Therefore, the western end of Tumbler Island is undergoing lateral migration by sea flooding in excess of the average end. The objective of this project is to restore the eastern end of Tumbler Island to a more stable condition.	3A	
CWPPRA	Mandalay Bank Protection Demonstration	TE-0041	SP	USFWS	TERREBONNE	345	N/A	2003	\$1,732,448	This demonstration project is intended to develop new techniques for protecting and restoring organic soils, which can be easily eroded. In fact, banks and breakwaters were treated to a demonstrated approach. The project is intended to help maintain and restore the landscape.	3A	
CWPPRA	Move Existing Atchafalaya Water to Central Terrebonne (Transferred)	TE-0042	HR	USFWS	ST MARY	N/A	N/A	Transferred	N/A	This project is intended to reduce marsh loss through the improved distribution of excess water and sediment available on the central Terrebonne Basin. This project was transferred to the LCA program.	3A	
CWPPRA	Terrebonne Bay Shore Protection Demonstration	TE-0045	SP	USFWS	TERREBONNE	0	N/A	2007	\$2,719,768	The project objective is to restore critical lengths of deteriorated channel banks and stable barrier marsh lost to subsidence and saltwater intrusion.	3A	
CWPPRA	West Lake Bourdoux Shoreline Protection and Marsh Creation	TE-0046	SP	USFWS	TERREBONNE	145	N/A	2008	\$17,893,913	The purpose of this project is to create and nourish about 200 acres of marsh along the western shoreline of Lake Bourdoux to 10 meters above sea level. A portion of this project was constructed using CAF-2007 funds.	3A	
CWPPRA	Ship Shoal Whiskey West Flank Restoration (Inactive)	TE-0047	BH	EPA	TERREBONNE	500	N/A	Inactive	\$1,599,810	The objective of this project is to rebuild dunes and a marsh platform on the west flank of Whiskey Island through the deposition of dredged material transported from Ship Shoal. This project would provide a barrier to reduce wave and tidal energy, thereby protecting mainland shorelines from continued erosion. The project was designated as inactive by the CWPPRA Task Force in 2013.	3A	
CWPPRA	Racoon Island Shoreline Protection and Marsh Creation	TE-0048	BH, MC	NRCS	TERREBONNE	16	N/A	2007, 2013	\$23,163,393	The purpose of this project is to protect the existing southern shoreline of the island by constructing 8 more rock breakwaters. Phase B utilized dredged sediment from the Gulf of Mexico to create marsh on the land side of the island.	3A	

ONGOING PROTECTION AND RESTORATION SUMMARIES

Project Description										Planning Unit	
CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immersed	Total Budget		
CWPPRA	Ayora Island Diversions and Land Building (Deauthorized)	TE-0049	FD, M/C	USACE	ST MARY	N/A	Deauthorized	\$19,157,200	Project features include a small diversion from Bayou Shaffner into Ayora Lake paired with marsh creation through dedicated dredging.	3A	
CWPPRA	Whiskey Island Back Barrier Marsh Creation	TE-0050	BH	EPA	TERREBONNE	270	N/A	2010	\$30,414,083	The project was subsequently deauthorized by the CWPPRA Task Force. The goal of this project is to recreate a back barrier marsh platform on which the barrier island can migrate in order to increase the longevity of the previous restored and natural portions of the island. Barrier construction was completed in the fall of 2010. Project features include construction of 31.6 acres of back barrier marsh, 5,800 linear feet of tidal creeks, three 1-acre tidal ponds, and 13,000 linear feet of sand dunes on the Gulf side beach shore.	3A
CWPPRA	Madison Bay Marsh Creation and Teracing	TE-0051	MC, TE	NMFS	TERREBONNE	1019	N/A	Pending	\$39,821,438	The growth of this project and to create and nourish marsh and associated edge habitat and to promote conditions conducive to the growth of surrounding aquatic vegetation. The proposed terraces will reduce the wave erosion of existing marshes along the fringes of Madison Bay. The project would benefit approximately 1,019 acres of fresh marsh and open water over the 20-year project life.	3A
CWPPRA	West Belle Pass Barrier Headland Restoration	TE-0052	BH	NMFS	LAFOURCHE	389	N/A	2012	\$39,422,093	This project involves the reestablishment of the West Belle headland by rebuilding a large portion of the beach, dune, and back barrier marsh that once existed. Approximately 300 feet of beach and dune were rebuilt.	3A
CWPPRA	Enhancement of Barrier Island Vegetation Demo	TE-0053	VP	EPA	TERREBONNE	N/A	N/A	2011	\$91,9,264	The goal of this project is to test several technologies or products to enhance the establishment and growth of key barrier island and salt marsh vegetation. The project focuses specifically on enhancing the establishment and growth of transplants of both dune vegetation (bottle gourd /P. acuminatum) and sea oats (Uniola paniculata) and marsh vegetation smooth cordgrass (Spartina alterniflora) and black mangrove (Avicennia germinans).	3A
CWPPRA	Central Terrebonne Freshwater Enhancement	TE-0066	MC, H/R	NRCS	TERREBONNE	456	N/A	Pending	\$17,389,120	The project will reestablish historic hydrologic and salinity conditions by reducing the artificial intrusion of Gulf marine waters via the Grand Pass into the central Terrebonne marshes while enhancing the influence of the Atchafalaya River waters into the area.	3A
CWPPRA	Lost Lake Marsh Creation and Hydrologic Restoration	TE-0072	HR, MC	USFWLS	TERREBONNE	749	N/A	Pending	\$35,873,728	Project goals include: 1) restore an important feature or structure within Lake Eaze and Bayou Decade to prevent the coalescence of those two water bodies; 2) increase the delivery of fresh water, sediments, and nutrients into marshes north and west of Lost Lake; 3) reduce fetch in open marsh areas by a construction of a terrace field.	3A, 3B
CWPPRA	Terrebonne Bay Marsh Creation - North Cottin Lake Marsh Creation	TE-0083	MC	USFWLS	TERREBONNE	353	N/A	Pending	\$28,664,401	Project goals are to create 365 acres of intertidal marsh in shallow open water and nourish 299 acres of fragmented marsh within the project area during water exchange between Terrebonne Bay and interior lakes during tidal and storm events and to reduce Sediments will be hydraulically dredged from Cottish Lake and pumped via pipeline to create approximately 415 acres of marsh habitat.	3A
CWPPRA	Island Road Marsh Creation & Nourishment	TE-0117	MC	NMFS	TERREBONNE	312	N/A	Pending	\$30,325,016	The proposed project will partially restore 1,141.726 acre of created saline marsh and 19.3 acres of nourished saline marsh adjacent to Island Road. Sediment will be hydraulically pumped from a borrow source near Lake Eaze and 19.3 of the newly constructed marsh (182 acres) will be planted with native salt marsh grasses. This will reduce further erosion, reduce eel grass, and reduce time for full vegetation. The project would result in an aquatinted increase of 31.2 acres over the 20-year project life.	3A
CWPPRA	West Fourchon Marsh Creation	TE-0134	MC	NMFS	LAFOURCHE	304	N/A	Pending	\$40,435,267	The goals of this project are to create and nourish 14.4 acres of marsh by pumping sediment from an offshore borrow site in the Gulf of Mexico. This project will result in new marsh habitat and increase the longevity of existing habitat. The project will also help to protect the people and infrastructure of Port Fourchon.	3A
CWPPRA	Bayou Decade Ridge and Marsh Creation	TE-0138	MC	NOAA	TERREBONNE	382	N/A	N/A	\$29,037,768	The project is set to construct 1,141.726 acre of ridge along the northern bank of Bayou Decade and create and/or nourish 30.3 acres of marsh. This will be done by creating a borrow pit in the Atchafalaya River Channel, filling the pit with sand, and then placing the sand on the ridge and marsh and dredge and fill the borrow pit.	3A
CWPPRA	Vernilion River Cutoff Bank Protection	TV-0003	SP	USACE	VERMILION	202	N/A	1996	\$2,047,479	The project will be to prevent further erosion, hardening the river cut-off, and constructing sediment trapping fences on the Vermilion River Cut-off. Mitigation will be provided to prevent further erosion, hardening the river cut-off, and constructing sediment trapping fences on the Vermilion River Cut-off.	3B
CWPPRA	Cote Blanche Hydrologic Restoration	TV-0084	HR	NRCS	ST MARY	2223	N/A	1998	\$10,093,902	The primary objectives of this project are to reduce shoreline loss from wave erosion, reduce excessive tidal fluctuations and rapid tidal exchange to prevent scouring of intertidal marsh, develop a hydrologic regime conducive to sediment and nutrient deposition, and to establish vegetation in eroded areas.	3B
CWPPRA	Boston Canal Vermilion Bay Bank Protection	TV-0009	SP	NRCS	VERMILION	378	N/A	1995	\$1,043,231	The project involves tailoring 15 miles of levee along the eastern bank of Boston Canal. The project was planned with single stems of Spaulding aluminum at 3 foot intervals.	3B
CWPPRA	Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock (Inlet/Exit)	TV-0011-B	SP	USACE	VERMILION	N/A	N/A	Inactive	\$1,101,738	The project was intended to construct a rock dike to protect the east shoreline of Freshwater Bayou Canal. The project was subsequently designated as inactive by the CWPPRA Task Force.	3B
CWPPRA	Little Vermilion Bay Sediment Trapping	TV-0012	TE	NMFS	VERMILION, IBERIA	441	N/A	1999	\$886,030	This project is designed to optimize the retention of sediment from the Atchafalaya River to create new marsh areas in Little Vermilion Bay. Dredged material will be placed to create emergent vegetated wetlands, thereby protecting the existing structures from wind induced wave erosion.	3B
CWPPRA	Oakskey Canal Hydrologic Restoration Increment 1	TV-0013-A	HR	USACE	IBERIA	408	N/A	2002	\$2,925,216	The objective of this project is to improve hydrology, reduce tidal fluctuation to minimize marsh loss, and provide protection to critically eroding bankline and shoreline area.	3B
CWPPRA	Marsh Island Hydrologic Restoration	TV-0014	HR	NMFS	VERMILION, IBERIA	160	N/A	2001	\$5,143,323	The objective of this project is to stabilize the northeastern shoreline of Marsh Island, including the northern shoreline of Lake Sand, and Marsh Island, protection of the northeast shoreline with rock, and isolation of Lake Sand from Vermilion Bay with a rock dike.	3B
CWPPRA	Sediment Trapping at "The Jaws"	TV-0015	TE, VP	NMFS	ST MARY	1998	N/A	2005	\$1,055,732	The objective of this project is to induce sedimentation to create emergent vegetated wetlands. This was achieved by constructing wetland terraces thereby reducing wave fetch. Distributary channels were created to deliver water and sediment to the project area.	3B
CWPPRA	Cheniere Au Tigre Sediment Trappping Demonstration	TV-0016	SNT	NMFS	VERMILION	N/A	N/A	2001	\$624,998	The objective of this project is to field test a conceptual device designed to trap sediment from the Gulf of Mexico, stabilize the ongoing erosion on Cheniere Au Tigre, and build up sections of the barrier island that have already eroded away.	3B
CWPPRA	Lake Ondine Land Bridge	TV-0017	SP	NMFS	VERMILION	1496	N/A	2004	\$1,181,129	The objective of this project is to prevent the shoreline south of Lake Ondine from breaching and creating another pass from Vermilion Bay to the Gulf. The project consists of tailoring a canal and armoring the beach with rock.	3B
CWPPRA	Four Mile Canal Trapping and Sediment Trappping	TV-0018	TE	NMFS	IBERIA	52	N/A	2004	\$2,667,156	This project includes construction and planning of terrace with smooth cordgrass (<i>Spartina alterniflora</i>) within Little White Lake and areas between inlets.	3B
CWPPRA	Weak Bay Marsh Creation Commerce Canal Reservoir Redirection (Transferred)	TV-0019	SP	USACE	IBERIA	N/A	N/A	Transferred	\$30,227	The goal of the project is to create marsh to restore landbridge separating Weeks Bay and GMMW. In 2013, the CWPPRA Task Force transferred implementation of the project to parish stakeholders.	3B
CWPPRA	Baou Sae Shoreline Protection (Deauthorized)	TV-0020	SP	NRCS	ST MARY	131	N/A	Deauthorized	\$32,103,020	The goal of the project was to mitigate an eroding shoreline with approx 36,776 feet of rock dike shoreline protection. The project was deauthorized by the CWPPRA Task Force.	3B
CWPPRA	East Marsh Island Marsh Creation	TV-0021	MC	NRCS	IBERIA	1159	N/A	2010	\$21,215,936	The objective of the project was to create approximately 36.5 acres of sustainable marsh. The majority of the project area has been converted to open water, primarily because of Hurricane Ike (2002). Through the use of approximately 55 million in unused construction funds, over 500 acres of additional marsh was created/nourished. The sediment for marsh creation was dredged from East Bay and dumped at a maximum of 6 miles.	3B
CWPPRA	Colte's Bayou Marsh Creation	TV-0063	MC	NMFS	VERMILION	398	N/A	Pending	\$27,581,223	The project consists of filling/mounding marsh habitat and increasing freshwater and sediment inflow into interior wetlands by immobile material at a minimum of 6 miles.	3B

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunos.	Total Budget	Project Description		Planning Unit
FEDERAL	Lake Pontchartrain Hurricane Mitigation Project	HPL-MIT	SI	USACE	ST. JOHN THE BAPTIST	600	N/A	1996	\$2,222,892	This project consisted of a near-shore, segmented breakwater system in Lake Pontchartrain parallel to a fire-mile reach of the Marchae Hurricane Protection Area. The project specifically mitigated for damages resulting from construction of the Lake Pontchartrain	1	
FEDERAL	MRCO Ecosystem Restoration	PO-0065	VP, FD, MM, SP, MC	USACE	ST. BERNARD, ORLEANS	53700	N/A	Pending	\$2,900,000,000	This project involves several miles of restoration measures that are collectively intended to restore some of the ecosystem damaged by construction of MFOO.	1	
FEDERAL	Lost Lake Vegetation Project	TE-0082	VP	USFWS	TERREBONNE	N/A	N/A	2011	\$161,000	This coastal vegetative planting project is for erosion control and habitat restoration in the Lost Lake area of southwestern Terrebonne Parish.	3A	
FEMA	Fourchon Navigation Canal Levee Maintenance	DSR-81557	SP	FEMA	TERREBONNE	4000	N/A	1995	\$218,165	This FEMA project involved the repair of segments of the western bank of the Fourchon Navigation Canal damaged by Hurricane Andrew in 1992.	3A	
FEMA	Wine Island	DSR-81558	DM	FEMA	TERREBONNE	25	N/A	1995	\$253,579	This FEMA project was a cooperative venture with the USACE in the benefit of dredged material from a scheduled Houma Navigational Canal maintenance dredging project. The land was repaired to pre-Hurricane Andrew condition and planted with vegetation to stabilize the sediment.	3A	
FEMA	Timbaler Island Repairs	DSR-81559	BH	FEMA	TERREBONNE	70	N/A	1996	\$551,653	This FEMA project closed a major breach 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 Repair Protection	DSR-81560	DM	FEMA	TERREBONNE	25	N/A	1996	\$633,179	The 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	LaBranchie W Islands	DSR-81768	SP	FEMA	ST. CHARLES	N/A	N/A	2000	\$4,315	This FEMA project repaired sand fencing on Timbalier Island that was destroyed during a series of tropical storms and hurricanes in the fall of 1998.	3A	
FEMA	Timbalier Island	DSR-81784	BH	FEMA	TERREBONNE	N/A	N/A	2000	\$119,394	The installation of the new fangue curbs was completed by Terrebonne Parish Consolidated Government.	3A	
FEMA	Falgout Canal	DSR-81785	SP	FEMA	TERREBONNE	N/A	N/A	2000	\$10,761	This FEMA project replaced tap gates on water control structures damaged during Tropical Storms and hurricanes in the fall of 1998.	3A	
FEMA	East Island	DSR-81786	VP	FEMA	TERREBONNE	N/A	N/A	2000	\$168,113	This FEMA project involved the planting of marsh vegetation on the dune and lake front shoreline of East Island. This area is part of a (Stadinga Llemoria), 500 acre black mangrove (Avicennia germinans), and 6,474 linear cane (Phragmites australis) plants were planted in April 2000.	1	
FEMA	Isle Demers (Whiskey Island)	DSR-81787	VP	FEMA	TERREBONNE	1258	N/A	2000	\$591,566	This FEMA project involved the installation of sand fencing and the planting of vegetation to repair areas of Whiskey Island sand and damaged by tropical storms and hurricanes during the fall of 1998. This area is part of a CWPPRA project area and CWPPRA funds were combined with the FEMA funds for repairs.	3A	
FEMA	Marsh Island Repairs	PW-1646	MM	FEMA	IBERIA	N/A	N/A	2005	\$885,881	This FEMA project consisted of repairs to areas of stone paving, stone dikes, and minor repair of navigation aids on the Marsh Island Hydrologic Restoration (TV-14) project damaged during Hurricane Ida in 2002. The project also included minor maintenance work paid for by CWPPRA.	3B	
FEMA	Cote Blanche Repairs	PW-1906	HR	FEMA	ST. MARY	N/A	N/A	2005	\$64,092	This FEMA project consisted of repairs to areas of stone paving, stone dikes, and minor repair of navigation aids on the Cote Blanche Hydrologic Restoration (TV-04) project damaged during Hurricane Ida in 2002. The project also included minor maintenance work paid for by CWPPRA.	3B	
FEMA	Cameron Creole Structures	PW-4257	HR	FEMA	CAMERON	N/A	N/A	2007	\$325,700	This FEMA project consists of repairs to key structures of the Cameron Creole Maintenance (CS-14) project that were damaged by Hurricane Rita in 2005. These structures are located at Chitimacha, Pecon, Lamberton, No Name, and Alligator Bayous.	4	
FEMA	Holy Beach Sand Fencing	PW-4403	SP	FEMA	CAMERON	N/A	N/A	2006	\$218,473	This FEMA project consists of the replacement of 46,000 linear feet of sand fencing on the Holy Beach Sand Management (CS-31) project that was destroyed by Hurricane Katrina in 2005.	4	
FEMA	Houmaide Hydrological Structure	PW-8743	HR	FEMA	ST. BERNARD	N/A	N/A	2007	\$64,900	This FEMA project consists of repairs to the water control structure of the Houmaide Hydrologic Restoration (PC-24) project that was damaged by Hurricane Katrina in 2005. Repairs were made to damaged fencing, railings, and displaced riprap, and a lost portable hydraulic actuator is being replaced.	1	
FEMA	Lake Pontchartrain Debris Removal	N/A	N/A	N/A	CHARLES, ST. JOHN THE BAPTIST, ST. TAMMANY, TANOPAHOA	N/A	N/A	2010	\$10,000,000	The goal of this project was to remove debris from approximately 758 square miles of Lake Pontchartrain.	1	
FEMA	Montegut Wetlands	PW-1728	MM	FEMA	TERREBONNE	N/A	N/A	2005	\$1,093,982	This FEMA project repaired damage to the Montegut Wetland (TE-01) project that occurred during Hurricane Ida in 2002. The project consisted of refurbishing and reconstructing 17,000 linear feet of an existing earthen levee using off-site borrow material.	1	
HSDRRS	West Bank and Vicinity	EA-0066	HP	USACE	ST. CHARLES, ORLEANS, JEFFERSON, PLAQUEMINES	N/A	71	Pending	\$3,150,000,000	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 levee walls and other structures to the 2027 protection levels.	2	
HSDRRS	New Orleans to Venice	EA-0067	HP	USACE	PLAQUEMINES	N/A	58	Pending	\$1,301,523,760	The NOV project consists of 24 segments of work covered by projects NOV-1-2, NOV-5-16, NOV-NF-W-4 to 6, NF-02, and Task Force Guardian (TFG) Command Project 1 consisting of the section of the Plaquemines Parish Hurricane Protection System.	1,2	
HSDRRS	Grand Isle and Vicinity	BA-0073	SP	USACE	JEFFERSON, LAFOURCHE	N/A	Not Available	Pending	\$25,000,000	The Grand Isle and Vicinity Hurricane Protection Project consists of a 7.5 mile veneered sand dune bending the length of Grand Isle's gulf shore, a levee to stabilize the western end of the island at Canadien Pass, and an offshore wavebreaker system.	2	
HSDRRS	Storm-Proofing of Interior Pumping Stations	BA-0074	FP	USACE	JEFFERSON, ORLEANS	N/A	N/A	2014	\$340,000,000	This project involves the installation of various improvement features to the interior pump stations of Orleans and Jefferson Parish under the HSDRRS.	2	
HSDRRS	HSDRRS Mitigation-WBV	BA-0109	MC	USACE	JEFFERSON, LAFOURCHE	1318	N/A	Pending	\$126,000,000	This HSDRRS project involves the implementation of various restoration measures to mitigate wetland impacts associated with the Construction of the West Bank and Vicinity (WBV) project.	2,3A	
HSDRRS	Risk Reduction-Basataria Basin Landbridge	BA-0148	MC, HP	USACE	JEFFERSON	223	N/A	Pending	\$10,100,000	Agronishment is being led by USAID and is 100% federally funded with approximately \$10.1 Million allocated by the U.S. 4th Supplemental Appropriations for a Hurricane Risk Reduction project. It provides for about 101 acres of marsh creation and 122 acres of marsh nourishment on the south shore of the Pen.	2	
HSDRRS	Previously Authorized Mitigation WBV	BA-0154	MM, VP, PI	USACE	JEFFERSON, ST. CHARLES	1130	N/A	Pending	\$11,000,000	This project is being led by USAID and is 100% federally funded with approximately \$7.9 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 Saginetti State Park; 2) acquisition of approximately 970 acres of high value woody wetlands in St. Charles Parish, and 3) acquisition, improvement, and management of approximately 350 acres of high quality woody wetlands in St. Charles Parish.	2	
HSDRRS	Plaquemines TFL Mitigation - Brattinale to Scarsdale - Big Marsh	BA-0156	MC	USACE	PLAQUEMINES	24	N/A	Pending	\$2,000,000	This project is being led by USAID and is 100% federally funded with approximately \$2.8 Million allocated. It provides for the creation of approximately 24 acres of marsh. Additionally, Plaquemines Parish will be conducting a neighboring lot of 16 acres of marsh creation followed by a marshland swap with the adjacent parish for a total of 40 acres.	1	
HSDRRS	New Orleans to Venice	BA-0158	MC	USACE	PLAQUEMINES	342	N/A	Pending	\$14,500,000	This project is being led by USAID and is 100% federally funded with approximately \$1.4 Million allocated. It provides for about 180 acres of mitigation, which includes approximately 50 acres of BLH wetland combined, 50 acres of swamp, 60 acres of freshwater marsh, and 20 acres of brackish marsh.	2,1	
HSDRRS	New Orleans to Venice	BA-0159	MC	USACE	PLAQUEMINES	410	N/A	Pending	\$30,000,000	This project is being led by USAID and is 100% federally funded with approximately \$30 Million allocated. It provides for about 700 acres of mitigation, which includes approximately 150 acres of BLH wetland combined, 140 acres of intermediate marsh, 70 acres of freshwater marsh, 16 acres of brackish marsh, and 280 acres of saltine marsh.	2,1	
HSDRRS	Risk Reduction/Via Freshwater Diversion	BS-0003-B	FD, SD, HP	USACE	PLAQUEMINES	65	N/A	Pending/On Hold	\$10,100,000	This project is being led by USAID and is 100% federally funded with approximately \$10.1 Million allocated for reducing water from the Caernarvon Diversions into the Arpent Canal to enhance the movement of fresh sediment-laden water into the marsh north of Lake Lay in order to halt and reverse marsh deterioration. This project was originally included as a shunt under CWPPRA BS-16 but removed to USACE to fund it as a marsh creation project.	1	

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRa Program										Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immovated	Total Budget	Project Description	Planning Unit
HSDRFS	Lake Pontchartrain & Vicinity, Lake Borgne Surge Barrier	LPV-INC-02	PO-0055	HP	USA/CE	ST. BERNARD, ORLEANS	N/A	2	2013	\$1,134,000,000	This project involves the construction of a Hurricane Surge Barrier across the tip of Lake Borgne connecting the MRGO levees south of Bayou Terrebonne with the MRGO levees East of Michoud Canal with footings at Bayou Bienvenue and GWW.	1								
HSDRFS	SELAs	PO-0057	OT	USA/CE	JEFFERSON, ORLEANS	N/A	N/A	Pending	\$1,170,974,586	This project consists of dredging and pump station projects within Jefferson Parish and Orleans Parish, on both the east bank and west bank of the Mississippi River.	1,2									
HSDRFS	Permanent Closure of Canals and Pumes	PO-0060	HP	USA/CE	ORLEANS, JEFFERSON	N/A	0.34	Pending	\$614,800,000	This project, authorized under Public Law 108-234, involves the design and construction of a permanent protection system for the outlet canals along 17th Street, Orleans Avenue, and London Avenue and install pumps and closure structures at or near the lakefront.	1									
HSDRFS	West Shore Lake Pontchartrain	PO-0062	HP	USA/CE	ST. JOHN THE BAPTIST, ST. CHARLES, ST. JAMES, ST. ALEXANDRIA, ASCENSION	N/A	27	Pending	\$898,584,583	This project involves the assessment of hurricane and storm reduction measures in a study area bounded by the Bonnet Carré Spillway to the east, the Mississippi River to the south, Lakes Pontchartrain and Maurepas to the north, and the St. James Parish/AAscension Parish line to the west.	1									
HSDRFS	Lake Pontchartrain and Vicinity	PO-0063	HP	USA/CE	ST. CHARLES, JEFFERSON	N/A	128	2010	\$3,852,000,000	Lake Pontchartrain and Vicinity (LPV) is the hurricane protection program that involves approximately 30 hurricane protection projects in East Jefferson and St. Charles Parishes.	1									
HSDRFS	Lake Pontchartrain & Vicinity, Seabrook Lock LPV-HNC-01	PO-0064	HP	USA/CE	ORLEANS	N/A	0.5	2012	\$157,156,414	This project consists of a gate closure structure across the Industrial Canal approximately 500 ft. South of the Ted Hickey Bridge at Lake Pontchartrain to work in conjunction with the HMIC Bridge Surge Barrier.	1									
HSDRFS	LPV T-88 Fone Guardian Mitigation- Bayou Sauvage	PO-0121	MC	USA/CE	ST. TAMMANY, ORLEANS	1089	N/A	Pending	\$85,000,000	This ISACE project involves the implementation of various restoration measures to mitigate wetland impacts associated with the construction of the Lake Pontchartrain and Vicinity (LPV) project.	1									
HSDRFS	LPV T-88 Fone Guardian Mitigation- Bayou Sauvage	PO-0145	MM, VP	USA/CE	ORLEANS	58	N/A	Pending	\$780,000	This project involves the implementation of various restoration measures to mitigate wetland impacts associated with the construction of the Lake Pontchartrain and Vicinity (LPV) project.	1									
HSDRFS	Previously Authorized Mitigation LPV- Maurepas	PO-0146	MC, SP	USA/CE	ST. JOHN THE BAPTIST	1329	N/A	7/8/1905	\$22,389,556	This project is being funded by USACE and is 100% federally funded with approximately \$31.3 million allocated. It provides for containment dikes with rock and in areas with dredge material (to match the C-PRA Turn Curve project success). The project is intended to create marshes and reduce erosion.	1									
LOUISIANA COASTAL AREA	LCA Small Bayou Lafourche Rentrediation	BA-0070	FD	USA/CE	ASSUMPTION, LAFOURCHE	N/A	N/A	Pending/On Hold	\$133,500,000	The project will use a small diversion less than 5000 cfs to reintroduce flow from the Mississippi River to Bayou Lafourche. Project will include providing freshwater, sediment and nutrients needed to reduce salinity, stimulate 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 costs will be taken from YRDA 2007 legislation.	3A									
LOUISIANA COASTAL AREA	LCA Medium Diversion with Dedicated Dredging at Myrtle Grove	BA-0071	FD	USA/CE	PLAQUEMINES	N/A	N/A	Pending/On Hold	\$278,300,000	Authorized by YRDA 2007 as a sediment diversion between 500 and 5,000 cfs. Ongoing monitoring effort to examine influence of sediment diversion on marshes and oysters. Sediment bypasses and oysters.	2									
LOUISIANA COASTAL AREA	LCA Modification of Davis Pond Diversion	BA-0072	FD	USA/CE	PLAQUEMINES, ST. BERNARD, LAFOURCHE	N/A	N/A	Pending/On Hold	\$68,277,885	This modification project is authorized to study and design the modification of the structure and/or outfall of the diversion to wetland restoration outfalls within the Barataria Basin.	2									
LOUISIANA COASTAL AREA	LCA Modification of Caminada Canal Diversion	BS-0019	FD	USA/CE	PLAQUEMINES	N/A	N/A	Pending/On Hold	\$21,000,000	This modification project is authorized to study and design the modification of the diversion structure and/or outfall of the diversion to the Mississippi River used for navigation. The state is using a controlled structure to provide additional in-river wetland restoration outfalls.	1									
LOUISIANA COASTAL AREA	LCA Medium Diversion at White's Ditch	BS-0020	FD	USA/CE	PLAQUEMINES	N/A	N/A	Pending/On Hold	\$12,686,400	A medium diversion from the Mississippi River into the central River and Chenier Canal using a controlled structure to provide additional in-river wetland restoration outfalls.	1									
LOUISIANA COASTAL AREA	LCA Barataria Basin Barrier Shoreline - 2007	LA-0010	MC, BH	USA/CE	PLAQUEMINES, ST. JAMES, LAFOURCHE	N/A	N/A	Pending/On Hold	\$363,900,000	The purpose of this project is to provide beach/dune restoration and marsh creation on Caminada Habitats and Shell Island.	2									
LOUISIANA COASTAL AREA	LCA Beneficial Use Feasibility Study	LA-0019	DM	USA/CE	COASTWIDE	N/A	N/A	Pending/On Hold	\$100,000,000	This feasibility study will examine increased beneficial use of dredged material from Federally authorized navigation channels.	COASTWIDE									
LOUISIANA COASTAL AREA	LCA Mississippi River Delta Management Study	MR-0016	OT	USA/CE	PLAQUEMINES	N/A	N/A	Pending/On Hold	\$25,358,136	This project involves the development of a strategic framework for feasibility evaluation of improved management of fresh water, nutrients, and sediment resources of the Lower Mississippi River, from the Old River Control Structure to Head of Passes, to better sustain coastal habitats. Detailed plan.	1, 2									
LOUISIANA COASTAL AREA	Small Diversion at Hope Canal	PO-0067	FD	USA/CE	ST. JOHN THE BAPTIST	N/A	N/A	Pending/On Hold	\$150,000,000	This project creates a small freshwater diversion less than 5000 cfs to introduce sediment and nutrients into Maurepas Swamp in order to facilitate saltwater intrusion, improve dredging productivity, and prevent further deterioration of the marsh. The state is using funds from a part of the required cost share for this project. *July funded 2/10 provided the project had cost estimates.	1									
LOUISIANA COASTAL AREA	LCA Small Diversion at Convent/Biloxi River	PO-0068	FD	USA/CE	ST. JAMES, ASCENSION	N/A	N/A	Pending/On Hold	\$123,140,000	This project evaluates a small diversion of up to 6,000 cfs from the Mississippi River into the Blind River through a new control structure to introduce freshwater, sediments, and nutrients into the southeast portion of the Maurepas swamp.	1									
LOUISIANA COASTAL AREA	LCA Amite River Division (Transferred)	PO-0069	VP, HR	USA/CE	LIVINGSTON, TERREBONNE	N/A	N/A	Transferred	\$10,760,000	The goal of this project is to establish hydrologic connectivity as a state project O-142.	1									
LOUISIANA COASTAL AREA	LCA Mantin Land Bridge Between Calion Lake and Gulf of Mexico	TE-0067	MC	USA/CE	TERREBONNE	N/A	N/A	Pending/On Hold	\$82,500,000	The goals of this project are to prevent connection between the Gulf and Calion Lake by constructing shoreline protection on the gulf shore erosion and increase freshwater influence on marshes. A bridge area.	3A									
LOUISIANA COASTAL AREA	LCA Point au Fer	TE-0068	SP	USA/CE	TERREBONNE	N/A	N/A	Pending/On Hold	\$48,300,000	The goal of this project is to stabilize Gulf shorelines on Point au Fer Island to prevent direct connection between gulf and interior water bodies thereby preventing conversion of existing wetlands to marine habitat.	3A									
LOUISIANA COASTAL AREA	LCA Terrebonne Basin Barrier Shoreline Restoration	TE-0070	BH	USA/CE	TERREBONNE	N/A	N/A	Pending/On Hold	\$133,300,000	This project provides for the restoration of the Tornillo and Demers Islands transect island chains. This would simulate historical conditions by returning the current number of species, seagrass, nesting birds, and dune height of the islands. Demers/Racoon Island, East Island, Trinity Island, West Island, Tornillo Island, Tern Island, and East/Terrebonne Island.	3A									
LOUISIANA COASTAL AREA	LCA Conve Atchafalaya River Water to Northern Terrebonne Marshes	TE-0071	HR	USA/CE	TERREBONNE	N/A	N/A	Pending/On Hold	\$349,995,500	The project will increase existing Atchafalaya River influence to central Lake Boudeau and eastern Grand Bayou Terrebonne marshes via the Gulf Intracoastal Waterway (GIWW).	3A									
NFWF	Caminada Headland and Dune Restoration Inclement 2	BA-0143	BH	N/A	JEFFERSON, LAFOURCHE	532	N/A	2016	\$147,083,587	The project is to construct a sediment diversion from the Mississippi River into the lower Barataria Basin.	2									
NFWF	Mid-Barataria Diversion	BA-0153	SD	N/A	PLAQUEMINES	68,000	N/A	Pending	In Development	The MBSD is a large and complex civil works and restoration project. MBSD, when in operation, would transfer sediment-laden water from the Mississippi River through a 1.5 miles long, before outfalling past the back levee into mid-Barataria Basin. The project will restore the natural deltaic and sedimentation processes along the Mississippi River near River Mile 60.7 just north of Port Fourchon. The MBSD would be expected to build and nourish ten to thirty thousand acres of critical coastal wetlands over a 50 year period, being a top contributor to the 2012 to 2018 plan's goal of achieving no net loss of land in the future.	2									
NFWF	Lower Barataria Diversion	BA-0163	SD	N/A	PLAQUEMINES	In Development	N/A	N/A	In Development	The purpose of the project is to construct a sediment diversion from the Mississippi River into the lower Barataria Basin to build & sediment diversion.	1									
NFWF	Lower Breton Diversion	BS-0023	SD	N/A	PLAQUEMINES	Development	N/A	N/A	In Development	The purpose of the project is to construct a sediment diversion from the Mississippi River into the lower Barataria Basin to build & sediment diversion.	1									

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description		Planning Unit
									In Progress	In Development	
NFWF	Mid Breton Diversion	BS-0030	DI	N/A	PLAQUEMINES	In Development	N/A	\$74,000,000	The objective of this project is to evaluate a sediment diversion located in the vicinity of Wylle Ditch around 75,000 cfs.	1	
NFWF	Increase Atchafalaya Flow to East Terrebonne	TE-0110	SD	N/A	TERREBONNE	In Development	N/A	\$10.524,280	The purpose of this project is to utilize freshwater and sediment from the Atchafalaya River in order to build, sustain, and maintain wetlands within the Terrebonne Basin. The project intends to dredge the GWWB of the Atchafalaya and install a bypass structure at Barouf Bluff Lock to increase freshwater and sediment flows from Atchafalaya River to Terrebonne marshes.	3A, 3B	
NFWF	East Ternahier Island Restoration	TE-0118	BH	N/A	LAFOURCHE	In Development	N/A	\$74,000,000	This project will engineer and design a restoration of dune, supralidal, and intertidal habitat, such that the two presently remaining, severely degraded island segments will be connected and the historic island footprint re-established, which will improve bird and fish habitat, help protect oil and gas infrastructure, and provide habitat for a surge protected for western Lafourche Parish.	3A	
NFDA	Cheniere Ronquille Barrier Island Restoration	BA-0076	BH, MC	NMFS	PLAQUEMINES	408	N/A	\$38,683,755	The objective of this project is to prevent breaching of the barrier shoreline by restoring the dune and marsh platform. Project was designed under CWFPPA, but will seek NFWF funds for construction.	2	
NFDA	Shell Island West - NRDA	BA-0111	BH	N/A	PLAQUEMINES	347	N/A	\$110,524,280	This project aims to restore the Shells Islands West barrier island, reduce wave energies within the bay area, and restore productive habitat to Basin Bay and the surrounding area. It will create 125 acres of marsh and 272 acres of dune and beach.	2	
NFDA	Lake Hermitte Marsh Creation Increment 2	BA-0141	MC	N/A	PLAQUEMINES	101	N/A	\$139,000,000	This project will create 101 acres of marsh building off of the BA-42 Lake Hermitte CWFPPA project utilizing NRDA earth restoration funds.	2	
NFDA	Queen Bess Island Restoration	BA-0202	BH	N/A	JEFFERSON	36	N/A	\$20,000,000	This project is designed to restore suitable colonially-vegetated nesting and brood rearing habitat on the island from its current size of less than 5 acres to approximately 36 acres. Effuses 74 & 75. This will be accomplished by hydrodynamically dredging sediment from a nearby suitable offshore borrow source and depositing it within existing rock ring that outlines the island. The island will be permitted to a new construction set back elevation of 5.5 ft NAVD 88. Small limestone blocks will be deposited on most of the perimeter of the island to create a low漫水的 beach-like feature for nesting terns and shorebirds. The island will be planted with suitable vegetation to provide optimal nesting conditions.	2	
NFDA	Barataria Basin Ridge and Marsh Creation - Spanish Pass Increment	BA-0203	MC	N/A	PLAQUEMINES	1254	N/A	\$124,500,000	Spanish Pass is a natural historic roadway in the Mississippi River located west of Venice, Louisiana. The natural natural banks and ridges of earthen ridge have degraded due to natural and manmade causes. The ridge restoration feature of this project will restore 126 acres of earthen ridge and 117 acres of marsh.	2	
NFDA	Rabbit Island Restoration Project	CS-0080	BH	N/A	CAMERON	200	N/A	\$27,000,000	The primary goal of the project is to restore bird habitat by dredging material from the Calcasieu Ship Channel and adding fill to the island along with construction of dikes and dunes. Approximately 200 acres of bird habitat will be restored.	4	
NFDA	Lake Borgne Marsh Creation - Increment One	PO-0180	MC	N/A	ST. BERNARD	1548	N/A	\$127,300,000	This project will create approximately 1,548 acres of marsh, extending approximately four miles from Shell Beach on the southern rim of Lake Borgne to Lera, Louisiana.	1	
NFDA	NRDA Caline Lake Headlands	TE-0100	BH	N/A	TERREBONNE	1272	N/A	\$111,309,000	This project aims to restore the Whisley Island Barrier Island in order to retain its geomorphologic form and ecological function. It will create 7.70 acres of marsh habitat and 9.7 acres of dune and beach habitat.	3A	
NFDA	Terrebonne Basin Ridge and Marsh Creation - Bayou Terrebonne Increment	TE-0139	MC	N/A	TERREBONNE	1496	N/A	\$126,000,000	The Bayou Terrebonne increment of the Terrebonne Basin Ridge and Marsh Creation Project is a ridge restoration and marsh creation project located in western Terrebonne Parish. The ridge restoration feature of this project will restore 126 acres of earthen ridge and marsh creation features of this project will dredge sediment from offshore to create 1,370 acres of marsh. This increment is part of a large-scale restoration strategy for the Terrebonne Basin that will rebuild ridge and intertidal marsh habitat that has degraded due, in part, to the DNW oil spill.	3A	
OTHER	Lake Pontchartrain Mitigation Project	HPL-MIT	SP	N/A	ST. JOHN THE BAPTIST	600	N/A	\$2,222,832	This project consisted of a near-shore segmented drawwater system in Lake Pontchartrain parallel to a five-mile reach of the Manchac Hurricane Protection project. The project specifically mitigated for damages resulting from construction of the Lake Pontchartrain Hurricane Protection project.	1	
OTHER	Coastal Wetlands Public Outreach	N/A	OT	N/A	N/A	N/A	N/A	\$400,000	The NRDA Public Information office provides a variety of printed materials, educational materials, website information, and traveling exhibits for the public. Other department outreach efforts include participating in conferences, workshops, civic events, and school activities. Much of the agency's education outreach is in partnership with the Bureau of Land Management and the American Wetland Campaign. As a result of working with the separated authors, writers, and reporters, the Public Information Office has contributed to the publishing of hundreds of articles over the past years. To contact the Louisiana Department of Natural Resources' Public Information Office, email—info@dnr.lsu.edu.	COASTWIDE	
RESTORE	West Grand Terre Beach Nourishment and Stabilization	BA-0197	BH	N/A	JEFFERSON	Development	N/A	\$85,000,694	The project will complete the engineering and design to build a sandbar and a rock revetment to protect restored marsh.	2	
RESTORE	Calcasieu Ship Channel Salinity Control Measures	CS-0065	HR	N/A	CAMERON	In Development	N/A	\$1,050,000	The purpose of this project is to manage salinities being introduced into adjacent water bodies through the Calcasieu Ship Channel to reduce the rate of saltwater intrusion into the surrounding wetlands. The project intends to construct features to prevent saltwater intrusion into the Calcasieu Ship Channel and the Port of Lake Calcasieu. Measures would control salinity spikes and would be constructed at a manner that would allow for the continued functioning and development of the Calcasieu Ship Channel and the Port of Lake Calcasieu.	4	
RESTORE	River Reintroduction into Maurepas Swamp	PO-0029	FD	EPA	ST. JOHN THE BAPTIST, ST. JAMES	36121	N/A	\$147,028,735	This project intends to restore a natural hydrologic regime and increase nutrient inputs in hypersaline swamp tracts south of Lake Maurepas through the diversion of Mississippi River water into an area of degraded swamp. The project was originally proposed under CWFPPA, but underwent subsequent development as a State-only project.	1	
RESTORE	Golden Triangle Marsh Creation	PO-0163	MC	N/A	ORLEANS, ST. BERNARD	Development	N/A	\$54,551,330	This project would complete the engineering and design to create approximately 600 acres of marsh within the Golden Triangle Marsh system.	1	
RESTORE	Biloxi Marsh Living Shoreline Project	PO-0174	SP	N/A	ST. BERNARD	Development	N/A	\$57,719,731	The project would create a living breakwater structure by mechanically placing a manufactured structure, or suite of structures, off the shoreline of Elio Bay and Elio Point, near the mouth of Bayou La Louche.	1	
SECTION 204/1135	Houma Navigation Canal Lock Complex	TE-0113	HR	N/A	TERREBONNE	In Development	N/A	\$1,050,000	The Houma Navigation Canal Lock Complex (TE-113) is a part of the Morganza to the Gulf of Mexico Hurricane Protection Project. This section 204 project utilized material from maintenance dredging activities along the Mississippi River Gulf Outlet (MRGO) to nourish the littoral system that feeds Breton Island.	3A	
SECTION 204/1135	MRGO, Breton Island Restoration, Mile 2.3 to 4.0	N/A	DM	USA/CE	PLAQUEMINES	26	N/A	\$150,000	This Section 204 project provided for the unclaimed material of 3,468,901 cubic yards of material into shallow water adjacent to the south jetty at about mile 15.3. The material was dredged from mile 1.0 to 11.0 of the Mississippi River Gulf Outlet (MRGO).	1	
SECTION 204/1135	MRGO, Breton Island Berm, Mile 2 to 3	N/A	DM	USA/CE	ST. BERNARD	50	N/A	\$350,000	The project involved pumping approximately 1.6 million cubic yards of material into shallow water adjacent to the Mississippi River Gulf Outlet establishment.	1	
SECTION 204/1135	Mississippi River Gulf Outlet Berm, Mile 4 to 11	N/A	DM	USA/CE	ST. BERNARD	50	N/A	\$290,000	The project was fast-tracked due to the impact of Hurricane Ida and Tropical Storm Isaias in 2020.	1	
SECTION 204/1135	Mississippi River Gulf Outlet, Mile 11 to 12, 2023	N/A	DM	USA/CE	ST. BERNARD	113	N/A	\$590,000	This project involved pumping 4.3 million cubic yards of material into shallow water adjacent to the Mississippi River Gulf Outlet (MRGO) navigation channel and placed at an elevation conducive to marsh vegetation establishment.	1	
SECTION 204/1135	Mississippi River Gulf Outlet, Mile 14 to 12, 2033	N/A	DM	USA/CE	JEFFERSON	125	N/A	\$140,000	Barataria Bay Waterway, Mile 31 to 24.5	2	

ONGOING PROTECTION AND RESTORATION SUMMARIES

CPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunized	Project Description		Planning Unit	
									Total Budget			
SECTION 204/1135	Barataria Waterway Grand Tere Island Ph 2	N/A	DM	USA/CE	JEFFERSON	80	2002	\$100,000	This Section 204 project provided for the beneficial placement of 500,000 cubic yards of material dredged from the Barataria Bay Waterway (BWB) to create wetlands on the bay side of Grand Tere Island.	2		
SECTION 204/1135	Calaeset River and Pass	N/A	DM	USA/CE	CAMERON	480	N/A	1999	\$1,560,804	This Section 204 project provides for the disposal of dredged material removed from the river between mile 5 and 11 of the Calaeset River Channel. A total of 4,470,000 cubic yards of material was deposited in three phases within the Sabine National Wildlife Refuge as an elevation conducive to marsh creation.	4	
SECTION 204/1135	Wine Island Restoration	DSR-81558	DM	USA/CE	TERREBONNE	37	N/A	1991-2003	\$1,007,000	This Section 204/1135 project was cooperative effort with the USACE and included the use of beneficial dredging from a scheduled Hureau Navigation Canal mainline dredge to restore Wine Island.	3A	
SECTION 204/1135	Barataria Bay Waterway, Grand Tere Island (Phase I)	N/A	DM	USA/CE	JEFFERSON	115	N/A	1996	\$1,370,000	This Section 204/1135 project provides for the beneficial placement of 500,000 cubic yards of dredged material from the Barataria Bay Waterway (BWB) to create wetlands on Grand Tere Island.	2	
SECTION 204/1135	Houma Navigation Canal Wine Island Barrier Island Restoration	N/A	DM	USA/CE	TERREBONNE	50	N/A	2002	\$1,000,000	This Section 204/1135 project investigated the feasibility of beneficially using the dredged material from the bar channel area in lieu of the Ocean Dredged Material Disposal Site. The construction schedule of this project was expedited due to the impact of Hurricane Lili and Tropical Storm Isidore.	3A	
SECTION 204/1135	Brown Lake	N/A	MC, DM	USA/CE	CAMERON	315	N/A	1999	\$1,132,435	The project will restore, to the extent possible, the natural hydrology of the area. A reduction in marsh loss and improved water conditions are expected to occur following project implementation. Long-term water management objectives will be directed towards maintaining a brackish marsh system.	4	
STATE	Alexandria to the Gulf	AT-0012	OT	N/A	RAPIDES	N/A	N/A	N/A	\$970,000	This feasibility study is intended to evaluate options and alternatives for providing urban drainage and flood reduction to the city of Alexandria and restoration and flood protection benefits to agricultural areas south and southwest of the city.	3B	
STATE	Atchafalaya Basin Natural Resources Inventory and Assessment	AT-0013	OT	N/A	ST MARY, IBERIA, ST MARTIN	N/A	N/A	N/A	\$1,450,000	This project assesses and inventories the natural resources in the Atchafalaya Swamp.	3B	
STATE	Naomi Siphon Diversion	BA-0003	FD	N/A	PLAQUEMINES, JEFFERSON	8200	N/A	1992	\$9,602,381	This project involved the construction of eight parallel siphons to divert water from the Mississippi River into the adjacent wetlands near Naomi, Louisiana. The maximum discharge of the siphons is 2,100 cfs.	2	
STATE	West Pointe à la Hache Siphon Diversion	BA-0004	FD	N/A	PLAQUEMINES	9200	N/A	1992	\$9,645,693	This project involved the construction of eight parallel siphons to divert water from the Mississippi River into the adjacent wetlands on the west side of the river near Pointe à la Hache, Louisiana. The maximum discharge of the siphons is 2,000 cfs.	2	
STATE	Queen Bess	BA-0005-B	SP, DM	N/A	JEFFERSON	145	N/A	1993	\$1,475,176	The purpose of this project is to restore Queen Bess Island as a brown pelican (<i>Pelecanus occidentalis</i>) rookery. Dredged material was added to the island to increase its size in 1991, and a rock wall was installed around the perimeter of the original island in 1992 to aid in the recovery of the island. The area has been one vegetated and the number of pelicans nests on the island increased after project completion.	2	
STATE	Baie de Chactas	BA-0005-C	SP	N/A	ST CHARLES	130	N/A	1990	\$175,000	Approximately 300,000 pounds of crushed oyster shell were placed on 7,400 feet of shoreline to restore the physical integrity of the marsh shoreline separating Lake Sakakawea and Baie du Chactas and Baie du Cabanage.	2	
STATE	Lake Salvador Shoreline Protection Extension	BA-0015-X1	SP	N/A	ST CHARLES	2035	N/A	2005	\$4,840,344	The purpose of this project is to build a rock dike that will protect the marsh shoreline along the northeastern portion of Lake Salvador, as an extension of the BA-15 Phase I CW/PFA project.	2	
STATE	Bayou Siegnette	BA-0016	SP	N/A	JEFFERSON	88	N/A	1994, 1998	\$1,373,151	This project involved the construction of a 6,810-foot limestone rock berm to reinforce the bank between Lake Salvador and Barrou Siegnette and a installation of a timber pilings fence across an abandoned access can that connects the two water bodies. The fence is designed to reduce wave energies and provide a safe place for boaters to land on the lake while still allowing enhanced sediment and aquatic transits. Additional CW/PFA funds were appropriated for the design of this state-funded project. Maintenance of this project was necessary in the 1998-1999 fiscal year at a cost of \$20,000.	2	
STATE	Baou LaFourche Freshwater Introduction	BA-0025	FD	N/A	LAFOURCHE	Not Available	N/A	2011	\$20,000,000	The Mississippi River diversion from Baou LaFourche will restore coastal marshes and provide drinking water to over 300,000 residents.	2	
STATE	Plaquemines Parish - Southeast Louisiana Strategic Restoration	BA-0046-SF	MC	N/A	PLAQUEMINES	N/A	N/A	N/A	\$4,500,000	This project funded the dredging of the first 6.2 miles of the bayou to accommodate a proposed increased flow of 1,000 cfs.	2	
STATE	Jean Lafitte Tidal Protection	BA-0075-1	HP	N/A	JEFFERSON	N/A	2.9	Pending	\$15,730,000	This project provided funding to supplement a Plaquemines Parish dredging design project.	2	
STATE	Rosemont Tidal Protection	BA-0075-2	HP	N/A	JEFFERSON	N/A	5.3	Pending	\$20,500,000	This project will provide flood protection improvements consisting of new earthen levees, approximately 8,010 linear feet of reinforced concrete, additional flood gates to 20 NAVD.	2	
STATE	St. Charles West Bank Hurricane Protection Levee	BA-0085	HP	N/A	ST CHARLES	N/A	9	Pending	\$4,500,000	This project is a system of levees,耳防 structures and pump stations being constructed to provide flood protection to the communities of St. Charles Parish on the West Bank of the Mississippi River.	2	
STATE	Baou LaFourche Salt Water Control Structure	BA-0091	OT	N/A	LAFOURCHE	N/A	N/A	Pending	\$4,690,000	This project will allow saltinity levels in Bayou LaFourche to be more effectively managed through operation of the saltwater control structure.	2	
STATE	Grand Isle East End Breakwater/Jetty Design	BA-0092	SP	N/A	JEFFERSON	N/A	N/A	N/A	\$1,000,000	This project provided funding for the design of breakwaters/jetties work for Grand Isle State Park.	2	
STATE	Donaldsonville to the Gulf of Mexico Hurricane Protection	BA-0115	HP	USA/CE	ASSUMPTION, LAFOURCHE, ST JOHN THE BAPTIST, ST CHARLES, ST JAMES	N/A	N/A	N/A	\$6,000,000	The purpose of this project is to reduce the risk of flooding from coastal storm surge and rainfall to prevent further economic losses and environmental damage in the Barataria Basin. The project is currently in its feasibility study phase, during which various alternatives to reducing storm surge being examined, the adequacy of the existing drainage system is being assessed, and cultural, historical, and recreational issues are being identified. The scope is to study various alternatives that will provide flood protection from tidal, hurricane surges, and heavy rainfall events, determine the adequacy of the existing interior drainage systems and evaluate whether additional pumping capacity is required, and analyze recreational, cultural, and environmental needs.	2	
STATE	Grand Isle/Ft. Island Breakwaters	BA-0168	SP	N/A	JEFFERSON	Not Available	N/A	2015	\$10,269,987	The project will improve and raise approximately 33,000 feet of levees surrounding the Kerauer Community, a forced drainage Grand Isle in order to protect commercial and residential infrastructure, wetlands, and islands. The project includes renourishment of 1,450 feet of new breakwater to an elevation of 9 feet.	2	
STATE	Kerauer Bayou Board Levee Lift	BA-0169	HP	N/A	LAFOURCHE	N/A	6	Pending	\$1,000,000	This project will remove and raise approximately 0.70 acres of marsh in the Barataria basin to address the sites and placement of a new boardwalk.	2	
STATE	Breach Management Plan	BA-0170	BH	N/A	JEFFERSON, LAFOURCHE, PLAQUEMINES, TERREBONNE	N/A	N/A	N/A	\$7,106,511	This project involves the development of a system-wide program for handling the breach that occurs between the barrier island and the headland system of the Louisiana coastline. The project will include development of identification, classification, and prioritization methodologies for restoration activities, debris collection, and maintenance costs, and improve boardwalks.	2, 3A	
STATE	Barataria Large-Scale Component E-Planning	BA-0192	MC	N/A	PLAQUEMINES, JEFFERSON	8070	N/A	N/A	In Development	Creation of approximately 0.70 acres of marsh in the Barataria basin, restore degraded marsh, and reduce wave erosion (component of G02 MC-15). Project involves components to be constructed in 1st and 2nd implementation periods.	2	
STATE	Brannon Ditch	BD	SP	N/A	CALCASIEU	480	N/A	1991	\$1,2440	This project included the construction of wooden breakwater fences along 2,200 feet of the GWWY access from Brannon Ditch in Calcasieu Parish. This area has experienced shoreline erosion in excess of 25 feet/year. The breakwater wave action from boats and the current from Brannon Ditch during periods of high discharge. Smooth cordgrass (<i>Spartina alterniflora</i>) was also planted along the breakwaters in order to enhance accretion and increase the stability of this site.	4	

ONGOING PROTECTION AND RESTORATION SUMMARIES

Project Description										Planning Unit
CPRa Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Total Budget		
						Miles or Levee Immovated				
STATE	Brown Marsh	BFM-01	MC	N/A	LAFOURCHE	44	N/A	2002	\$473,365	Project features consisted of a thin layer marsh creation/maintenamt covering 44 acres in Lafourche Parish.
STATE	Lake Levy Hydrologic Restoration	BS-0006	FD	N/A	ST. BERNARD	100	N/A	1987	\$1,000,000	This project involved the construction of a pumping station located along the south-east edge of the St. Bernard Parish Piege. This will discharge collected rainfall from the marsh north of Lake Pontchartrain and help prevent saltwater intrusion. The project was built by contractors with the Lake Pontchartrain Basin Levee District and was completed in M/S of 1987.
STATE	Cheniere Au Tigre	CAT-01	SP	BOEMRE	VERMILION	40	N/A	2005	\$1,602,271	The primary objective of this project is to protect the Cheniere Au Tigre shoreline from additional erosion and protect local infrastructure along the beach front of the Cheniere structures. The proposed series of segmented breakwaters was located just East of the CWPPRA funded TV-16 project with up to nine additional structures. The structures cover approximately 2,000 linear feet with an approximate distance of 240 feet from the existing shoreline.
STATE	Holy Beach	CS-0001	SP	N/A	CAMERON	88	N/A	1991, 1992, 1993, 1994	\$8,437,000	The objective of this project is to protect the marsh north of the Gulf of Mexico shoreline by expanding shoreline protection in phases. In Ocean View, Louisiana to the east near Calcasieu Pass. A total of 34 breakwaters were constructed in 1991-21; breakwaters were constructed in 1992, 21; breakwaters were constructed in 1993, and nine breakwaters were constructed in 1994 between Calcasieu Pass and Holy Beach, Louisiana. Eighteen of the existing breakwaters were raised and/or extended in 2003 utilizing marine matttress foundations and armor stone.
STATE	Rivcade Canal Marsh Management	CS-0002	MM	N/A	CAMERON	6575	N/A	1994	\$2,005,857	The project was designed to stabilize salinities and water levels by reducing water flows through Rivcade canal and Black Lake.
STATE	Cameron Canele Levee	CS-J0004-A	HP	N/A	CAMERON	2602	N/A	2011	\$12,500,000	The intent of this project is to provide for repair and maintenance of critical perimeter control structures around Calcasieu Lake and repairs to the Cameron-Canele Levee. These structures were severely damaged by Hurricane Rita.
STATE	Cameron-Canele Structure Automation	CS-0004-A-1	HR	N/A	CAMERON	N/A	N/A	1999	\$700,000	This project consists of automating three existing water control structures along the east shore of Calcasieu Lake. These structures are relatively isolated and are difficult to manipulate. Automation of these structures will improve management capabilities in the Sabine National Wildlife Refuge.
STATE	Cameron Parish Shoreline Restoration	CS-0033	OT	N/A	CAMERON	523	N/A	2014	\$6,800,000	The project involved the establishment of dunes and berms about 60' x 7' wide, extending from the western Calcasieu River Jetty to the eastern shoreline of Blind Lake - Constance Beach breakwater field.
STATE	Black Lake Supplemental Beneficial Use Disposal Area	CS-0034	DM	USACE	CAMERON	440	N/A	2010	\$21,034,329	The purpose of this project was to prevent the Gulf Intracoastal Waterway from breaching into Blind Lake. The project consisted of placing 2,394 linear feet of limestone breakwater along the south side of the G.I.W. adjacent to Blind Lake. The project is the second phase of this project included planting giant cordgrass (Zizaniopsis miliacea) along the inside of the breakwater to enhance the accretion process.
STATE	Blind Lake	CS-BL	SP	N/A	CAMERON	480	N/A	1989	\$173,433	A total of 1129 earthen berms were constructed in a backwash system and planted with smooth cordgrass (Spartina alterniflora) in open water areas of the Sabine National Wildlife Refuge. The project's objective was to increase the length of marshland in interrate, reproductivity, and bottomland vegetation.
STATE	Sedaine Terraces	CS-ST	SNT	N/A	CAMERON	110	N/A	1990	\$190,047	The project's objective was to reduce marsh degradation by reducing wind-generated wave energy, increase overall primary productivity, and bottomland vegetation.
STATE	Fisheries Habitat Restoration on West Grand Terre Island at Fort Livingston	FTL-01	SP	N/A	JEFFERSON	No Available	N/A	2003	\$2,078,816	This project consists of a rock dike built in to protect the Gulf shoreline of West Grand Terre Island and Fort Livingston. This project was specified due to erosion rates along West Grand Terre rapidly accelerated due to the impacts of tropical storms in 2002.
STATE	Grand Isle Bay Side Breakwaters	GIBB-01	SP	N/A	JEFFERSON	50	N/A	1995	\$500,000	The purpose of this project was to reduce erosion on the bay side of Grand Isle. Fifteen 200-foot breakwaters were constructed on the back bay side of Grand Isle.
STATE	Dedicated Dredging Program - Lake Salvador	LA-0001-A	MC, DM	N/A	ST. CHARLES	28	N/A	1999	\$342,276	Two sites were filled utilizing dredged material adjacent to Baie du Cabangue on the Salvador Wildlife Management Area. This project is part of the cost-share state dedicated dredging program. The goal of this program is to use a small, mobile hydraulic dredge along marshes adjacent to the waterways.
STATE	Dedicated Dredging Program - Bayou Dupuit	LA-0001-B	DM, MC	N/A	JEFFERSON	66	N/A	2000	\$1,080,017	Three sites were filled utilizing dredged material adjacent to Bayou Dupuit and the Pen. This project is part of the cost-share state dedicated dredging program. The goal of this program is to use a small, mobile hydraulic dredge along Louisiana's coastlines to deposit dredged material, and thereby nourish and/or rebuild threatened coastal marshes adjacent to the waterways.
STATE	Passe a Lourie Site - Dedicated Dredging Program	LA-0001-C	DM	N/A	PLAQUEMINES	26	N/A	2005	\$450,000	This project treated approximately 40 acres of marsh just north of Lake Deleware along the western bank of the Morris Canal. This project is part of the cost-share state dedicated dredging program. The goal of this program is to use a small, mobile hydraulic dredge along marshes adjacent to the waterways.
STATE	Terrebonne School Board Site - Dedicated Dredging	LA-0001-D	DM	N/A	TERREBONNE	40	N/A	2006	\$2,598,587	This project created approximately 38 acres of marsh near Caillous Lake using dredged material from Grand Bayou Blue. This project is part of the cost-share state dedicated dredging program. The goal of this program is to use a small, mobile hydraulic dredge along inland waterways in Louisiana's coastal zone to deposit dredged material, and thereby nourish and/or rebuild threatened coastal marshes adjacent to the waterways.
STATE	Grand Bayou Blue Site - Dedicated Dredging	LA-0001-E	DM, MC	N/A	LAFOURCHE	38	N/A	2007	\$1,831,534	This project treated approximately 67 acres of marsh on Point Au Fer Island adjacent to the CWPPRA TE-16 project using material dredged from Achafalaya Bay. This project is part of the cost-share state dedicated dredging program. The goal of this program is to use a small, mobile hydraulic dredge along inland waterways in Louisiana's coastal zone to deposit dredged material, and thereby nourish and/or rebuild threatened coastal marshes adjacent to the waterways.
STATE	Dedicated Dredging - Point au Fer	LA-0001-F	DM	N/A	TERREBONNE	67	N/A	2007	\$2,469,250	The project integrates shoreline restoration and hurricane protection alternatives to address the coastal issues of Southwest Louisiana. It includes shoreline restoration, marsh creation, salinity control, barrier protection, and barrier restoration measures.
STATE	Southwest Coastal Louisiana Feasibility Study	LA-0020	SP, MC	USACE	CALCASIEU, VERMILION, CAMERON	In Development	Pending		\$8,000,000	Project was authorized in December 7, 2005.
STATE	Sedaine Eye 2	LA-0021-1	DM	N/A	CAMERON	227	N/A	2010	\$6,800,000	The purpose of this project is to cover the loss of marsh in the Sedaine Refuge Marsh in Point au Fer.
STATE	MAST - Management	LA-0211	OT	N/A	COASTWISE	N/A	N/A	N/A	\$200,000	This project is to recognize activities undertaken by the State of Louisiana's Coastal Protection and Restoration Authority as part of the Sedaine Eye 2 project.
STATE	Sediment Diversion Implementation and Program Management	LA-0276	DI	N/A	JEFFERSON, LAURENCE, PLAQUEMINES, ST. BERNARD	N/A	N/A	In Development		This project will include all work involved in the development of the Diversions Management program. This will be performed by CPRA personnel and CH2M and will initially result in the development of full E&D scopes for both the Atchafalaya and Mid-Breton diversions.
STATE	Pecan Island Freshwater Introduction	ME-0001	FD	N/A	VERMILION	39000	N/A	1982	\$447,152	The purpose of this project is to introduce freshwater from the north to counter the saltwater intrusion from the south. The project consists of two water control structures and approximately 5,700 linear feet of barrier embankment needed to channel water from the Lake to the south.
STATE	Marsh Creation From Freshwater Bayou	MIE-0025-SF	MC	N/A	VERMILION	96	N/A	2015	\$5,700,000	The purpose of this project is to create 96 acres of marsh southeast of intersection of Acadia Canal and Freshwater Bayou.
STATE	Small Sediment Diversions	MR-0001-B	SD	N/A	PLAQUEMINES	6719	N/A	1993	\$1,010,500	This project involved the excavation of 12 diversions through the levees of Mississippi River distributary channels within the Barataria-Terrebonne National Estuary Program. This was in order to create self-sustaining emergent marsh.
STATE	North Grand Isle Breakwaters	NGI	SP	N/A	JEFFERSON	50	N/A	1995	\$160,000	This project was authorized to construct sediment rock breakwaters on the bar site of Grand Isle to protect canals formed between Caminada Bay and the west side of Louisiana Hwy 1. The Louisiana Department of Natural Resources (LDNR) contributed to no construction funds and the local Levee District supplied construction inspection only.
STATE	Violet Siphon Diverion	PO-0001	FD	N/A	ST. BERNARD	84	N/A	1992	\$300,584	The purpose of this project is to return it to 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.

ONGOING PROTECTION AND RESTORATION SUMMARIES

Project Description										Planning Unit
CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Miles or Levee Immersed	Construction Completion	Total Budget	
STATE	Bayou Cheneee	PO-0002-C	SP	N/A	ORLEANS	75	N/A	1994	\$22,000	This project installed 2,000 feet of brush fences at the mouth of Bayou Cheneee.
STATE	LaBranché Shoreline Stabilization and Canal Closure	PO-0003	SP	N/A	ST CHARLES	1750	N/A	1987	\$1,324,000	The purpose of this project is to restore the integrity of the shoreline, which separates Lake Pontchartrain from the western edge of the LaBranché wetlands.
STATE	LaBranché Shoreline Protection	PO-0003-B	SP	N/A	ST CHARLES	50	N/A	1996	\$1,290,851	A rock revetment was constructed along the Lake Pontchartrain shoreline, east of Bayou LaBranché, to protect the hydrologic boundary between the lake and the wetlands areas from being breached.
STATE	Central Wetlands Pump Outfall	PO-0008	FD	N/A	ST BERNARD	300	N/A	1992	\$250,000	This project is designed to provide freshwater, nutrients, and sediment associated with storm water runoff to an area of marsh near the Vieux Station (P.C.O.).
STATE	Turtle Cove Shore Protection	PO-0010	SP	N/A	ST JOHN THE BAPTIST	184	N/A	1994	\$366,000	This project involved the construction of a 1,640 foot rock-filled gabion breakwater to maintain and protect the Lake Pontchartrain shoreline that shelters the "Prarie" (an 80-acre embankment saltmarsh bordered by organic freshwater marsh) from high wave energies and to encourage sediment deposition behind the gabion structure. An additional 195,000 was used for maintenance in 2001.
STATE	MRGO Closure Structure	PO-0038-SF	OT	USA CE	ST BERNARD	2343	N/A	2009	\$14,116,500	This project involves the installation of a closure structure in the Mississippi River Gulf Outlet (MRGO) to prevent the intrusion of saline Gulf water into interior marsh via the channel. Project Implementation was 100% Federal; the State acquired Real Estate interests for structure and is responsible for O&M activities.
STATE	St. Bernard Parish 40 Acre Levee Reroutes	PO-0061	HP	N/A	ST BERNARD	N/A	Not Available	2011	\$5,000,000	This project is in the Lake Borgne Levee District and provided funds for the raising of low reaches of the Forty Acre Levee.
STATE	Bioxi Marsh	PO-0072	SP	N/A	ST BERNARD	300	N/A	2014	\$22,000,000	This project involved the construction of approximately four miles of shoreline protection along the southeastern shoreline of Lake Borgne.
STATE	North Shore Hurricane/Flood Protection and Restoration Plan	PO-0074	OT	N/A	ST TAMMANY, TANGIPAHOA	N/A	N/A	N/A	\$1,271,988	This project involves the development of a hurricane protection plan for the North Shore.
STATE	MRGO and Lake Borgne (Bayou Dune Submitt)	PO-0093	SP	USA CE	ST BERNARD	N/A	N/A	Pending	Not Available	This project will construct approximately 17,850 linear feet of stone/forests dikes along the southwest shoreline of Lake Borgne in the vicinity of Bayou Bienville. CERA is actually positioned on the two outer passes that are impacted by this project.
STATE	MRGO and Lake Borgne (Shell Beach Segment)	PO-0094	SP	USA CE	ST BERNARD	N/A	N/A	Pending	Not Available	This project will construct approximately 14,440 linear feet of stone/forests dikes along the southwest shoreline of Lake Borgne in the vicinity of Bayou Bienville. CERA is acquiring portions of three outer passes that are impacted by this project.
STATE	MAS2 - Outreach	PO-0129	OT	N/A	JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JEROME, LIVINGSTON	N/A	N/A	N/A	\$266,670	The objective of this project is to support the release by the Federal Emergency Management Agency (FEMA) of a Digital Flood Insurance Rate Map (DFIR) and Flood Insurance Study (FIS) report, for the Greater New Orleans area.
STATE	Hydrologic Restoration of the Arme River Diversions Canal	PO-0142	HR, VP	N/A	ST TAMMANY	1800	N/A	7/9/1905	\$3,392,100	The purpose of this project is to restore hydrologic connectivity between Maurepas Swamps and natural waterbodies, plant vegetation in highly degraded swamp habitat.
STATE	St. Tammany Parish Coastal Protection Study	PO-0167	HP	N/A	ST TAMMANY	N/A	N/A	Pending	Not Available	This project involves updating the 2012 Northshore Hurricane and Flood Protection Study for St. Tammany and Tangipahoa Parishes with newly completed and proposed projects in the St. Tammany Parish Coastal Zone. In addition, a gap analysis will be performed to identify new projects to further protect vulnerable areas, and finally a benefit/cost analysis of projects will be undertaken to determine the most effective and efficient projects to be implemented.
STATE	Violet Canal North Levee Alignment	PO-0170	HP	N/A	ST BERNARD	N/A	N/A	Pending	\$1,164,000	For the construction of the Violet Canal. In the vicinity of the Violet Canal, to maintain flood protection for the public, and provide natural vegetation in highly degraded swamp habitat.
STATE	Fontainebleau State Park Mitigation	PO-435NIP4	SP	N/A	ST TAMMANY	6	N/A	1999	\$476,104	This project was re-scoped in March 2016. It now involves updating the 2012 Northshore Hurricane and Flood Protection Study for St. Tammany and Tangipahoa Parishes with newly completed and proposed projects in the St. Tammany Parish Coastal Zone. In addition, a gap analysis will be performed to identify new projects to further protect vulnerable areas, and finally a benefit/cost analysis of projects will be undertaken to determine the most effective and efficient projects to be implemented.
STATE	Raccoon Island Repair	RI	DM	N/A	TERREBONNE	197	N/A	1994	\$1,400,000	This project repaired a section of the eroded shoreline at Raccoon Island.
STATE	Spoilbank along the GIWW	SBG	VP	N/A	TERREBONNE	1	N/A	1993	\$3,400	This project planted 8,000 feet of spoilbank along the Gulf Intracoastal Waterway with black willow (Salix nigra) and bald cypress (Taxodium distichum) in an effort to reduce further bank erosion. The effectiveness of different types of native exclusion devices was also tested.
STATE	Sedaine Shellbank Stabilization	SSB	SP	N/A	CAMERON	10	N/A	1990	\$66,000	The purpose of this project was to provide natural shoreline protection by using tidal currents to deposit sand on the shoreline. The benefits of this design over the use of permanent structures are lower cost, less disturbance of the natural habitat on the shoreline, and allowing natural distribution of sediment and organisms without impairment.
STATE	Monague Wetland	TE-0001	MM	N/A	TERREBONNE	4200	N/A	1993	\$5,537,036	The objective of the Monague Wetland project is to protect and enhance 4,200 acres of degraded wetland habitat in the Pointe au Chene WMA managed by the Louisiana Department of Wildlife and Fisheries. Major funding for the project was provided by Ducks Unlimited and the North American Wetlands Conservation Act.
STATE	Faigout Canal Wetland	TE-0002	MM	N/A	TERREBONNE	1300	N/A	1993, 1995	\$1,560,000	The primary objectives of this project were to protect approximately 8,000 acres of marsh and cypress-tupelo swamp, reduce saltwater intrusion, and improve wildlife habitat for migrating waterfowl and fishery energy. The funding was utilized for this project by LDWF and T-FCG.
STATE	Bayou LaChâche Wetland	TE-0003	MM	N/A	TERREBONNE	4374	N/A	1991, 1996	\$2,047,222	This project is the first of its kind to minimize the effects of saltwater intrusion by increasing the retention of freshwater derived from local runoff and establish control over saltwater flow into the project area.
STATE	Pointe Aux Chênes Hydrologic Restoration	TE-0006	MM	N/A	TERREBONNE	4700	N/A	2006	\$2,771,819	This comprehensive coastal restoration project benefits approximately 4,700 acres of brackish-intermediate marsh within the Pointe Aux Chênes WMA managed by the Louisiana Department of Wildlife and Fisheries. Major funding for the project was provided by Ducks Unlimited and the North American Wetlands Conservation Act.
STATE	Lower Petit Caillou	TE-0007-B	HR	N/A	TERREBONNE	3465	N/A	1995, 2007	\$1,536,084	The objective of this project is to decrease saltwater intrusion into the project area by re-routing freshwater discharge from the Lower Petit Caillou Canal into the Terrebonne River. This will increase the amount of freshwater available to the saltwater intrusion.
STATE	Point Farm Refuge Planting	TE-0014	VP	N/A	TERREBONNE	150	N/A	1995	\$226,931	This project includes levee modifications and improvements. The project was allocated \$1.5 million in GI Surplus and \$4.827 million in GI Surplus.
STATE	Morganza to the Gulf	TE-0064	HP	USA CE	LAFOURCHE, TERREBONNE	N/A	18	Pending	\$8,000,000	This project involves the construction of approximately 2400 feet of sheet piles to an elevation of +13 feet along the GIWW at Larose to Larose Sheath.
STATE	Larose to Golden Meadow - Flood Protection	TE-0065	HP	N/A	LAFOURCHE	N/A	23	2014	\$161,000	This project consists of vegetative plantations on the shore and vicinity of Lost Lake.
STATE	Valentine to Larose	TE-0111	HP	N/A	LAFOURCHE	N/A	0.5	Pending	TBD	F feasibility study and EIS preparation for investigating dredging of the HNC to accommodate the current fleet of large vessels utilizing the navigation channel, as well as the increased need for support of the offshore oil and gas platform/facility operations along the HNC. This project is being managed by DOTD with interim funding being provided by C-FRA.
STATE	St. Mary Backwater Flooding	TE-0116	HP	N/A	ST MARY, TERREBONNE	N/A	1.72	Pending	\$5,000,000	This project provides for flood protection improvement to the current Morgan City flood protection system by raising some of the existing levees to elevations as identified in the March 27, 2013 report by T. Baker Smith.

ONGOING PROTECTION AND RESTORATION SUMMARIES

CIPRA Program	Name	State Project Number	Project Type	Federal Sponsor	Parish	Acres Benefited	Construction Completion	Miles or Levee Immunized	Project Description		Planning Unit
									Total Budget	Project Type	
STATE	Yellow Bayou	TV-0002-B	SP	N/A	ST MARY	126	N/A	1982	\$134,500	The objectives of the project were to maintain the integrity of approximately 2,000 acres of interior marsh between Jackson Bayou and the British-American Canal and to stabilize a 465 feet of the East Cote Blanche Bay shoreline. This was achieved by constructing an oyster shell berm adjacent to the water's edge to reduce shoreline erosion.	3B
STATE	Marsh Island Control Structures	TV-0006	MM	N/A	IBERIA	643	N/A	1993	\$453,500	The objectives of this project were to reduce the rate of land loss, revegetate shallow open-water areas, and increase waterfowl food within the water management units. Flap gatting devices, culverts and earthen canal plugs were installed in October of 1993 at the northeast and southwest units to control water exchange between the units and the surrounding water bodies. Within the management units, canal spoil banks were breached and ditches were constructed to facilitate water movement between interior marsh ponds.	3B
STATE	Freshwater Bayou Bank Protection	TV-0011	SP	N/A	VERMILLION IBERIA	241	N/A	1994	\$2,177,025	This project conserves vegetated wetlands by maintaining the physical integrity of marshes that separate Freshwater Bayou and interior water bodies. The dominant project feature consists of the construction of 44,000 linear feet of rock dike, extending north to the confluence of Belle Isle Bayou and Freshwater Bayou. The original project was constructed in 1984, however, repairs were made to this structure in 1996 and 2001.	3B
STATE	Oaks/Avery Structures	TV-0013-B	SP	N/A	VERMILLION, IBERIA	160	N/A	2000	\$3,107,735	This project enhanced the adjacent CWP/PRA-funded TV-13a project by installing low-sill structures at the outlet of Oaks and Avery Canals to redirect more water flow through the portion of Bayou Petit Anse south of the 53WW.	3B
STATE	South Central Coastal Plan	TV-0054	OT	USA/CE	ST MARY, IBERIA, ST MARTIN	In Development	In Development	Pending	\$970,000	The South Central Coastal project was authorized 8/30/2000 in 2009 surplus funds. The project team, which includes the Office of Coastal Protection and Restoration, St. Martin Parish, St. Martin Parish and Iberville Parish, has initiated a data gathering effort. We anticipate completing this phase of the project by the end of 2010. This information will be used kick start the project with the US Army Corps of Engineers. Once study authorization is obtained from the US Congress the project will progress to the feasibility phase.	3B
STATE	Morgan City/St Mary Flood Protection	TV-0055	HP	N/A	ST MARY	4.5	Pending	N/A	\$3,871,000	This project will provide flood protection improvements by raising or improving over seven miles of the current levee system in the Morgan City area.	3B
STATE	Deltambre-Avery Canal (E&D)	TV-0057	HP	N/A	IBERIA	N/A	N/A	N/A	\$970,000	This project will design and engineer a flood control structure for the Deltambre-Avery Canal just south of the Intracoastal Waterway. When constructed this project will provide flood protection improvements by allowing the closure of the Deltambre-Avery Canal to reduce the impact of storm surge from Vermilion Bay.	3B
STATE	Bayou Tigue Flood Control Complex	TV-0075	HP	N/A	IBERIA, VERMILLION	N/A	Not Avail	Pending	\$6,280,000	This project will utilize 16,280,000 of funds allocated from TV-56 to design and construct a pumping station to augment flood control operations at a closure gate across Bayou Tigue, currently under design, to help mitigate flooding and flooding on the protected side caused by flood date closure during a lengthy rain event.	3B
STATE	Sunburst Freshwater Bayou Bank Stabilization	TV-0076	SP	N/A	VERMILLION	Not Available	N/A	2016	\$1,300,000	This project will utilize \$1,300,000 remaining from the MC-025-E/F project to augment the TV-0011B-E/F freshwater rock dike feature along Freshwater Bayou.	3B
STATE	Quintana Canal/Cybermont Point	TV-4356NP1	SP	N/A	ST MARY	26	N/A	1998	\$1,316,818	The project features approximately 3,650 linear feet of rock breakwaters along the Vermilion Bay shoreline and approximately 3,375 linear feet of foreshore rock dike along the Vermilion Bay Quintana Canal interlace and the south bank of the Quintana Canal.	3B
STATE	Beneficial Use of L-10 Twin Span Bridge (Bearbottoms)	N/A	OT	N/A	ORLEANS	N/A	Deauthorized	N/A	\$1,500,000	This project involves the use of twin span Debris as a form of shoreline protection for the Bayou Sauvage area.	1
STATE	East of Harvey Canal Interim Hurricane Protection - Phase I	N/A	HP	N/A	JEFFERSON	N/A	N/A	2009	\$4,000,000	This project involved the installation of a combination of sheet piles and earthen flood protection, ultimately to an elevation of 110 feet along the east side of the Harvey Canal from the set-off gate at LaPlace Boulevard to the existing levee at the west end, to provide intermittent protection during the HURRICANE DUSTON.	2
STATE	Raising of LA 1 at Golden Meadow Footbridge and Completion of Golden Meadow Lock Structure	N/A	HP	N/A	LAFOURCHE	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 LaSalle to Golden Meadow Hurricane Protection System.	2
STATE	Raising of LA 23 at LaReuisse (Houma Navigation Canal)	N/A	HP	N/A	PLAQUEMINES	N/A	N/A	2012	\$1,200,000	This project involved the raising of LA-HW 23 to the elevation of the adjoining La Reuisse Sluice to the highway crosses thus guiding levees. LDCT performed the engineering, the Thru and contracts to complete the project.	2
STATE	Bay Welsh Disposal Site	N/A	DM	N/A	TERREBONNE	N/A	N/A	N/A	\$300,000	The purpose of this project is to pre-clear the Bay Welsh disposal site adjacent to and east of the Houma Navigation Canal.	3A
STATE	Chabert Ring Levee	N/A	HP	N/A	TERREBONNE	N/A	Not Available	2008	\$500,000	The project consists of the design and construction for a segment of levee around the Chabert Medical Center and will provide flood protection for the facility allowing operation during possible flood events.	3A
STATE	Wine Island	N/A	DM	N/A	TERREBONNE	N/A	N/A	2007	\$2,000,000	The purpose of this project was to beneficially use material from the dredging of the Houma Navigation Canal Bay Channel on Wine Island.	3A
STATE	NRCS Biomass Program	N/A	VP	NRCS	COASTWIDE	N/A	N/A	N/A	\$80,000	The NRCS-LDNRCRD Biomass Program is a multiyear programmatic initiative to accelerate the collection, testing, and release of important coastal wetland restoration plants. The Biomass Program began in 1998 in conjunction with the LDNRCRD "make-Dredge Program" with emphasis on plant performance and dedicated dredged sediment. This program is an important coastal restoration COASTWIDE	COASTWIDE
STATE	NRCS Biomass Production Program	N/A	VP	NRCS	COASTWIDE	N/A	N/A	N/A	\$1,552,100	This multi-year cooperative wetland plant technology development. This program is an important coastal restoration	COASTWIDE
STATE	NRCS Biomass Production Program	N/A	VP	NRCS	COASTWIDE	N/A	N/A	N/A	\$399,658	environmental conditions for maximum growth of a number of varieties (i.e., cultivars) within four plant species. The information is intended to facilitate matching plant species and varieties to expected environmental conditions at restoration sites, thereby increasing the likelihood of successful revegetation efforts.	COASTWIDE
STATE	NRCS Vegetable Planting	N/A	VP	NRCS	COASTWIDE	609	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 will counter saltwater intrusion and help offset marsh subsidence. This project can affect up to 10,600 acres where vegetation is needed.	COASTWIDE
WRDA	Davis Pond Freshwater Diversion	BA-0001	FD	USA/CE	ST CHARLES	33,000	N/A	2002	\$24,818,000	This project creates freshwater and saltwater separation in the Mississippi River to coastal bays and marshes in Breton Sound for fish and wildlife enhancement. This project can affect up to 10,000 cubic feet per second.	1
WRDA	Cameron Freshwater Diversion	BS-0008	FD	USA/CE	PLAQUEMINES	16,000	N/A	1991	\$24,818,000		1

Notes:

Program: CWP/PRA=Coastal Wetlands Planning, Protection and Restoration Act; Act: State=Restoration projects funded primarily by the State of Louisiana; ECTION 204113=Water Resource Development Act Sections 204 and 135 (beneficial use of dredged material projects); WRDA=Water Resources Development Act; LCA=Louisiana Coastal Area; ENA=Federal Emergency Management Agency; FIMA=Federal Emergency Management Agency; HHD=Housing and Urban Development; NIFRS=National Marine Fisheries Service; NRCS=Natural Resources Conservation Service; NMFS=National Wetlands Research Center; USFWS=U.S. Fish and Wildlife Service; USACE=U.S. Army Corps of Engineers; USGS=U.S. Geological Survey.

Project Type: BI=Barrier Island/Headland; DM=Beneficial Use of Dredged Material; OM=Outfall Management; OT=Other project types (Infrastructure, etc.); PP=Property Purchase; SD=Sediment Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; TE=Terraces; VP=Vegetation Planting.

EPL=Priority Project List (as authorized each year by the CWP/PRA 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 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
Engineering and Design (P1)					
BA-0193	Caminada Headlands Back Barrier Marsh Creation Increment 2 ¹	\$565,952	\$125,120	\$0	\$691,072
BA-0194	East Leeville Marsh Creation and Nourishment ¹	\$800,000	\$600,000	\$300,000	\$1,700,000
BA-0195	Barataria Bay Rim Marsh Creation and Nourishment	\$250,000	\$175,000	\$75,000	\$500,000
CS-0049	Cameron-Creole Freshwater Introduction	\$100,000	\$0	\$0	\$100,000
CS-0078	No Name Bayou Marsh Creation and Nourishment ¹	\$570,507	\$302,362	\$0	\$872,869
CS-0079	Oyster Lake Marsh Creation and Nourishment ¹	\$2,000,000	\$600,000	\$0	\$2,600,000
ME-0031	Freshwater Bayou Marsh Creation	\$23,891	\$11,945	\$0	\$35,836
ME-0032	South Grand Chenier Marsh Creation- Baker Tract	\$93,060	\$39,680	\$0	\$132,740
PO-0075	LaBranche East Marsh Creation	\$48,183	\$24,092	\$0	\$72,275
PO-0133	LaBranche Central Marsh Creation	\$77,393	\$33,169	\$0	\$110,562
PO-0169	New Orleans Landbridge Shoreline Stabilization and Marsh Creation ¹	\$542,286	\$242,172	\$0	\$784,458
PO-0173	Fritchie Marsh Creation and Terracing	\$26,280	\$26,280	\$13,140	\$65,700
PO-0178	Bayou LaLoutre Ridge Restoration and Marsh Creation ¹	\$1,077,905	\$1,077,905	\$1,077,905	\$3,233,715
PO-0179	St. Catherine Island Marsh Creation and Shoreline Protection ¹	\$955,723	\$955,723	\$477,862	\$2,389,308
TE-0112	North Catfish Lake Marsh Creation	\$22,883	\$8,009	\$0	\$30,892
TE-0117	Island Road Marsh Creation and Nourishment ¹	\$1,151,337	\$31,543	\$0	\$1,182,881
TE-0134	West Fourchon Marsh Creation ¹	\$792,890	\$198,223	\$0	\$991,113
TE-0138	Bayou DeCade Ridge and Marsh Creation ¹	\$1,283,254	\$1,283,254	\$641,627	\$3,208,134
Construction (P2)					
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Lac des Allemands Swamp ¹	\$2,008,304	\$217,342	\$0	\$2,225,646
BA-0125	Northwest Turtle Bay Marsh Creation ¹	\$200,000	\$16,487,209	\$10,991,473	\$27,678,682
BS-0016	South Lake Lery Shoreline and Marsh Restoration	\$321,482	\$0	\$0	\$321,482
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation ¹	\$16,823,058	\$4,205,765	\$0	\$21,028,823
CS-0059	Oyster Bayou Marsh Creation and Terracing ¹	\$13,376,082	\$0	\$0	\$13,376,082
CS-0066	Cameron Meadows Marsh Creation and Terracing ¹	\$720,000	\$21,243,465	\$8,950,056	\$30,913,521
LA-0284	Salvinia Weevil Propagation Facility ¹	\$94,980	\$339,287	\$0	\$434,267
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization ¹	\$22,628,242	\$7,542,747	\$0	\$30,170,989
ME-0020	South Grand Chenier Marsh Creation Project	\$30,368	\$7,592	\$0	\$37,960
ME-0021	Grand Lake Shoreline Protection, Tebo Point	\$150,000	\$0	\$0	\$150,000
PO-0104	Bayou Bonfouca Marsh Creation ¹	\$13,607,626	\$0	\$0	\$13,607,626
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration ¹	\$20,173,768	\$0	\$0	\$20,173,768
TV-0063	Cole's Bayou Marsh Restoration ¹	\$16,434,897	\$4,108,724	\$0	\$20,543,621
Demonstration Projects (P1 & P2)					
LA-0280	Shoreline Protection, Preservation, and Restoration (SPPR) Panel ¹	\$117,835	\$117,835	\$117,835	\$353,504
Subtotal					
		\$117,068,184	\$60,004,442	\$22,644,897	\$199,717,523
Adjustment for Outlying Years²					
		N/A	\$29,995,558	\$67,355,103	\$97,350,661
Total Expenditures					
		\$117,068,184	\$90,000,000	\$90,000,000	\$297,068,184
Surplus Expenditures (See Table B-5)					
		(\$12,174,792)	\$0	\$0	(\$12,174,792)
Federal Expenditures (see Note 1)					
		\$96,384,103	\$75,904,989	\$76,500,081	\$248,789,173
Trust Fund Expenditures					
		\$8,509,289	\$14,095,011	\$13,499,919	\$36,104,219

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- 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 2019 - FY 2020 are therefore based on prior years' expenditures.

Table B-2. Louisiana WRDA Projected Expenditures

Project ID	Project Name	FY 2017	FY 2018	FY 2019	Project Total (FY 2017 - FY 2019)
BA-0191	Spanish Pass Ridge and Marsh Restoration ¹	\$0	\$0	\$0	\$0
LA-0020	Southwest Coastal Louisiana ²	\$901,048	TBD	TBD	\$901,048
Total Expenditures		\$901,048	\$0	\$0	\$901,048
Surplus Expenditures for WRDA (see Table B-6)		(\$901,048)	\$0	\$0	(\$901,048)
Trust Fund Expenditures for WRDA		\$0	\$0	\$0	\$0

Notes:

1- Project construction is anticipated to continue into FY 2018, but all CPRA expenditures are anticipated to be complete by the end of FY 2017.

2- 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 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
BA-0082	Lafitte Area Levee Repair	\$700,000	\$0	\$0	\$700,000
TE-0063	Falgot Canal Road Levee ¹	\$2,000,000	\$0	\$0	\$2,000,000
TE-0078	Cut-Off/Pointe Aux Chene Levee	\$7,095,000	\$0	\$0	\$7,095,000
N/A	CDBG Program Administration	\$11,680	\$11,680	\$0	\$23,360
Total Expenditures		\$9,806,680	\$11,680	\$0	\$9,818,360

Notes:

1- Project is anticipated to complete construction in FY 2017; FY 2018 expenditures are for closeout activities.

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

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
MOEX Projects					
MR-0016-S	Mississippi River Delta Strategic Planning-SSPM Expansion ¹	\$0	\$0	\$0	\$0
PO-0142	Hydrologic Restoration of the Amite River Diversion Canal ¹	\$704,687	\$131,250	\$704,687	\$1,540,624
Capital Outlay Projects					
BA-0066	West Bank and Vicinity ²	\$560,000	\$0	\$0	\$560,000
BA-0075-1	Jean Lafitte Tidal Protection ³	\$0	\$0	\$0	\$0
BA-0075-2	Rosethorne Tidal Protection ³	\$0	\$0	\$0	\$0
TE-0064	Morganza to the Gulf ²	\$15,000,000	\$0	\$0	\$15,000,000
LDOTD Interagency Transfer Projects					
TE-0108	HNC Deepening Section 203 Study	\$73,600	\$0	\$0	\$73,600
Projects with Trust Fund Expenditures					
BA-0109	HSDRRS Mitigation- WBV ³	\$50,000	\$50,000	\$50,000	\$150,000
BA-0154	Previously Authorized Mitigation WBV ³	\$50,000	\$50,000	\$50,000	\$150,000
BA-0158	New Orleans to Venice Mitigation- Plaquemines Non-Fed ³	\$5,840	\$11,680	\$11,680	\$29,200
BA-0159	New Orleans to Venice Mitigation- Fed ³	\$5,840	\$11,680	\$11,680	\$29,200
PO-0057	SELA- Overall ³	\$20,440	\$20,440	\$20,440	\$61,320
PO-0121	HSDRRS Mitigation- LPV ³	\$56,064	\$56,064	\$56,064	\$168,192
Total State Expenditures		\$16,526,471	\$331,114	\$904,551	\$17,762,136

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 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
BA-0025	Bayou Lafourche Freshwater Introduction ¹	\$848,740	\$0	\$0	\$848,740
BA-0043 (EB)	Mississippi River Long Distance Sediment Pipeline ²	\$10,700,527	\$0	\$0	\$10,700,527
BA-0045	Caminada Headland Beach and Dune Restoration ³	\$159,016	\$126,508	\$0	\$285,524
BA-0071	Medium Diversion with Dedicated Dredging at Myrtle Grove ⁴	\$3,860,892	\$0	\$0	\$3,860,892
BA-0075-1	Jean Lafitte Tidal Protection	\$10,000,000	\$4,500,000	\$0	\$14,500,000
BA-0075-2	Rosethorne Tidal Protection	\$4,500,000	\$5,500,000	\$0	\$10,000,000
BA-0085	St. Charles West Bank Hurricane Levee Protection	\$4,000,000	\$2,116,368	\$0	\$6,116,368
BA-0115	Donaldsonville to the Gulf ⁵	\$1,325,833	\$0	\$0	\$1,325,833
BA-0169	Kraemer/Bayou Boeuf Levee Lift	\$1,000,000	\$0	\$0	\$1,000,000
CS-0004	Cameron Creole Levee ⁶	\$2,876,528	\$0	\$0	\$2,876,528
LA-0020	Southwest Coastal Louisiana	\$901,048	\$0	\$0	\$901,048
ME-0025 (SF)	Marsh Creation near Freshwater Bayou	\$0	\$0	\$0	\$0
PO-0062	West Shore Lake Pontchartrain	\$3,500,000	\$0	\$0	\$3,500,000
PO-0063	Lake Pontchartrain and Vicinity	\$17,478,316	\$2,922,920	\$1,106,000	\$21,507,236
PO-0072	Biloxi Marsh ⁷	\$849,395	\$0	\$0	\$849,395
PO-0167	St. Tammany Parish Coastal Protection Study	\$1,200,000	\$700,000	\$0	\$1,900,000
PO-0170	Violet Canal North Levee Alignment ⁷	\$219,874	\$0	\$0	\$219,874
TE-0064	Morganza to the Gulf	\$10,700,000	\$600,000	\$0	\$11,300,000
TE-0065-SP	Larose to Golden Meadow- Larose Sheetpile	\$2,000,000	\$0	\$0	\$2,000,000
TE-0113	Houma Navigation Canal Lock Complex	\$8,000,000	\$0	\$0	\$8,000,000
TE-0116	St. Mary Backwater Flooding	\$2,147,950	\$536,988	\$0	\$2,684,938
TV-0054	South Central Coastal Plan	\$449,420	\$0	\$0	\$449,420
TV-0055	Morgan City/ St Mary Flood Protection	\$5,162,062	\$0	\$0	\$5,162,062
TV-0057	Delcambre-Avery Canal (E&D)	\$103,892	\$0	\$0	\$103,892
TV-0067	Bayou Tigre Flood Control Project	\$500,000	\$2,488,375	\$2,488,375	\$5,476,750
TV-0075	Bayou Tigre Flood Control Complex	\$3,421,200	\$2,280,800	\$0	\$5,702,000
N/A	East of Harvey Canal	\$161,399	\$0	\$0	\$161,399
N/A	Southeast Louisiana Flood Protection/ LERRDS ⁸	\$47,161,375	\$3,429,800	\$3,460,000	\$54,051,175

Programmatic and Non-Project Surplus Expenditures

AT-0013	Atchafalaya Basin Natural Resources Inventory and Assessment ⁶	\$289,120	\$0	\$0	\$289,120
LA-0026	Rehabilitation and Repair of State Restoration Projects ⁶	\$759,739	\$0	\$0	\$759,739
LA-0027	Barrier Island Maintenance Program	\$2,644,359	\$0	\$0	\$2,644,359
N/A	Science, Technology, and Education	\$0	\$0	\$0	\$0
N/A	Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) ⁶	\$624,870	\$0	\$0	\$624,870
LA-0025	Innovative Coast-Wide Initiatives	\$0	\$0	\$0	\$0
N/A	Beneficial Use	\$1,709,653	\$0	\$0	\$1,709,653
N/A	Emergency Reserve	\$6,263,645	\$0	\$0	\$6,263,645
N/A	Innovative Programs	\$876,143	\$0	\$0	\$876,143
LA-0259	University Partnerships	\$126,320	\$0	\$0	\$126,320
N/A	Non-Structural Program Development ⁹	\$500,000	\$798,551	\$0	\$1,298,551
LA-0265	Levee Engineering and Design Standards Development and Analysis	\$4,263,087	\$0	\$0	\$4,263,087
Total Expenditures		\$161,284,403	\$26,000,310	\$7,054,375	\$194,339,088

Notes:

- 1- Expenditures represent contingency funds to cover post-construction activities.
- 2- Includes funding for Large-Scale Barataria Marsh Creation (BA-0192) and CWPPRA projects (see Table B-1).
- 3- Surplus funds include post-construction monitoring expenditures (see Table B-8).
- 4- Includes funding for Diversion Modeling and Model Improvement (LA-0282).
- 5- Expenditures may be used for project closeout and to supplement funding of other coastal projects.
- 6- Expenditures may be used to supplement funding of other coastal projects.
- 7- Project constructed with leftover funds from project PO-0061 (completed in FY 2011).
- 8- 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).
- 9- Funds will be used to develop a coordinated strategy for implementing nonstructural projects in coastal communities. This may also include development of pilot projects in coastal parishes with high levels of risk and vulnerability.

Table B-6. CWPPRA Monitoring Projected Expenditures

Project No.	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
AT-0002	Atchafalaya Sediment Delivery	\$39,760	\$2,920	\$0	\$42,680
AT-0003	Big Island Mining	\$13,760	\$2,920	\$0	\$16,680
BA-0002	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	\$56,617	\$31,797	\$85,817	\$174,230
BA-0003-C	Naomi Outfall Management	\$15,090	\$28,004	\$19,094	\$62,188
BA-0020	Jonathan Davis Wetland Protection	\$2,920	\$16,936	\$8,760	\$28,616
BA-0027-C	Barataria Landbridge Shoreline Protection (Phase 3)	\$5,840	\$4,380	\$19,272	\$29,492
BA-0034-2	Hydrologic Restoration and Vegetative Planting in the Des Allemands Swamp	\$114,140	\$45,300	\$47,344	\$206,784
BA-0035	Chaland Pass to Grand Bayou	\$5,840	\$68,760	\$15,840	\$90,440
BA-0036	Dedicated Dredging on the Barataria Basin Landbridge	\$11,680	\$2,920	\$2,920	\$17,520
BA-0037	Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake	\$9,344	\$5,840	\$5,840	\$21,024
BA-0038	Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration	\$14,600	\$4,380	\$15,840	\$34,820
BA-0039	Mississippi River Sediment Delivery (Bayou Dupont)	\$95,180	\$9,670	\$9,920	\$114,770
BA-0042	Lake Hermitage Marsh Creation	\$82,703	\$14,625	\$76,625	\$173,953
BA-0048	Bayou Dupont Marsh and Ridge Creation	\$18,843	\$17,428	\$38,016	\$74,287
BA-0068	Grand Liard Marsh and Ridge Restoration	\$5,840	\$105,680	\$30,520	\$142,040
BA-0164	Bayou Dupont Sediment Delivery Marsh Creation #3	\$21,255	\$2,920	\$2,920	\$27,095
BA-0173	Bayou Grande Chenier Marsh and Ridge Restoration	\$2,336	\$85,070	\$25,112	\$112,518
BS-0003-A	Caernarvon Diversion Outfall Management	\$2,920	\$2,920	\$2,920	\$8,760
BS-0011	Delta Management at Fort St. Philip	\$14,600	\$8,760	\$2,920	\$26,280
BS-0016	South Lake Lery Shoreline and Marsh Restoration	\$8,760	\$15,056	\$2,336	\$26,152
CS-0004-A	Cameron-Creole Maintenance	\$30,368	\$44,384	\$44,384	\$119,136
CS-0011-B	Sweet Lake/Willow Lake Hydrologic Restoration	\$2,920	\$2,920	\$2,920	\$8,760
CS-0017	Cameron Creole Plugs	\$2,920	\$0	\$0	\$2,920
CS-0020	East Mud Lake Marsh Management	\$2,920	\$2,920	\$2,920	\$8,760
CS-0021	Highway 384 Hydrologic Restoration	\$2,920	\$26,572	\$19,272	\$48,764
CS-0022	Clear Marais Bank Protection	\$2,920	\$2,920	\$2,920	\$8,760
CS-0023	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	\$6,132	\$19,272	\$19,272	\$44,676
CS-0024	Perry Ridge Shore Protection	\$16,936	\$2,920	\$2,920	\$22,776
CS-0027	Black Bayou Hydrologic Restoration	\$33,958	\$31,038	\$18,190	\$83,187
CS-0028-3	Sabine Refuge Marsh Creation, Increment 3	\$37,008	\$12,264	\$8,760	\$58,032
CS-0028-4	Sabine Refuge Marsh Creation, Increment 4	\$37,008	\$12,264	\$8,760	\$58,032
CS-0029	Black Bayou Culverts Hydrologic Restoration	\$2,920	\$2,920	\$16,936	\$22,776
CS-0030	GIWW - Perry Ridge West Bank Stabilization	\$2,920	\$2,920	\$6,132	\$11,972
CS-0031	Holly Beach Sand Management	\$19,272	\$16,936	\$2,920	\$39,128
CS-0032	East Sabine Lake Hydrologic Restoration	\$2,920	\$12,264	\$12,264	\$27,448
CS-0053	Kelso Bayou Marsh Creation	\$0	\$0	\$2,920	\$2,920
CS-0059	Oyster Bayou Marsh Creation & Terracing	\$14,950	\$29,950	\$43,966	\$88,867
LA-0008	Bioengineered Oyster Reef Demonstration	\$21,608	\$2,920	\$0	\$24,528
LA-0016	Non-Rock Alternatives for Shoreline Protection Demonstration Project	\$71,608	\$2,920	\$0	\$74,528
LA-0039	Coastwide Plantings Program	\$76,504	\$63,656	\$63,656	\$203,816
LA-0003-B	Coastwide Nutri Control Plan	\$152,920	\$152,920	\$152,920	\$458,760
ME-0004	Freshwater Bayou Wetland (Phases 1 & 2)	\$17,236	\$19,856	\$2,920	\$40,012
ME-0011	Humble Canal Hydrologic Restoration	\$17,022	\$31,038	\$31,038	\$79,099
ME-0013	Freshwater Bayou Bank Stabilization	\$16,310	\$12,264	\$0	\$28,574
ME-0014	Pecan Island Terracing	\$4,088	\$2,920	\$2,920	\$9,928
ME-0016	Freshwater Introduction South of Highway 82	\$15,022	\$30,206	\$29,038	\$74,267
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	\$0	\$11,680	\$65,844	\$77,524
ME-0019	Grand-White Lakes Landbridge Protection	\$2,920	\$2,920	\$2,920	\$8,760
ME-0020	South Grand Chenier Hydrologic Restoration Project	\$7,008	\$16,936	\$16,936	\$40,880
ME-0022	South White Lake Shoreline Protection	\$2,920	\$2,920	\$2,920	\$8,760
MR-0003	West Bay Sediment Diversion	\$2,920	\$176,440	\$14,600	\$193,960
MR-0006	Channel Armor Gap Crevasses	\$7,008	\$0	\$0	\$7,008
MR-0009	Delta-Wide Crevasses	\$186,747	\$8,760	\$2,336	\$197,843
PO-0006	Fritchie Marsh Restoration	\$2,920	\$14,600	\$8,760	\$26,280
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	\$11,680	\$2,920	\$2,920	\$17,520
PO-0022	Bayou Cheevee Shoreline Protection	\$8,760	\$2,336	\$7,592	\$18,688
PO-0024	Hopedale Hydrologic Restoration	\$2,920	\$2,920	\$2,920	\$8,760
PO-0033	Goose Point/Point Platte Marsh Creation	\$4,672	\$8,760	\$2,336	\$15,768
PO-0104	Bayou Bonfouca Marsh Creation	\$43,507	\$2,336	\$43,784	\$89,627
TE-0020	Isle Dernieres Restoration East Island	\$16,352	\$20,440	\$20,440	\$57,232
TE-0022	Point Au Fer Canal Plugs	\$2,336	\$2,278	\$2,290	\$6,903
TE-0026	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	\$10,512	\$2,920	\$2,920	\$16,352
TE-0028	Brady Canaly Hydrologic Restoration	\$38,688	\$15,840	\$0	\$54,528
TE-0034	Penchant Basin Natural Resources Plan, Increment 1	\$167,520	\$67,520	\$5,840	\$240,880
TE-0037	New Cut Dune/Marsh Restoration	\$11,680	\$2,920	\$2,920	\$17,520
TE-0040	Timbalier Island Dune/Marsh Restoration	\$17,520	\$17,520	\$584	\$35,624
TE-0044	North Lake Merchant Landbridge Restoration	\$3,504	\$31,700	\$29,200	\$64,404
TE-0046	West Lake Boudreaux Shoreline Protection and Marsh Creation	\$7,125	\$7,125	\$7,125	\$21,374
TE-0048	Raccoon Island Shoreline Protection/Marsh Creation	\$68,760	\$48,760	\$8,760	\$126,280
TE-0050	Whiskey Island Back Barrier Marsh Creation	\$14,016	\$5,840	\$5,840	\$25,696
TE-0052	West Belle Pass Barrier Headland Restoration	\$5,840	\$5,840	\$5,840	\$17,520
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	\$14,016	\$49,780	\$62,276	\$126,072
TV-0004	Cote Blanche Hydrologic Restoration	\$16,936	\$2,920	\$0	\$19,856
TV-0012	Little Vermilion Bay Sediment Trapping	\$16,936	\$2,920	\$0	\$19,856

Table B-6. CWPPRA Monitoring Projected Expenditures

Project No.	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
TV-0013-A	Oaks/Avery Canal Hydrologic Restoration, Increment 1	\$2,920	\$8,968	\$16,936	\$28,824
TV-0014	Marsh Island Hydrologic Restoration	\$16,936	\$6,966	\$20,982	\$44,884
TV-0015	Sediment Trapping at "The Jaws"	\$20,156	\$16,936	\$2,920	\$40,012
TV-0017	Lake Portage Land Bridge	\$2,920	\$16,936	\$16,936	\$36,792
TV-0018	Four Mile Canal Terracing and Sediment Trapping	\$2,920	\$2,920	\$2,920	\$8,760
TV-0021	East Marsh Island Marsh Creation	\$22,458	\$11,362	\$12,264	\$46,085
TV-0063	Coles Bayou Marsh Restoration	\$17,016	\$8,760	\$28,864	\$54,640
CRMS	Coastwide Reference Monitoring System	\$8,862,955	\$8,920,075	\$8,928,835	\$26,711,866
		Total Expenditures	\$10,800,264	\$10,551,145	\$10,271,445
		Federal CWPPRA Monitoring Expenditures	\$9,180,224	\$8,968,474	\$8,730,728
		Trust Fund CWPPRA Monitoring Expenditures	\$1,620,040	\$1,582,672	\$1,540,717
					\$4,743,428

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

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
BA-0001	Davis Pond Freshwater Diversion ¹	\$611,284	\$653,999	\$693,455	\$1,958,738
BS-0008	Caernarvon Freshwater Diversion ¹	\$501,334	\$536,352	\$567,572	\$1,605,257
		Total Expenditures	\$1,112,618	\$1,190,351	\$1,261,027
		Federal WRDA Monitoring Expenditures	\$834,463	\$892,763	\$945,770
		NFWF WRDA Monitoring Expenditures (See Table B-13)	\$253,422	\$253,422	\$253,422
		State WRDA Monitoring Expenditures	\$24,732	\$44,166	\$61,835

Notes:

1- Monitoring expenditures partially funded with NFWF Adaptive Management funds (See Table B-13).

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

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
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	\$8,760	\$15,840	\$39,200
NFWF Projects					
BA-0143	Caminada Headland Beach and Dune Restoration Increment 2	\$785,250	\$656,500	\$268,000	\$1,709,750
NRDA Projects					
BA-0111	Shell Island West	\$154,961	\$134,680	\$26,420	\$316,061
BA-0141	NRDA Lake Hermitage Marsh Creation Increment 2	\$29,016	\$60,440	\$29,016	\$118,472
BA-0142	NRDA Cheniere Ronquille	\$151,709	\$114,040	\$24,080	\$289,829
TE-0100	NRDA Caillou Lake Headlands	\$355,479	\$165,117	\$163,213	\$683,809
Surplus Projects²					
BA-0045	Caminada Headland Restoration	\$109,016	\$126,508	\$0	\$235,524
USACE Mitigation Projects					
BA-0109	HSDRRS Mitigation - WBV	\$7,300	\$7,300	\$7,300	\$21,900
BA-0154	Previously Authorized Mitigation - WBV	\$7,300	\$7,300	\$7,300	\$21,900
PO-0038SF	MRGO Closure Structure	\$7,300	\$7,300	\$7,300	\$21,900
PO-0093	MRGO - Lake Borgne -Bayou Dupre Segment	\$7,300	\$7,300	\$7,300	\$21,900
PO-0094	MRGO - Lake Borgne -Bayou Bienvenue Segment	\$7,300	\$7,300	\$7,300	\$21,900
PO-0095	MRGO - Lake Borgne -Shell Beach Segment	\$7,300	\$7,300	\$7,300	\$21,900
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					
AT-0016	Bayou Sorrel, Frog Lake	\$7,008	\$7,008	\$7,008	\$21,024
BA-0188	OPA Lake Washington/Mendicant	\$7,008	\$7,008	\$7,008	\$21,024
BA-0196	LOSCO- EML	\$31,680	\$21,680	\$21,680	\$75,040
CS-0072	OPA Calcasieu River	\$9,344	\$9,344	\$9,344	\$28,032
LA-0278	General Oil Spill- LOSCO	\$29,200	\$29,200	\$29,200	\$87,600
MR-0027	OPA Joseph's Bayou I & II	\$7,008	\$7,008	\$7,008	\$21,024
MR-0165	OPA Gretna/Mississippi River	\$7,008	\$7,008	\$7,008	\$21,024
MR-0166	OPA Dune Energy - Garden Island Bay	\$7,008	\$7,008	\$7,008	\$21,024
TE-0121	OPA Hilcorp Bay St. Elaine	\$7,008	\$7,008	\$7,008	\$21,024
State-Only Projects					
PO-0142	Hydrologic Restoration of the Amite River Diversion Canal	\$52,984	\$66,087	\$44,795	\$163,866
PO-0148	Living Shoreline	\$59,084	\$37,916	\$65,379	\$162,379
PO-0152	Lake Borgne and MRGO Shoreline Protection	\$7,300	\$7,300	\$7,300	\$21,900
		Total Expenditures	\$1,981,744	\$1,551,160	\$817,855
		Berm to Barrier Expenditures	\$98,972	\$14,600	\$21,680
		NFWF Expenditures	\$785,250	\$656,500	\$268,000
		NRDA Expenditures	\$691,166	\$474,277	\$242,729
		Surplus Expenditures	\$109,016	\$126,508	\$0
		LOSCO Expenditures	\$112,272	\$102,272	\$102,272
		Trust Fund Expenditures	\$185,068	\$177,003	\$183,174
					\$545,245

Notes:

1- Monitoring expenditures funded with Berm to Barrier funds.

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

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

Project No.	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
AT-0002	Atchafalaya Sediment Delivery	\$8,760	\$4,672	\$2,336	\$15,768
AT-0003	Big Island Mining	\$8,760	\$4,672	\$2,336	\$15,768
BA-0002	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	\$1,679,726	\$22,534	\$22,534	\$1,724,794
BA-0003-C	Naomi Outfall Management	\$21,740	\$21,740	\$21,740	\$65,220
BA-0020	Jonathan Davis Wetland Protection	\$5,840	\$5,840	\$5,840	\$17,520
BA-0023	Barataria Bay Waterway West Side Shoreline Protection	\$5,840	\$5,840	\$5,840	\$17,520
BA-0026	Barataria Bay Waterway East Side Shoreline Protection	\$88,764	\$2,770,440	\$5,840	\$2,865,044
BA-0027	Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2	\$2,920	\$2,336	\$2,336	\$7,592
BA-0027-C	Barataria Basin Landbridge Shoreline Protection, Phase 3	\$2,920	\$2,336	\$2,336	\$7,592
BA-0027-D	Barataria Basin Landbridge Shoreline Protection Phase 4	\$2,920	\$2,336	\$2,336	\$7,592
BA-0034-2	Hydrologic Restoration and Vegetative Plantings in des Allemands Swamp	\$3,650	\$2,920	\$2,920	\$9,490
BA-0035	Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration	\$9,402	\$9,461	\$9,578	\$28,441
BA-0037	Little Lake Shoreline Protection/ Dedicated Dredging Near Round Lake	\$749,778	\$5,490	\$5,490	\$760,757
BA-0038	Pelican Island and Pass La Mer to Chaland Pass Restoration	\$9,811	\$9,928	\$10,045	\$29,784
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	\$5,840	\$133,176	\$5,840	\$144,856
BA-0042	Lake Hermitage Marsh Creation	\$11,680	\$11,797	\$11,972	\$35,449
BA-0048	Bayou Dupont Marsh and Ridge Creation	\$86,873	\$136,473	\$9,928	\$233,275
BA-0068	Grand Liard Marsh and Ridge Restoration	\$80,911	\$80,911	\$9,928	\$171,751
BA-0164	Bayou Dupont Sediment Delivery- Marsh Creation 3	\$91,856	\$9,928	\$99,856	\$201,640
BA-0173	Bayou Grande Chenier Marsh and Ridge Restoration	\$0	\$70,440	\$70,440	\$140,880
BS-0003-A	Caernarvon Diversion Outfall Management	\$41,055	\$42,323	\$42,323	\$125,701
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
BS-0024	Terracing and Marsh Creation South of Big Mar	\$0	\$13,640	\$374,693	\$388,333
CS-0004-A	Cameron-Creole Maintenance	\$220,840	\$102,628	\$102,803	\$426,271
CS-0011-B	Sweet Lake/Willow Lake Hydrologic Restoration	\$2,453	\$2,628	\$2,803	\$7,884
CS-0017	Cameron Creole Plugs	\$2,453	\$0	\$0	\$2,453
CS-0018	Sabine National Wildlife Refuge Erosion Protection	\$2,453	\$2,628	\$2,803	\$7,884
CS-0020	East Mud Lake Marsh Management	\$536,517	\$2,628	\$2,803	\$541,948
CS-0021	Highway 384 Hydrologic Restoration	\$22,920	\$23,095	\$22,803	\$68,818
CS-0022	Clear Marais Bank Protection	\$82,453	\$2,628	\$2,803	\$87,884
CS-0023	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	\$37,453	\$37,628	\$40,803	\$115,884
CS-0024	Perry Ridge Shore Protection	\$2,453	\$2,628	\$2,803	\$7,884
CS-0027	Black Bayou Hydrologic Restoration	\$5,659,760	\$12,628	\$12,803	\$5,685,191
CS-0028-2	Sabine Refuge Marsh Creation, Increment 2	\$376,008	\$71,628	\$376,008	\$823,644
CS-0028-4	Sabine Refuge Marsh Creation, Increment 4	\$69,340	\$2,628	\$2,803	\$74,771
CS-0028-5	Sabine Refuge Marsh Creation, Increment 5	\$69,340	\$2,628	\$2,803	\$74,771
CS-0029	Black Bayou Culverts Hydrologic Restoration	\$27,008	\$27,300	\$27,592	\$81,900
CS-0030	GIWW - Perry Ridge West Bank Stabilization	\$347,512	\$2,628	\$2,803	\$352,943
CS-0031	Holly Beach Sand Management	\$37,008	\$2,628	\$2,803	\$42,439
CS-0032	East Sabine Lake Hydrologic Restoration	\$2,453	\$2,628	\$2,803	\$7,884
CS-0049	Cameron-Creole Freshwater Introduction - Vegetative Plantings	\$424,600	\$59,052	\$59,344	\$542,996
CS-0054	Cameron-Creole Watershed Grand Bayou Marsh Creation	\$131,650	\$2,628	\$2,803	\$137,081
CS-0059	Oyster Bayou Marsh Creation & Terracing	\$90,614	\$2,628	\$2,803	\$96,045
LA-0003-B	Coastwide Nutria Control Program	\$3,305,016	\$3,315,739	\$3,315,739	\$9,936,494
LA-0016	Non-Rock Alternatives for Shoreline Protection Demonstration Project	\$2,453	\$2,628	\$2,803	\$7,884
LA-0039	Coastwide Plantings Program	\$8,760	\$8,760	\$11,680	\$29,200
ME-0004	Freshwater Bayou Wetland (Phases 1 & 2)	\$2,453	\$2,628	\$2,803	\$7,884
ME-0009	Cameron Prairie National Wildlife Refuge Shoreline Protection	\$2,453	\$2,628	\$2,803	\$7,884
ME-0011	Humble Canal Hydrologic Restoration	\$17,453	\$17,628	\$17,803	\$52,884
ME-0013	Freshwater Bayou Bank Stabilization	\$2,453	\$2,628	\$2,803	\$7,884
ME-0014	Pecan Island Terracing	\$2,453	\$2,628	\$2,803	\$7,884
ME-0016	Freshwater Introduction South of Highway 82	\$12,453	\$12,628	\$12,803	\$37,884
ME-0018	Rockefeller Refuge Gulf Shoreline Stabilization	\$2,453	\$2,628	\$2,803	\$7,884
ME-0019	Grand-White Lakes Landbridge Protection	\$2,453	\$2,628	\$2,803	\$7,884
ME-0020	South Grand Chenier Hydrologic Restoration Project	\$568,378	\$2,628	\$2,803	\$573,809
ME-0021	Grand Lake Shoreline Protection (CIAP + Tebo Point)	\$12,453	\$12,628	\$12,803	\$37,884
ME-0022	South White Lake Shoreline Protection	\$2,453	\$2,628	\$2,803	\$7,884
MR-0009	Delta Wide Crevasses	\$6,140	\$6,140	\$6,140	\$18,420
PO-0006	Fritchie Marsh Restoration	\$5,840	\$5,840	\$5,840	\$17,520
PO-0016	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	\$26,960	\$27,596	\$27,596	\$82,152
PO-0018	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	\$24,570	\$25,141	\$25,141	\$74,852
PO-0022	Bayou Cheevee Shoreline Protection	\$19,622	\$14,016	\$14,016	\$47,654
PO-0024	Hopendale Hydrologic Restoration	\$28,870	\$28,976	\$28,976	\$86,822
PO-0030	Lake Borgne Shoreline Protection	\$84,060	\$84,060	\$6,140	\$174,260
PO-0033	Goose Point/Point Platte Marsh Creation	\$83,176	\$5,840	\$5,840	\$94,856
PO-0075	Labranche East Marsh Creation	\$0	\$4,088	\$4,088	\$8,176
PO-0104	Bayou Bonfouca Marsh Creation Project	\$22,008	\$7,008	\$22,008	\$51,024
PO-0133	Labranche Central Marsh Creation	\$0	\$4,088	\$4,088	\$8,176
TE-0022	Point au Fer Canal Plugs	\$36,213	\$7,242	\$7,242	\$50,696
TE-0023 (USACE)	West Belle Pass Headland Restoration	\$5,490	\$2,336	\$2,336	\$10,162
TE-0026	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	\$471,432	\$7,242	\$7,242	\$485,915
TE-0028	Brady Canal Hydrologic Rest.	\$83,680	\$38,060	\$38,060	\$159,800
TE-0034	Penchant Basin Natural Resources Plan Increment 1	\$102,008	\$5,490	\$61,680	\$169,178
TE-0037	New Cut Dune and Marsh Restoration	\$138,760	\$17,520	\$5,490	\$161,770
TE-0039	South Lake Decade Freshwater Introduction	\$2,920	\$2,453	\$2,453	\$7,826

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

Project No.	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
TE-0043	GIWW Bank Restoration of Critical Areas in Terrebonne	\$42,928	\$5,490	\$5,490	\$53,907
TE-0044	North Lake Merchant Landbridge Restoration	\$1,545,040	\$5,490	\$5,490	\$1,556,019
TE-0045	Terrebonne Bay Shore Protection Demonstration	\$13,504	\$0	\$0	\$13,504
TE-0046	West Lake Boudreaux Shoreline Protection and Marsh Creation	\$17,300	\$5,490	\$5,490	\$28,279
TE-0048	Raccoon Island Shoreline Protection/Marsh Creation	\$2,210,772	\$17,520	\$5,490	\$2,233,781
TE-0050	Whiskey Island Back Barrier Marsh Creation	\$4,380	\$5,490	\$5,490	\$15,359
TE-0052	West Belle Pass Barrier Headland Restoration	\$453,330	\$5,490	\$5,490	\$464,309
TE-0072	Lost Lake Marsh Creation and Hydrologic Restoration	\$37,300	\$5,490	\$5,490	\$48,280
TV-0003	Vermilion River Cutoff Bank Protection	\$2,453	\$2,628	\$2,803	\$7,884
TV-0004	Cote Blanche Hydrologic Restoration	\$12,453	\$12,628	\$12,803	\$37,884
TV-0012	Little Vermilion Bay Sediment Trapping	\$57,008	\$2,628	\$2,803	\$62,439
TV-0013-A	Oaks/Avery Canal Hydrologic Restoration, Increment 1	\$343,564	\$2,628	\$2,803	\$348,995
TV-0014	Marsh Island Hydrologic Restoration	\$2,453	\$2,628	\$2,803	\$7,884
TV-0015	Sediment Trapping at "The Jaws"	\$52,453	\$2,628	\$2,803	\$57,884
TV-0017	Lake Portage Land Bridge	\$2,453	\$2,628	\$2,803	\$7,884
TV-0018	Four Mile Canal Terracing and Sediment Trapping	\$37,008	\$2,628	\$2,803	\$42,439
TV-0021	East Marsh Island Marsh Creation	\$104,774	\$2,628	\$77,008	\$184,410
TV-0063	Coles Bayou Marsh Restoration	\$2,453	\$2,628	\$127,618	\$132,699
TOTAL CWPPRA O&M Expenditures		\$21,109,662	\$7,523,456	\$5,366,011	\$33,999,129
Federal CWPPRA O&M Expenditures		\$17,943,212	\$6,394,937	\$4,561,110	\$28,899,259
State CWPPRA O&M Expenditures		\$3,166,449	\$1,128,518	\$804,902	\$5,099,869

Notes:

1. Table shows all approved CWPPRA 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 CWPPRA 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 CWPPRA Projects without Federal Cost Share

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
TE-0020	Isles Dernieres Restoration East Island	\$3,650	\$3,650	\$3,650	\$10,950
TE-0024	Isles Dernieres Restoration Trinity Island	\$3,650	\$3,650	\$3,650	\$10,950
TE-0025	East Timbalier Island Sediment Restoration, Phase 1	\$3,650	\$3,650	\$3,650	\$10,950
TE-0027	Whiskey Island Restoration	\$3,650	\$3,650	\$3,650	\$10,950
TE-0030	East Timbalier Island Sediment Restoration, Phase 2	\$3,650	\$3,650	\$3,650	\$10,950
TE-0040	Timbalier Island Dune and Marsh Restoration	\$3,650	\$3,650	\$3,650	\$10,950
Total Expenditures		\$21,900	\$21,900	\$21,900	\$65,700

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

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
BA-0001	Davis Pond Freshwater Diversion	\$1,002,467	\$1,072,601	\$1,155,902	\$3,230,970
BS-0008	Caernarvon Freshwater Diversion	\$452,086	\$483,694	\$483,694	\$1,419,474
Total Expenditures		\$1,454,553	\$1,556,295	\$1,639,596	\$4,650,444
Federal O&M Monitoring Expenditures		\$1,090,915	\$1,167,221	\$1,229,697	\$3,487,833
State WRDA O&M Expenditures		\$363,638	\$389,074	\$409,899	\$1,162,611

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

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
Hurricane Protection Projects					
BA-0066	West Bank and Vicinity ¹	\$388,465	\$409,089	\$431,293	\$1,228,847
BA-0067	New Orleans and Vicinity ¹	\$627,646	\$654,829	\$626,698	\$1,909,172
LA-0154	FEMA LAMP	\$135,038	\$128,030	\$0	\$263,068
LA-0206	HSDRRS Armoring ¹	\$437,956	\$455,693	\$473,662	\$1,367,311
LA-0253	Flood Protection Inspections ¹	\$256,215	\$268,875	\$284,819	\$809,909
LA-0269	CPRA Letter of No Objection	\$514,269	\$539,983	\$566,982	\$1,621,234
LA-0271	O&M Division State Wide Levee Board Meetings	\$182,189	\$191,298	\$200,863	\$574,351
PO-0057	SELA- Overall ¹	\$289,765	\$376,253	\$260,374	\$926,393
PO-0060	Permanent Canal Closures and Pump Stations ¹	\$2,681,036	\$2,690,088	\$749,484	\$6,120,608
PO-0063	Lake Pontchartrain and Vicinity ¹	\$405,213	\$426,674	\$449,758	\$1,281,644
PO-0096	Flood Protection Assistance	\$2,701,395	\$2,743,964	\$2,827,162	\$8,272,521
USACE Mitigation Projects					
BA-0109	HSDRRS Mitigation - WBV	\$7,008	\$7,008	\$7,008	\$21,024
BA-0154	Previously Authorized Mitigation - WBV	\$7,008	\$7,008	\$7,008	\$21,024
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 ¹	\$82,400	\$61,960	\$61,960	\$206,320
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	\$0	\$39,343	\$39,343	\$78,686
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	\$11,680	\$26,680	\$12,180	\$50,540
BA-0004	West Point a la Hache Siphon	\$11,680	\$26,680	\$12,180	\$50,540
BA-0005	Fort Livingston	\$80,740	\$24,972	\$24,972	\$130,684
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
PO-0001	Violet Siphon	\$333,680	\$25,680	\$25,680	\$385,040
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	\$34,926	\$52,521	\$56,673	\$144,120
TE-0003	Bayou LaCache Wetlands	\$105,840	\$105,840	\$105,840	\$317,520
TV-xx	Quintana Canal	\$12,453	\$2,037,423	\$12,803	\$2,062,679
TV-0013-B	Avery Canal	\$84,906	\$12,628	\$12,803	\$110,337
N/A	Maintenance Surveys	\$33,288	\$33,288	\$33,288	\$99,864
N/A	GPS Network (continued development and maintenance)	\$72,336	\$72,336	\$72,336	\$217,008
		Total Expenditures	\$9,727,901	\$11,565,970	\$7,502,996
		Surplus Expenditures	\$6,194,600	\$6,352,720	\$4,566,000
		Trust Fund Expenditures	\$3,533,301	\$5,213,250	\$2,936,996
					\$11,683,547

Notes:

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

Table B-13. Oil Spill Projected Expenditures¹

Project ID	Project Name	FY 2018	FY 2019	FY 2020	Project Total (FY 2018 - FY 2020)
Deepwater Horizon NRDA²					
BA-0111	Shell Island West- NRDA	\$1,000,000	\$250,000	\$250,000	\$1,500,000
BA-0202	Queen Bess Island Restoration	\$1,500,000	\$5,375,000	\$13,125,000	\$20,000,000
BA-0203	Barataria Basin Ridge and Marsh Restoration- Spanish Pass Increment	\$2,250,000	\$1,350,000	\$30,900,000	\$34,500,000
CS-0080	Rabbit Island Restoration	\$2,000,000	\$1,000,000	\$24,000,000	\$27,000,000
PO-0180	Lake Borgne Marsh Creation- Increment 1	\$3,000,000	\$2,000,000	\$32,000,000	\$37,000,000
TE-0100	NRDA Caillou Lake Headlands	\$103,176,805	\$0	\$0	\$103,176,805
TE-0139	Terrebonne Basin Ridge and Marsh Creation- Bayou Terrebonne Increment	\$1,500,000	\$900,000	\$30,600,000	\$33,000,000
N/A	Provide and Enhance Recreational Opportunities	\$11,000,000	\$11,000,000	\$0	\$22,000,000
N/A	NRDA Restoration Planning	\$2,152,520	\$2,204,066	\$2,258,187	\$6,614,773
N/A	Regionwide Trustee Implementation Group	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
N/A	NRDA Adaptive Management	\$12,241,166	\$13,861,856	\$16,722,054	\$42,825,075
Total Deepwater Horizon NRDA Expenditures		\$140,820,491	\$38,940,922	\$150,855,241	\$330,616,653
NFWF Projects					
BA-0143	Caminada Headland Beach and Dune Restoration Increment 2	\$785,250	\$656,500	\$268,000	\$1,709,750
BA-0153	Mid-Barataria Sediment Diversion	\$17,214,663	\$29,165,417	\$388,490,535	\$434,870,615
BS-0030	Mid-Breton Sediment Diversion	\$9,919,723	\$16,035,977	\$13,664,335	\$39,620,036
LA-0276	Sediment Diversion Management	\$2,740,359	\$2,835,611	\$3,382,998	\$8,958,967
TE-0110	Increase Atchafalaya Flow to Eastern Terrebonne	\$15,000,000	\$10,000,000	\$5,000,000	\$30,000,000
TE-0118	East Timbalier Island	\$1,100,000	\$1,100,000	\$103,385,000	\$105,585,000
N/A	NFWF Adaptive Management	\$7,650,300	\$6,033,722	\$5,048,422	\$18,732,444
Total NFWF Expenditures		\$54,410,295	\$65,827,227	\$519,239,290	\$639,476,812
Proposed RESTORE Projects					
BA-0197	West Grand Terre Beach Nourishment and Stabilization	\$4,000,000	\$2,659,216	\$25,000,000	\$31,659,216
CS-0065	Calcasieu Ship Channel Salinity Control Measures	\$14,000,000	\$16,400,000	\$30,200,000	\$60,600,000
PO-0029	Mississippi River Reintroduction into Maurepas Swamp	\$4,730,000	\$4,730,000	\$4,730,000	\$14,190,000
PO-0163	Golden Triangle Marsh Creation ³	\$3,600,000	\$1,300,000	\$1,000,000	\$5,900,000
PO-0174	Biloxi Marsh Living Shoreline	\$1,700,000	\$1,200,000	\$7,712,500	\$10,612,500
TE-0113	Houma Navigation Canal Lock Complex ⁴	\$10,000,000	\$9,000,000	\$50,000,000	\$69,000,000
N/A	Lower Mississippi River Management	\$1,600,000	\$1,600,000	\$1,600,000	\$4,800,000
N/A	Adaptive Management	\$10,040,000	\$9,517,421	\$11,755,675	\$31,313,096
N/A	Parish Matching Program ⁵	\$20,000,000	TBD	TBD	\$20,000,000
N/A	RESTORE Center of Excellence	\$1,648,000	\$1,800,000	\$800,000	\$4,248,000
Total RESTORE Expenditures		\$71,318,000	\$48,206,637	\$132,798,175	\$252,322,812
Total Oil Spill Expenditures		\$266,548,786	\$152,974,785	\$802,892,706	\$1,222,416,277
GOMESA Oil Spill Expenditures		(\$1,600,000)	\$0	\$0	(\$1,600,000)
Surplus Oil Spill Expenditures		(\$8,000,000)	\$0	\$0	(\$8,000,000)
State Oil Spill Expenditures		\$256,948,786	\$152,974,785	\$802,892,706	\$1,212,816,277

Notes:

- 1- Red font denotes projected expenditures for which funding has not yet been procured.
- 2- Projects may be initiated with Trust Fund revenue if available to be reimbursed with oil spill revenues.
- 3- Project funding includes \$1.6 million in GOMESA funding for landrights tasks.
- 4- Project partially funded with surplus funds (see Table B-5).
- 5- 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).

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Appendix C

Barrier Island Status Report

BARRIER ISLAND STATUS REPORT

Fiscal Year 2018 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.

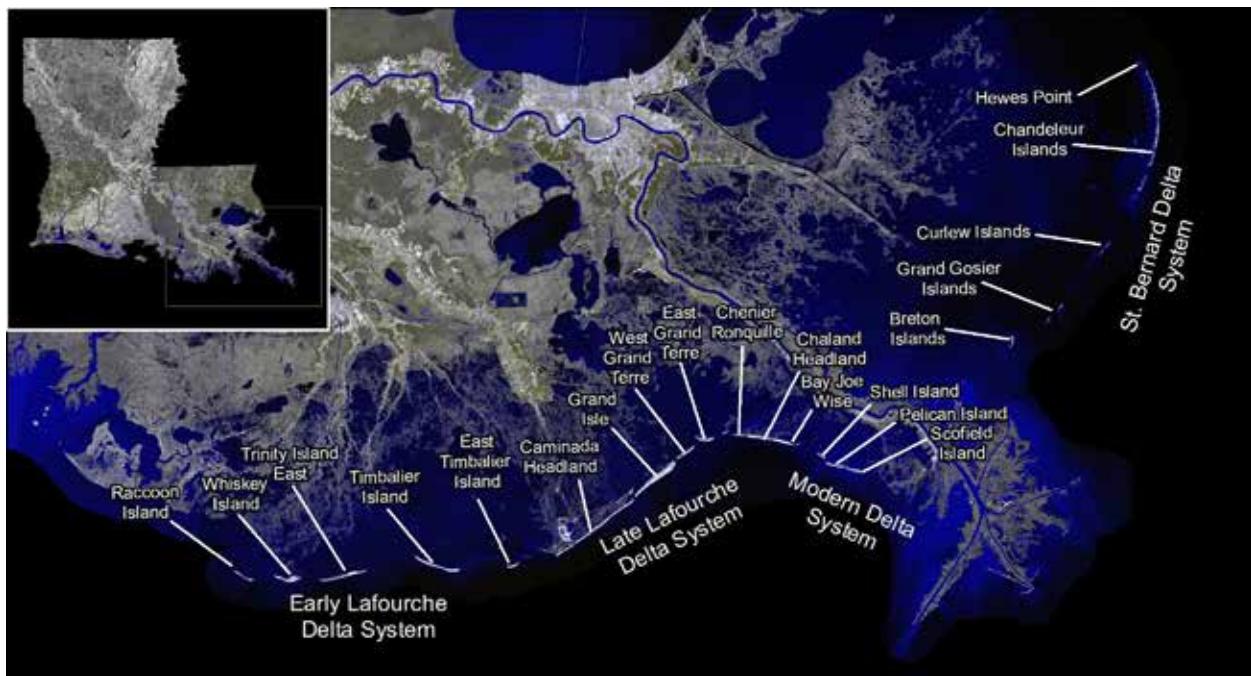


Figure 1. Location of barrier islands and Barrier Island Delta Systems in Louisiana

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 37 barrier island projects have been constructed to date (including 12 in the Early Lafourche Delta System, 16 in the Late

Lafourche Delta System, 7 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 the 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 7 in the full report presents the dimensions of the minimized restoration templates.

FUTURE PLANS

Future plans for Louisiana's barrier islands include additional projects, continuation of system wide barrier island monitoring via BICM, continued improvements in borrow area management, management of relevant sediment, geophysical, and ecological data, and improved overall understanding of sediment budgets and sediment management requirements to support the needs of the Coastal Master Plans barrier shoreline projects and better prioritize Louisiana's barrier shoreline efforts.

Table 1. List of constructed and pending barrier island projects in Louisiana

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

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Appendix D

Caernarvon & Davis Pond Operational Plans for 2017

Available Online (www.coastal.la.gov)

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Appendix E

Inventory of Non-State Projects

A. Parish CIAP Projects

PARISH CIAP PROJECTS

Project Number	Project Name	Project Description	Project Type	Agency/Sponsor	House District	Parish	Access Benefited	Distressed Community	Festivity Cost	Landbridge Cost	Livingstion Cost	Restoration Cost	Planning Unit	Project Summary				
														Start Date	End Date	Budget	Notes	
CLAP-BS-17	Lake Lery Rim Re-Establishment and Marsh Creation	MC BOEMRE/FWS	1	103	SUB.	300	Pending	N/A	\$497,417	\$8,188,293								1
CLAP-PO-39	Bald Cypress/Tupelo Coastal Forest Protection	LA BOEMRE/FWS	18	88	Liv.	1,762	2011	N/A	\$260,443	\$2,774,290								1
CLAP-PO-40	Hydrologic Restoration in the West Swamps Maurepas Swamps	HR BOEMRE/FWS	18	88	Liv.	6,458	Pending	N/A	\$863,185	\$2,594,680								1
CLAP-PO-41	Update of St. Bernard Parish Coastal Zone Management Plan	PL BOEMRE/FWS	1	103	SUB.	N/A	N/A	N/A	\$200,000	N/A					Funds will be used so that the St. Bernard Parish Coastal Zone Management Plan may be updated.			1
CLAP-PO-42	West LaBranche Shoreline Protection	SP BOEMRE/FWS	19	56	SIC.	N/A	Pending	N/A	N/A	\$3,600,000					This project involves the continuation of rock shoreline protection project on the south shore of Lake Ponchartrain in St. Charles Parish. The project will consist of installing approximately 2,150 linear feet of rock dike on the existing shoreline and the construction of a 130-foot-long timber pile bridge at the mouth of Bayou Labranche.			1
CLAP-PO-43	East LaBranche Shoreline Protection	SP BOEMRE/FWS	19	56	SIC.	N/A	Pending	N/A	N/A	\$930,917					This project involves the continuation of rock shoreline protection project on the south shore of Lake Ponchartrain in St. Charles Parish. The project will consist of installing approximately 15,300 linear feet of rock dike.			1
CLAP-PO-45	East Bank Wastewater Assimilation Plant	MM BOEMRE/FWS	18	57	StLa	2,400	Pending	N/A	N/A	\$1,600,000					This project will construct a wetland assimilation treatment plant which will collect wastewater from secondary treatment modules in Grand Point, Louisiana. It will pump the wastewater to the point area that will discharge into seven acres of forested wetland areas that will directly affect 2,400 acres of wetlands.			1
CLAP-PO-46	Reserve Relief Canal Shoreline Protection Project	SP BOEMRE/FWS	19	57	StLo	N/A	Pending	N/A	\$28,3015	\$1,730,042					The proposed project will consist of approximately 1,400 linear feet of shoreline protection extending in easterly and westerly direction in St. John the Baptist Parish, where the Reserve Relieve Canal enters Lake Maurepas and entrance LaCombe and the Tammany Trace linear park south of U.S. 190 in LaCombe, Louisiana within the Bayou LaCombe watershed.			1
CLAP-PO-48	Green Property Preservation Project	LA BOEMRE/FWS	11	90	SIT.	27	2011	N/A	N/A	\$1,345,000					This project includes the acquisition of a 27.2 acre parcel to preserve a sensitive wetland composed of pristine cypress swamp and bottomland hardwoods from future commercial or residential development. It is located between Bayou LaCombe and the Tammany Trace linear park south of U.S. 190 in LaCombe, Louisiana within the Bayou LaCombe watershed.			1
CLAP-PO-49	French Property Preservation Project	LA BOEMRE/FWS	11	90	SIT.	40	2009	N/A	N/A	\$1,718,150					This project includes the acquisition of a 40 acre parcel composed of pine trees and mixed hardwoods with inclusion hardwoods, which lies between the I-12 Service Road and Bayou Libid in Slidell, Louisiana. This project is to educate the public about the value of wetlands. Invasive plant species will be removed and nest boxes will be installed.			1
CLAP-PO-51	Mandeville Aquatic Ecosystem Restoration Project	MM BOEMRE/FWS	11	89	SIT.	N/A	2010	N/A	N/A	\$3,734,879					This project will include an upgrade of the existing wastewater treatment plant and construction of a discharge structure and piping system for wetland assimilation. It will construct 2.5 miles of fence main for disbursement of treated effluent into 1.7 square miles of uninhabited wetland adjacent to the western border of the City of Mandeville.			1
CLAP-PO-52	Lake Ponchartrain Shoreline Protection	SP BOEMRE/FWS	6	73	Tang.	N/A	Pending	N/A	\$694,400	\$5,882,716					The project is located in Tangipahoa Parish between Pass Manchac and the mouth of the Tangipahoa River. The goal of the proposed project is to construct approximately 12,000 linear feet of forestshore protection.			1

PARISH CIAP PROJECTS

Program	Project Number	Project Name	Project Type	Project Sponsor	House District	Parish	Asses Bestfield	Conservation Date	Foothills Comparison	Landdepths Cost	Restoration Cost	Restoration Dates	Restoration Costs	Restoration Dates	Planning Unit	Project Summary				
																Phase I	Phase II	Phase III		
CTAP	PO-53	Wetland Wastewater Assimilation Process Planning	PL	BOEMRE/FWS	18	58	N/A	2009	N/A	\$45,994	N/A	N/A	N/A	\$1,860,558	N/A	1	The study will develop a plan to allow wetland assimilation to provide tertiary treatment to wastewater while improving wetland quality. The study will analyze potential sites and set project goals. The final report will provide preliminary characterizations of the parish's wetland systems, their suitability for wastewater assimilation, an analysis of the wetlands' loading and assimilation capacities, and capabilities of the wetlands and preliminary engineering and cost analyses.			
CTAP	PO-70	Northshore Beach Marsh Creation Restoration	MC	BOEMRE/FWS	11	90	Slt.	600	Pending	N/A	N/A	N/A	N/A	\$265,100	\$2,989,653	1	This project is located in the Ponchartrain Basin in St. Tammany Parish. Project features include approximately 600 acres of marsh creation via hydraulic dredging and placement of 2 million cubic yards of material. The likely borrow location is Lake Ponchartrain, the Highway 11 Canal, and Bayou Bonfou and associated canals. The objectives of this project are to create approximately 600 acres of intermediate marsh, reduce erosion of adjacent interior marshes, and maintain and support the integrity of the Lake Ponchartrain shoreline.			
CTAP	PO-71	Waterline Booster Pump Station, East Bank	INF	BOEMRE/FWS	18	58	Slt.	N/A	2011	N/A	N/A	N/A	N/A	\$10,000	\$10,000	1	The project would construct a waterline booster pump along LA Highway 44 in Convent, Louisiana in St. James Parish. The construction includes housing a 40 hp motor with a 1,100 gallon/minute high-service pump and connecting to the existing 1 inch PVC waterline at two locations in order to establish a loop and bypass system. The station will have a metal building with a concrete floor to enclose the pump and electrical equipment.			
CTAP	BA-50	Bayside Segmented Breakwaters at Grand Isle	SP	BOEMRE/FWS	8	105	Jef.	N/A	2012	N/A	\$307,709	N/A	N/A	N/A	\$2,989,653	N/A	2	The project is located in Jefferson Parish, Louisiana, along the bay side of Grand Isle, Louisiana. The purpose of this project is to reduce erosion on the bay side of Grand Isle. Twenty-four 300 foot breakwaters (approximately 1.5 miles) will be constructed on the back-bay side of Grand Isle.		
CTAP	BA-51	Groose Bayou Ridge Creation and Shoreline Protection	PL	BOEMRE/FWS	8	105	Jef.	1,200	2011	N/A	\$165,935	N/A	N/A	N/A	\$7,642,285	N/A	2	This project located in Lafitte, Jefferson Parish, Louisiana, will help protect shoreline erosion by creating over 8,000 linear feet of additional shoreline through the use sediment from the Mississippi River, and vegetative planting along the west side of Groose Bayou. This project will help establish a wetland ridge which will function as habitat for native species of plants and animals.		
CTAP	BA-52	Lower Lafitte Shoreline Stabilization at Bayou Rigolettes	SP	BOEMRE/FWS	8	105	Jef.	N/A	Pending	N/A	\$387,986	N/A	N/A	N/A	\$7,642,285	N/A	2	This project located within the Barataria Basin and reduce saltwater intrusion and deterioration of interior marsh. Over 10,600 linear feet of foreshore rock revetment will be constructed, along with a water control structure in order to protect the interior marshes.		
CTAP	BA-53	Martinique Forest Ridge Restoration	VP	BOEMRE/FWS	20	54	Laf.	60	N/A	N/A	\$700,000	N/A	N/A	N/A	\$2,209,910	N/A	2	Distributary ridges and Chenier ridges along the coast of Louisiana are disappearing at an alarming rate. Projects such as these help establish ridge habitats and associated wetlands which are extremely important for millions of migrating Neotropical songbirds that cross the Gulf of Mexico, in addition to providing wetland habitat for coastal plant and animal species.		
CTAP	BA-54	Northwest Little Lake Marsh Creation and Enhancement	DM MC VP	BOEMRE/FWS	20	54	Laf.	100	2011	N/A	\$222,430	N/A	N/A	N/A	\$2,209,910	N/A	2	This project, located in Lafourche Parish, will use dredged dredge material to create 30-40 acres of wetlands in interior open water bodies (enhancing 70-100 acres of marsh) and plant 2 rows of smooth cordgrass along approx. 7,500 linear feet of the lake shoreline.		
CTAP	BA-56	Update of the Plaquemines Parish Coastal Management Plan	PL	BOEMRE/FWS	1	105	Plaq	N/A	N/A	N/A	\$300,000	N/A	N/A	N/A	Funds will be allocated to the Parish so that they may update their coastal management plan.	N/A	2			
CTAP	BA-57	Tidelwater Road Flood Protection	INF	BOEMRE/FWS	1	105	Plaq	N/A	2010	N/A	N/A	N/A	N/A	\$3,364,310	Tidelwater Road is subject to heavy inundation from directional winds that elevate tides over the roadway. Wetland loss in the area is severe, and along much of Tidelwater Road's length there is open water in canals and ponds that about the road shoulder. Tidelwater Road is an important access point for the oil and gas industry. This project also proposes to create flood protection along the entire length of Tidelwater Road.	2				

PARISH CIAP PROJECTS

Program	Project Number	Project Name	Project Type	Project Sponsor	House District	Parish	Acres Benefited	Construction Dates	Funding Sources	Landowner Co-ops	Permitting Dates	Permitting Co-ops	Project Summary			Planning Unit
													Completion Date	Start Date	End Date	
CIAP	BA-59	Waterline Booster Pump Station, West Bank	INF	BOEMRE/FWS	18	58	N/A	2009	N/A	N/A	\$236,700					2
CIAP	BA-61	West Bank Wetland Conservation and Protection	LA	BOEMRE/FWS	18	58	Sta.	235	2010	N/A	N/A	\$718,620				2
CIAP	BA-62	West Bank Wastewater Assimilation Plant	MM	BOEMRE/FWS	18	58	Sta.	2,400	Pending	N/A	N/A	\$1,757,026				2
CIAP	BA-63	Small Dredge Program	DM	BOEMRE/MC	20	54	Laf.	175	2010	N/A	\$160,250		\$2,789,031			
CIAP	BA-64	Jump Basin Dredging and Marsh Creation	MC	BOEMRE/FWS	1	105	Plaq.	7	Pending	N/A	N/A	\$800,000				2
CIAP	BA-65	Fifi Island Restoration Extension	BI	BOEMRE/FWS	8	105	Jef.	6	Pending	N/A	\$208,251		\$2,338,605			2
CIAP	NA	Culvert Installation Through Existing Berms and Board Roads	LA	BOEMRE/FWS	18	58	Sta.	N/A	Pending	N/A	N/A	\$90,686				2
CIAP	PO-90	West Lac Des Allemands Shoreline Protection	SP	BOEMRE/FWS	18	58	Sho.	N/A	Pending	N/A	\$507,369		\$3,313,183			2
CIAP	CS-36	Shoreline Protection at Intracoastal Park	SP	BOEMRE/FWS	27	36	Cal.	3	Pending	N/A	N/A	\$1,000,000				4
CIAP	CS-37	South GIWW Restoration	HR SP	BOEMRE/FWS	30	36	Cal.	2,500	Pending	N/A	\$83,074		\$525,459			4

PARISH CIAP PROJECTS

Program	Project Number (Refereed)	Project Name	Project Type	Assessor/Sponsor	State District	Acres Dredged	Construction Dates	Erosion/Land Loss Cost	Design/Development Cost	Engineering, Design & Construction Cost	Planning Unit	Project Summary		
												The project is a 1,200 acre marsh restoration/protection project located in Calcasieu Parish, Louisiana, approximately 3.0 miles northwest of Hackberry. This project proposes four different components: 1. Two water control structures; 2. Four miles of new levee construction; 3. Repair of 1 mile of existing levee on the eastern and western boundaries; and 4. Placement of approximately four miles of rip rap rock dike along the Gulf Intracoastal Waterway (GIWW). 4		
CIAP	CS41	Horseshoe Lake Marsh Restoration	HR	BOEMRE/FWS	30	33	Cal.	1,200	Pending	N/A	\$350,000	\$1,650,000		
CIAP	CS42	South Johnson Bayou Restoration	HR	BOEMRE/FWS	25	47	Cam.	N/A	Pending	N/A	\$54,000	\$618,700	This proposal refers to the Chenier Plain portion of Coast 2050, Region 4, Johnson's Bayou Ridge mapping unit. The project features include the replacement of existing water control structures (two 24 inch culverts) that are currently not functioning as designed, and the refurbishment of one mile of adjacent levees. 4	
CIAP	CS43	Dreux Island Restoration	HR	BOEMRE/FWS	25	47	Cam.	600	2012	N/A	\$48,000	\$514,850	This project features include: 1) the replacement of one existing 24 inch water control structure that is currently not functioning due to storm impacts and 2) the refurbishment of approximately 4,000 linear feet of adjacent levees. The new structures will reduce saltwater intrusion into the project area and restore historic salinity and hydrologic regimes. Without this project the 600-acre intermediate and brackish marsh will experience extensive interior marsh loss. 4	
CIAP	CS44	Rabbit Island	DM MC SP	BOEMRE/FWS	25	47	Cal. Cam.	200	Pending	N/A	\$440,540	\$1,559,460	The project is located in the Calcasieu-Sabine Basin, in the West Cove of Calcasieu Lake. The goal of the project is to restore approximately 200 acres of pelican nesting and marsh habitat to Rabbit Island by adding sediment, through the beneficial use of sediment dredged from the Calcasieu Ship Channel, and 2,500 linear feet of small limestone shoreline protection to the west corner of Rabbit Island. 4	
CIAP	CS48	Bank Stabilization: Dugas Cut to Kelso Bayou	PL	BOEMRE/FWS	25	47	Cam.	N/A	N/A	N/A	\$580,000	N/A	This project will provide the engineering and design in order to continue the construction of approximately two miles of rip-rap dike from Dugas Landing to Kelso Bayou and reclaim eroded channel banks utilizing spoil material from dredging activities when more funding becomes available to the parish. 4	
CIAP	CS-50	East Little Pecan Bayou Restoration	HR	BOEMRE/FWS	26	47	Cam.	1,500	2010	N/A	\$37,611	\$638,030	This project is located along Little Pecan Bayou in the south central portion of Cameron Parish. Project features include the installation of one bulkhead with four 48 inch water control structures at the location of an existing plug. The objective of the proposed project is to repair the water control structures so that pre-Hurricane Rita salinity and water levels can be restored to approximately 1,500 acres of marsh. 4	
CIAP	CS-51	Little Chenier Road	HR INF	BOEMRE/FWS	25	47	Cam.	N/A	2010	N/A	\$16,493	\$262,888	This project is located on the east end of Little Chenier Road and south of the Big Burn Marsh. Approximately 2,700 linear feet of roadway needs to be raised approximately two feet to an elevation of +4 feet NAVD, to prevent excessive flooding south of the Little Chenier Road by stopping water from overtopping the road during abnormally heavy rain events and flooding the marshes south of Little Chenier Road. 4	
CIAP	CS-52	Clear Marais Bank Protection	SP	BOEMRE/FWS	30	36	Cal.	1,500	Pending	N/A	\$175,000	\$1,825,000	The project is located north of the Gulf Intracoastal Waterway (GIWW) approximately 10 miles northwest 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. 4	
CIAP	ME-26	West Big Burn Bridge Restoration	HR MM	BOEMRE/FWS	25	47	Cam.	10,000	2010	N/A	\$52,572	\$970,138	This proposal refers to the Chenier Plain portion of Coast 2050, Region 4, Big Burn mapping unit. Project features include the replacement of one existing water control structure (three 8-foot bays) that is currently not functioning as designed. 4	
CIAP	ME-27	South Little Pecan Bayou Restoration	HR	BOEMRE/FWS	25	47	Cam.	24,600	Pending	N/A	\$133,641	\$1,735,121	This proposal refers to the Chenier Plain portion of Coast 2050, Region 4, Little Pecan mapping unit. Project features include the replacement of three existing water control structures (three 4-inch culverts) that are currently not functioning as designed, one new water control structure (that includes three 18 inch culverts), and the refurbishment of portions of three miles of existing levees (adding in some locations 2 feet of material to return the levees to +3 feet NAVD). 4	

PARISH CIAP PROJECTS

Project Number	Project Name	Project Type	Age/C/Sponsor	Specific District	Tide/District	Parish	Assets Benefited	Construction Dates	Feasibility Cost	Engineering Costs	Land/Erosion Costs	Restoration Costs	Project Summary			Planning Unit	
													Cost/Benefit	Completion Date	Cost		
ME-30	North Memento Restoration	HR M	BOEMRE/FWS	25	47	Cam.	10,000	2011	N/A	\$211,141	\$3,006,631						4
NA	Calcasieu Parish Administrative Assistance	PL	BOEMRE/FWS	27	36	Cal.	N/a	N/A	N/A	\$20,000	N/A			This project will provide necessary financial assistance to Calcasieu Parish Government to manage and implement the CIAP program.			4
TE-59	Atakapas Canal Hydrologic Restoration	DM HR	BOEMRE/FWS	21	60	Assu.	12	Pending	N/A	\$48,000	\$977,000			This project will remove excessive accumulated sediment from Atakapas Canal at its intersection with Lake Veret in Assumption Parish for a distance of approximately 2,000 feet improving water quality, fisheries habitat, and sport fishing access. The removed sediment will be beneficially used to restore approximately 12 acres of bald cypress habitat along the shoreline of Lake Veret. As part of the project, cypress trees will be planted at the rate of 3/2 trees per restored acre.			3a
TE-60	Lake Veret Swamp and Lake Kin Restoration	DM MC	BOEMRE/FWS	21	60	Assu.	40	Pending	N/A	\$115,000	\$4,634,146			Located in west-central Assumption Parish, Lake Veret accumulates sediment in its shallow areas. The proposed project will use a hydraulic dredge to remove material that will be used beneficially. The project objective is to remove accumulated sediment from Lake Veret and improve the condition of 40 acres of deteriorating lake rim and adjacent swamp habitat.			3a
AT-06	Point Cheureuil Shoreline Protection	MC SP	BOEMRE/FWS	21	50	SIM.	25	Pending	N/A	\$204,461	\$1,653,704			The project is located in Region 3, Atchafalaya River Basin, St. Mary Parish, along the southeastern shoreline of East Cote Blanche Bay, around Point Cheureuil and the northeastern shoreline of Atchafalaya Bay. The eroding shoreline was caused by open water fetch and resulting wave energy from East Cote Blanche and Atchafalaya Bays. Project features will protect the natural ridge functions of the Bayou Sale Ridge and protect the adjacent marshes.			3b
AT-07	Deer Island Pass Realignment	DM HR MC	BOEMRE/FWS	21	51	SIM.	50	Pending	N/A	\$313,413	\$2,440,352			Located in St. Mary Parish, this project near the mouth of Deer Island Bayou will dredge a 280 foot long, 280 foot wide channel to improve water and sediment flow into northeast Atchafalaya Bay. The dredged material will be beneficially used to reduce shoreline erosion and to create about 30 acres of marsh.			3b
AT-08	Bayou Amy Boat Launch and Educational Pavilion	PA	BOEMRE/FWS	22	46	SIMt.	N/A	Pending	N/A	\$47,950	\$342,050			This project located in St. Martin Parish will construct an open-air pavilion and a 1,235 foot long nature trail adjacent to an existing wilderness canoe trail. This project will serve as a gateway to the Atchafalaya Basin providing public access, information and educational opportunities. It will ultimately tie into Lake Fausse Point State Park.			3b
AT-09	Stephenville Wastewater Assimilation and Facility Restoration	MM	BOEMRE/FWS	21	50	SIMt.	5	Pending	N/A	N/A	\$2,201,002			This project will include an upgrade of the existing wastewater treatment plant infrastructure and construction of a discharge structure and piping system into the adjacent wetlands for wastewater assimilation. Stephensville's wastewater facility is located in Stephensville along Bayou Millhouse in Lower St. Martin Parish.			3b
AT-10	Beau Bayou Water Quality and Sediment Reduction	HR SNT	BOEMRE/FWS	22	46	SIMt.	23,000	Pending	N/A	\$340,960	\$3,360,461			This project consists of a combination of multiple actions including dredging, gapping and creating in-line sediment traps in and adjacent to Beau Bayou in St. Martin Parish. This will correct existing sediment overload and lack of oxygen (hypoxia) improving fisheries habitat as well as the overall health of the system.			3b
TV-24	Weeks Bay/Commercial Canal Marsh Creation and Shoreline Protection	PL	BOEMRE/FWS	22	49	Ibe. Ver.	N/A	N/A	\$200,000	N/A	N/A			Feasibility Study of methods of marsh creation to build landmass and create vegetated wetlands. Project will evaluate various methods to create a sediment deposition field and protect the existing shoreline. This will enhance natural processes to create landmass between Weeks Bay and the GIWW and protect it.			3b
TV-25	Port of Iberville Bridge Replacement - Port Road over Roderre Lateral	INF	BOEMRE/FWS	22	49	Ibe.	N/A	2012	N/A	\$66,465	\$391,807			The project is located in Iberville Parish, and will aid the Port of Iberville in its day-to-day operations. This project will replace the bridge on Port Road over Roderre Lateral. The existing bridge is approximately 28 feet wide and 60 feet long. The Port of Iberville handles a substantial amount of OCS produced products and the large equipment used in transporting these products take a major toll on the port's bridges and roadways.			3b

PARISH CIAP PROJECTS

Program	Project Number	Project Name	Project Type	Assessor/Sponsor	Shoreline Distress	Flood Distress	Public	Assesment Dates	Construction Dates	Permit Dates	Asces/Breasted	Costs	Project Summary			Planning Unit
													Engineering Costs	Labor/Hire Costs	Equipment Costs	
CIAP	TV-32	Lake Sand Terracing	MC SP VP	BOEMRE/FWS	22	49	Ibe.	55	2013	N/A	\$66,500	\$1,094,130	The project is located in Ibena Parish on the Marsh Island State Wildlife Refuge, and will construct approximately .55 acres of shallow bay bottom terraces planted with native vegetation. The construction of the terraces will result in the direct creation of .34 acres of marsh and it is anticipated that construction of the terraces will result in a 50% reduction in the erosion of the neighboring shoreline.			3b
CIAP	TV-33	Lake Tom Terracing	MC SP VP	BOEMRE/FWS	22	49	Ibe.	55	2013	N/A	\$66,500	\$645,534	The project is located in Ibena Parish on the Marsh Island State Wildlife Refuge, and will construct approximately .55 acres of shallow bay bottom terraces planted with native vegetation. The construction of the terraces will result in the direct creation of .55 acres of marsh and it is anticipated that construction of the terraces will result in a 50% reduction in the erosion of the neighboring shoreline.			3b
CIAP	TV-35	Vermilion Bay Shoreline Restoration	SP VP	BOEMRE/FWS	22	49	Ibe.	132	2012	N/A	\$330,000	\$4,662,196	The project is located along the Vermilion Bay Shoreline south of Tigre Lagoon; it will establish approx. 8,100 linear feet of shoreline using the wave dampening structure determined to be most feasible. These structures will also allow for sediment trapping and accretion.			3b
CIAP	TV-36	Planning Assistance and Administration (St. Mary Parish)	PL	BOEMRE/FWS	21	50	STM.	N/A	N/A	N/A	\$25,000	N/A	This project will provide necessary financial assistance to St. Mary Parish Government to manage and implement the CIAP program.			3b
CIAP	TV-37	Burns Point Recreation Park Improvements	SP	BOEMRE/FWS	21	50	STM.	N/A	2011	N/A	N/A	\$1,010,000	This project in St. Mary Parish at the Burns Point Recreation Park adjacent to East Isle Blanche Bay, will provide a 600 foot sheet bulkhead and walkway along the park's shoreline. This will stop the rapid erosion that is occurring at the park's shoreline and provide access for inspection.			3b
CIAP	TV-38	Thorgerson Road Improvements	INF	BOEMRE/FWS	21	50	STM.	N/A	2012	N/A	\$134,000	\$1,018,761	The project is located in Berwick and extends to Morgan City in St. Mary Parish. This project will upgrade Thorgerson Road from Hwy 90 to the River Road, as a result, the project will increase capacity, and improve safety and efficiency during normal operations. The road improvement feature includes the widening of the existing road. The preliminary project benefit is to provide improved traffic flow and safety while increasing roadway access to the industrial and commercial facilities located in Berwick, Louisiana.			3b
CIAP	TV-40	Vermilion Parish CZM Planning and Development	PL	BOEMRE/FWS	26	47	Ver.	N/A	N/A	N/A	\$100,000	N/A	Funds will be available to assist Vermilion Parish in improvements to the Coastal Zone Management plan for the parish.			3b
CIAP	TV-41	Shoreline Protection on Southwest Point at Southwest Pass	PL	BOEMRE/FWS	26	47	Ver.	N/A	N/A	N/A	\$217,782	N/A	This project is located in Vermilion Parish. The goal of the project is to armor the shoreline via 8,759 linear feet of onshore revetment for the south shoreline of Vermilion Bay at Southwest Point. The funds allocated in the current project would be used to initiate surveying, geotechnical investigation, engineering, design and permit development, so that when additional funds become available this project will be able to proceed to construction in a more-timely manner.			3b
CIAP	TV-44	Henry Hub Access Improvements - Highway 331 Realignment	INF	BOEMRE/FWS	26	49	Ver.	N/A	Pending	N/A	\$39,500	\$272,299	This project will realign approximately 2,000 linear feet of LA Hwy. 331, at a location approximately .5 miles south of LA Hwy. 14. This segment of the roadway has a reverse curve that represents a safety hazard for traffic traveling this highway to the Henry Hub.			3b
CIAP	TV-45	Shoreline Protection and Marsh Creation at Tiger Point	SP	BOEMRE/FWS	26	47	Ver.	N/A	Pending	N/A	\$186,455	\$1,199,130	This project will install 1,500 feet of cement bags at Tiger Point in Vermillion Parish to slow erosion rates by half.			3b
CIAP	TV-46	Henry Hub Access Improvements - Charlie Field Road Bridge Replacement	INF	BOEMRE/FWS	26	49	Ver.	N/A	2011	N/A	\$67,000	\$371,201	This project will replace an existing three span timber bridge with a four span concrete deck bridge for the Charlie Field Road Bridge across a tributary of Bayou Tigre. The bridge is located approximately ~2,300 feet south of LA Hwy. 14, in eastern Vermilion Parish.			3b
CIAP	TV-49	Intracoastal City Street Improvements	INF	BOEMRE/FWS	26	47	Ver.	N/A	2011	N/A	\$51,400	\$469,416	This project provides for the reconstruction of several roadways in the Intracoastal City area to mitigate the damage caused by heavy oilfield support truck traffic over the years. The streets to be improved are as follows: Offshore Road (4,700 linear feet), M. L. Liquid Road (850 linear feet), Barge Road (1,450 linear feet), Teal Road (1,200 linear feet).			3b

PARISH CIAP PROJECTS

Project Number	Project Name	Project Type	Agency/Sponsor	Senate District	House District	Parish	Access/Benefited Communities	Feasibility/Cost	Environmental Design Cost	Landscaping Cost	Construction Cost	Planning Unit	Project Summary	
													CTAP	CTAP
TV-50	Henry Hub Access Improvements - Charlie Field Road	INF	BOEMRE/FWS	26	49	Vet.	N/A	2012	N/A	\$87,270	\$442,000	This project provides for the widening and reconstruction of Charlie Field Road, a vital link between LA 14 and the Henry Hub, from LA Hwy. 14 to LA Hwy. 331 in eastern Vermilion Parish. The project will widen the existing 18-foot wide roadway to 20-foot surface for approximately 4,100 feet to provide room for the truck traffic to utilize this stretch of the roadway to access the Henry Hub.	3b	
TV-51	Oyster Reef Parallel to Cheniere au Tigre	SP	BOEMRE/FWS	26	47	Vet.	N/A	Pending	N/A	\$209,800	\$1,229,184	This project will create a one mile oyster reef 1,300 feet from shore by using approved available materials. Oyster spat are plentiful in this area; therefore, creating this base will establish a living sustainable reef. This project will reduce shoreline loss rate by half. It will slow down wave energy, attract fish and shellfish habitat, slow coastal erosion, and increase recreational fishing opportunities.	3b	
TV-53	North Prong Schooner Bayou	FD SP	BOEMRE/FWS	26	49	Vet.	N/A	2010	N/A	\$54,277	\$1,595,723	This project is located on the east bank of the North Prong of Schooner Bayou, from the GIWW to the Schooner Bayou Locks. With several breaches to contain, the project will employ culverts with flap gates to allow the freshwater flow to continue into the marshes to the east, while preventing uncontrolled saltwater intrusion into the Merrittau Basin.	3b	

Program; CIAP=Coastal Impact Assistance Program

Project Type: B=Barrie Island; D=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; SD=Sediment Diversions; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; VP=Vegetation Planting.
Agency/Sponsor: BOEMRE=Bureau of Ocean Energy Management, Regulation, and Enforcement; FWS=US Fish and Wildlife Service. The administration of CLAP was transferred from BOEMRE to FWS on Oct. 1, 2011.
Jeff=Jefferson, Lat=Lafourche, Liv=Livingston, Ort=Orleans, St=St. Charles, Sul=St. James, Sto=St. John the Baptist, STM=St. Mary, SMT=St. Martin, STU=St. Tammany, Tan=Tangipahoa, Ter=Terrebonne, Plaq=Plaquemines, Ver=Vermillion

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Appendix E

Inventory of Non-State Projects

B. 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

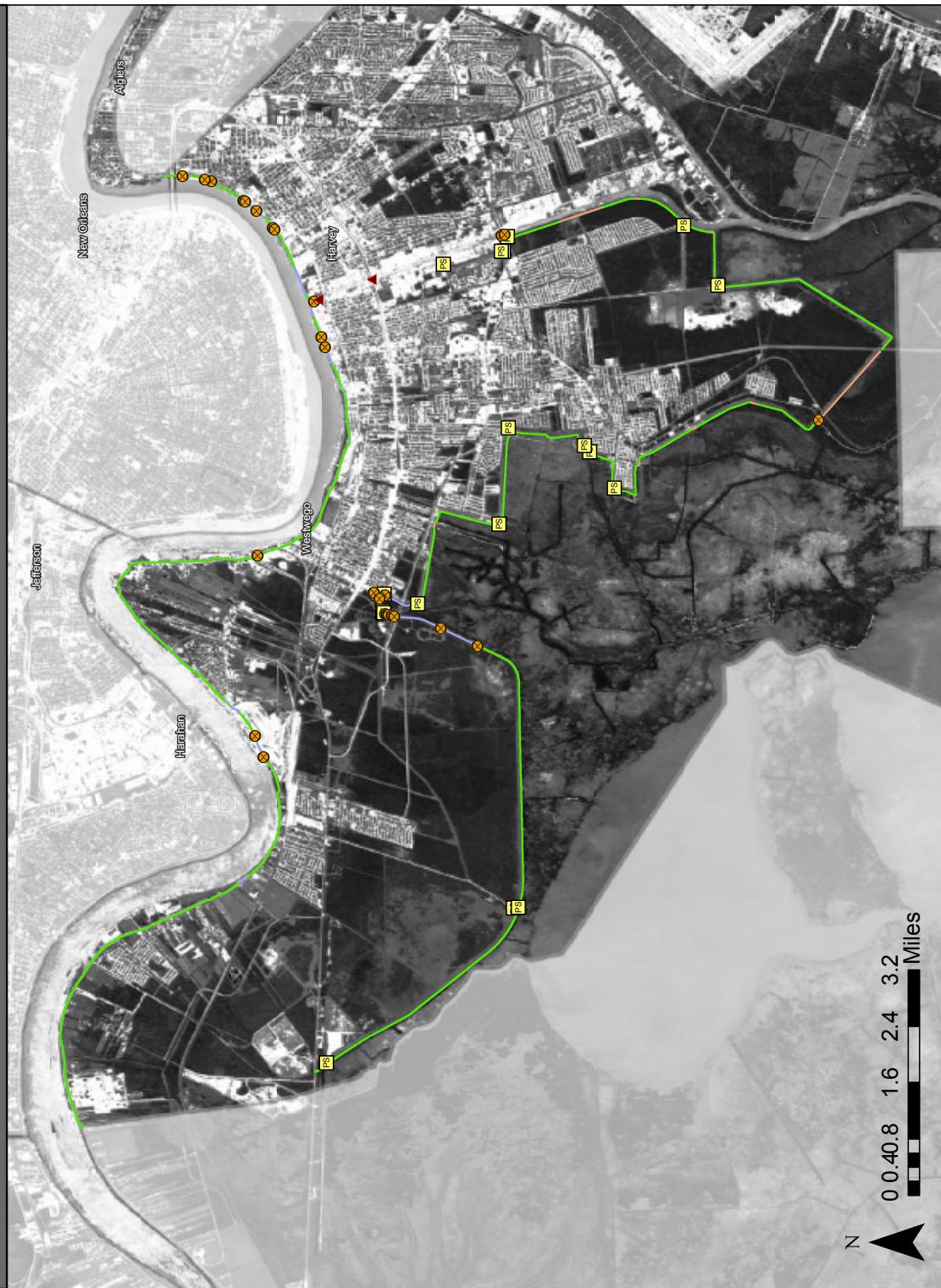
Data Sources:
USACE
LA OCPR



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 OCPRA



ALGIERS LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

Legend

Levee Construction Type
Earthen Levee
I-Wall
Control Structure
Control Structure
Pump Station
Water Bodies

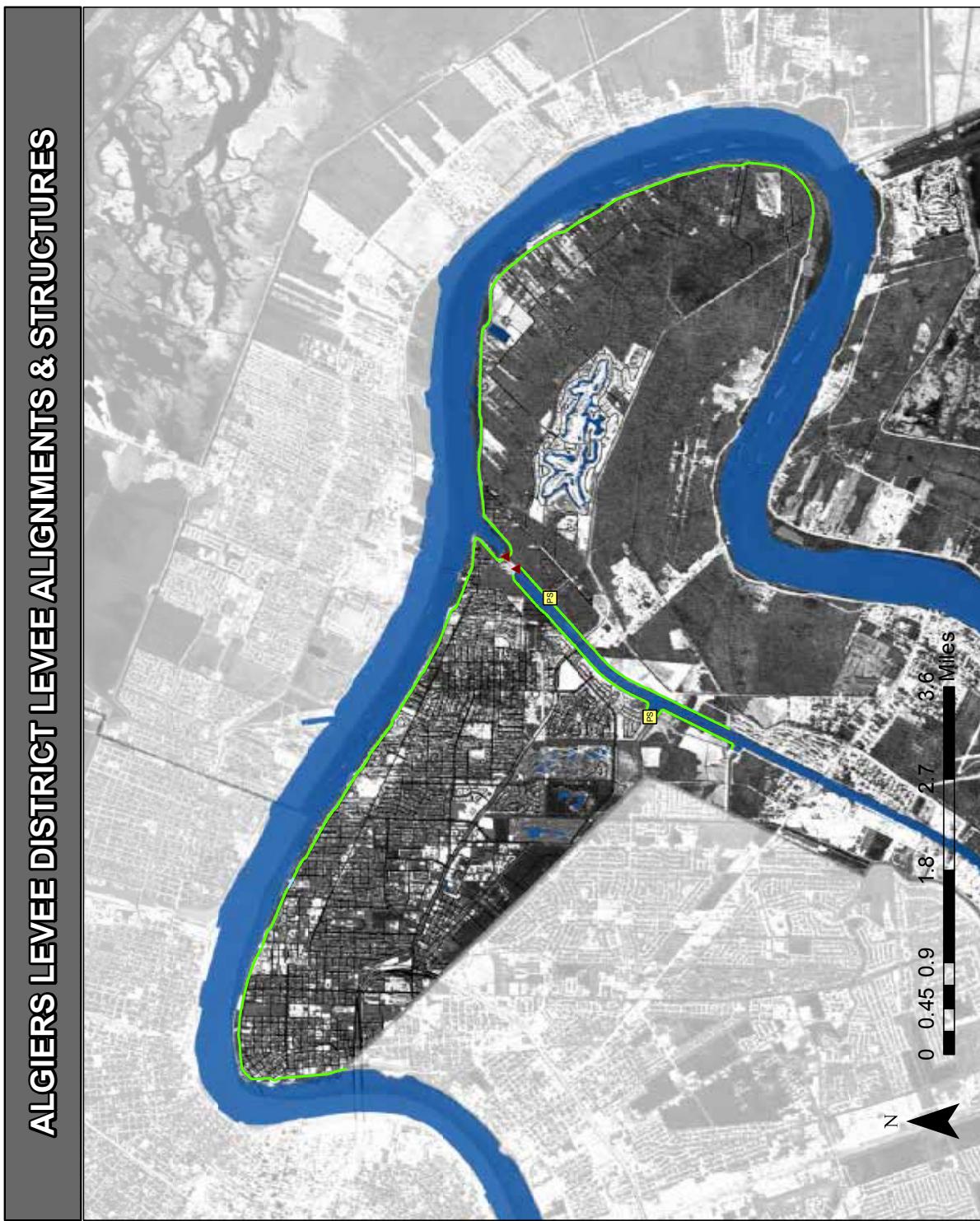


Map by: Louisiana Office of
Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

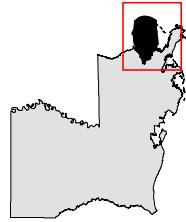
Data Sources:
USACE
LA OCPR



LAKE BORGNE BASIN LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES

Legend

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

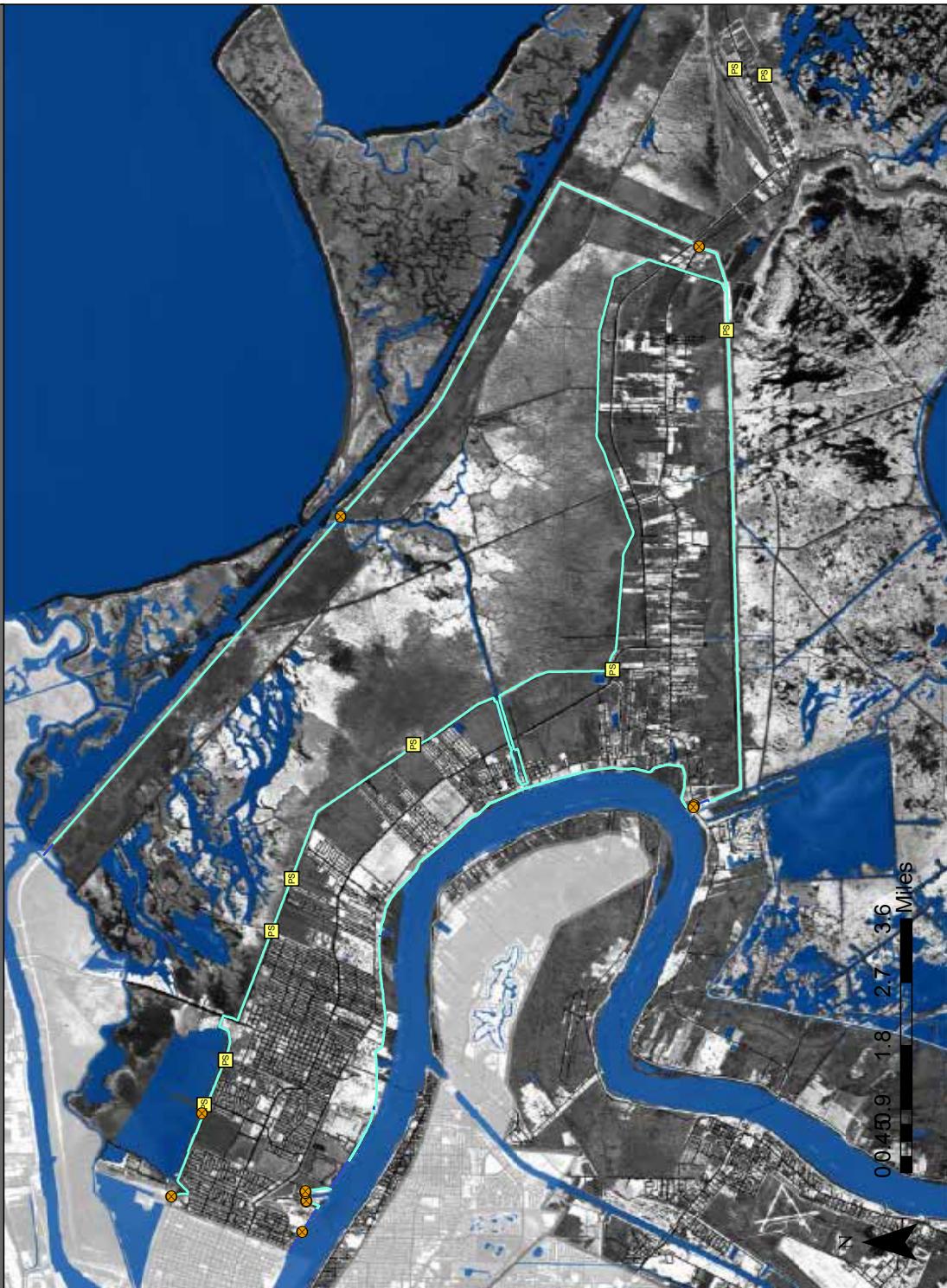


Map by: Louisiana Office of
Coastal Protection & Restoration

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 & Restoratio
Date: April 28, 2009

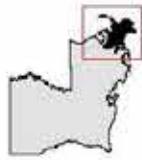
Imagery: 2000 SPOT
Data Sources:
USACE
LA OPCR



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

Date Sources:
USACE
LA.CPRA



PONTCHARTRAIN LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



Map by: Louisiana Office of
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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

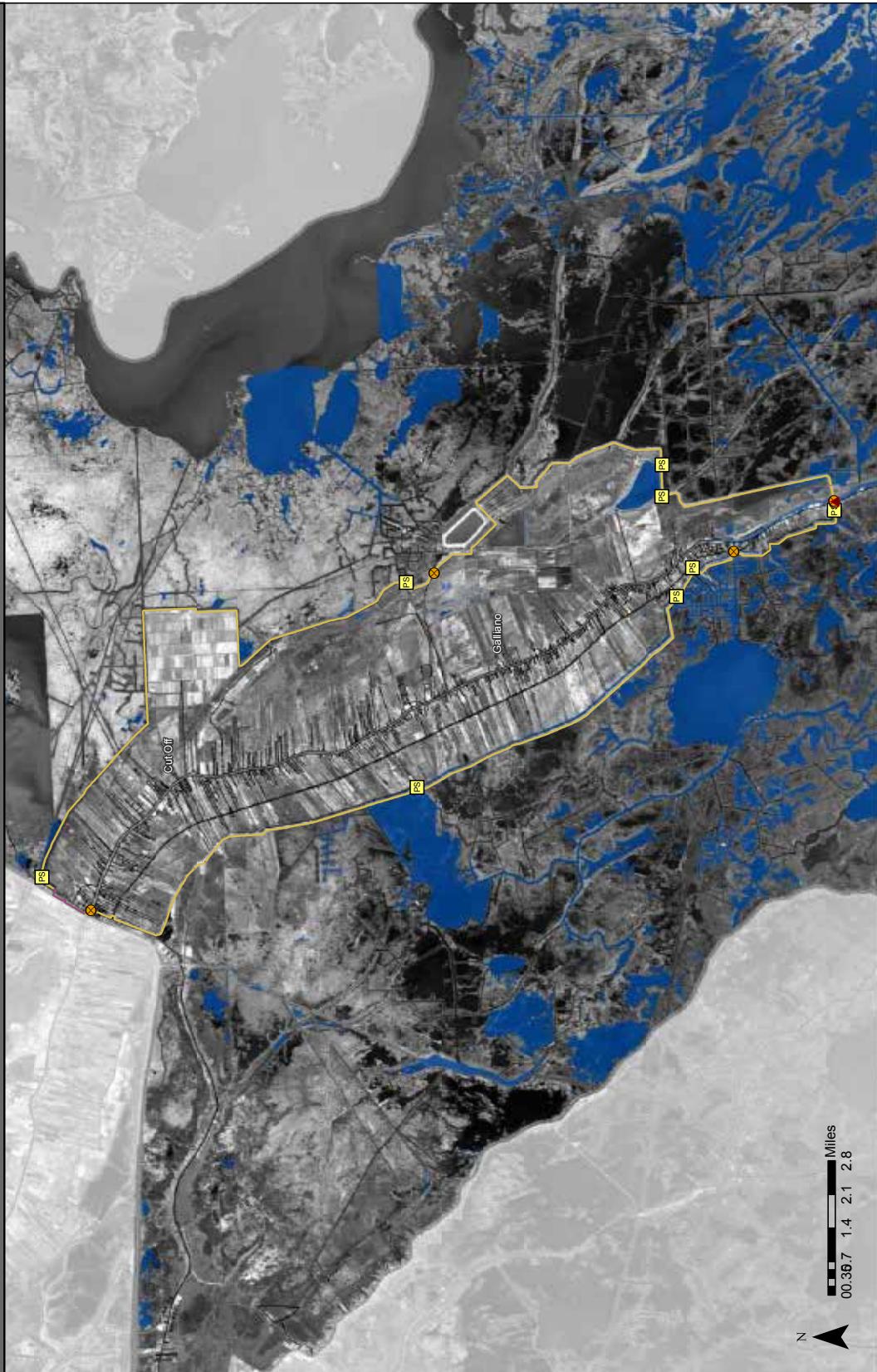


Map by: Louisiana Office of
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Date: April 28, 2009

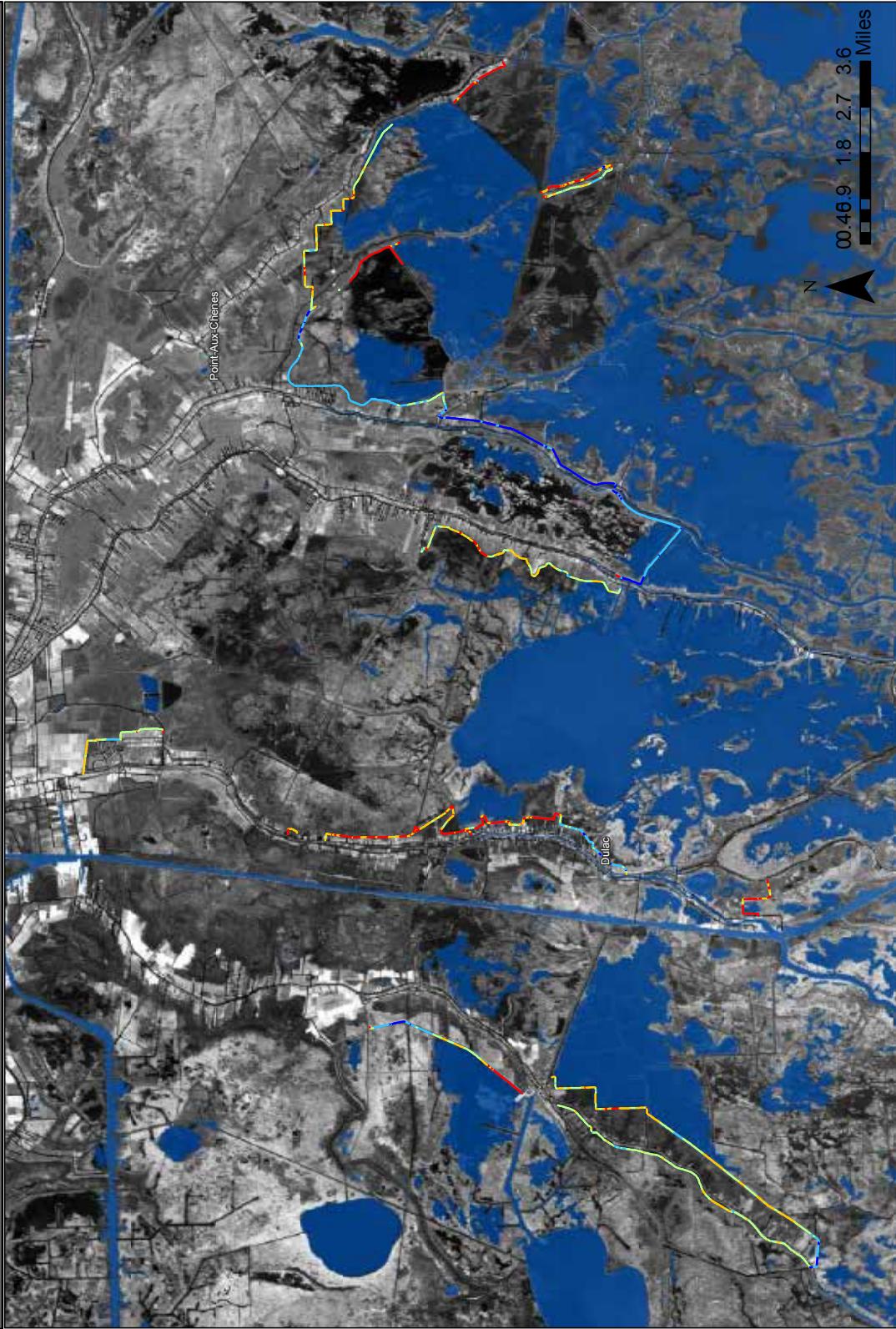
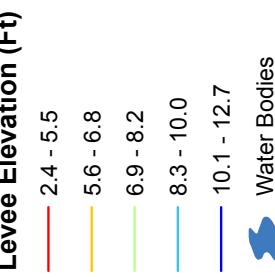
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Data Sources:
USACE
LA OCP&R



TERREBONNE LEVEE & CONSERVATION DISTRICT LEVEE ELEVATIONS

Legend



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

C. Projects and Project Concepts in Coastal Parish Master Plans

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Number	Local Project Name	Project Type	House District	Project Costs	Project Summary		Planning Unit
					Ter.	Ter.	
N/A	FD37	Sediment Introductions at South Shore Sister Lake	MC	20	53	Ter.	Not provided
N/A	FD21	Marsh Creation North Stump Canal	MC	20	51	Ter.	Not provided
N/A	FD22	Marsh Creation School Board Property South of Swing Bayou	MC	20	51	Ter.	Not provided
N/A	FD23	Marsh Creation North-East of Toilet Bowl Canal	MC	20	51	Ter.	Not provided
N/A	FD24	Marsh Creation North East of Bayou Parchant	MC	20	51	Ter.	Not provided
N/A	FD70	Brandy Canal Hydrological Restoration Project	HR	20	51	Ter.	Not provided
N/A	FD57	Dredge Bayou Terrebonne from Company Canal to Humble Canal	HR	20	53	Ter.	\$5,000,000 - \$20,000,000
N/A	FD58	Dredge Minors Canal (GIWW to Lake Decade)	HR	20	51	Ter.	Not provided
N/A	FD62	Dredge Company Canal to Convey Freshwater Flow to Terrebonne Marshes	HR	20	53	Ter.	\$6,000,000 - \$20,000,000
N/A	FD59	Connect St. Louis Canal to Petit Caillou	HR	20	53	Ter.	Not provided
N/A	FD85	Large Pump Station at Bayou Terrebonne	HP	20	53	Ter.	\$500,000
N/A	FD66	Pump Station at Bayou Petit Caillou for Freshwater Diversion to Ward 7	HP	20	53	Ter.	Not provided
N/A	FD79	Bayou Terrebonne Freshwater Diversion Project	FD	20	53	Ter.	\$2,000,000 - \$5,000,000
N/A	FD68	South Lake Decade Freshwater Enhancement and Shoreline Protection	HR, SP	20	51	Ter.	\$5,800,000
N/A	FD71	Ashland Freshwater Introduction and Wetland Assimilation Project	WA	20	53	Ter.	\$6,000,000
N/A	FD77	Woodlawn Ranch Road	HR	20	53	Ter.	\$500,000
N/A	FD85	Reconnect Grand Bayou to GIWW	HR	20	53	Ter.	\$5,000,000 - \$20,000,000
N/A	FD33	Freshwater Introduction via Blue Hammock Bayou	FD	20	51	Ter.	Not provided
N/A	FD67	Faigout Canal Freshwater Enhancement (Phase I)	HR	20	51	Ter.	\$10,000,000
N/A	FD90	Freshwater Diversion using the Bayou Terrebonne Flood Gate	FD	20	53	Ter.	Not provided
N/A	FD72	Lower Bayou Dularge Pump Station	HR	20	51	Ter.	\$500,000
N/A	FD73	Upper Bayou Dularge	HR	20	51	Ter.	\$500,000
N/A	FD74	Mayfield	HR	20	53	Ter.	Not provided

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Name	Location Number	Project Type	Phase District	Tributary District	Bifurcations	Project Costs	Project Summary		Planning Unit
							Start Date	End Date	
St. Barthelemy Canal	JE-1	LaBranché Wetlands Drainage Diversion	FD	8	105	Jef.	\$8,55,000	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 storm water control structure to divert storm water drainage into the LaBranché 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
Bretton Sound	N/A	Baptiste Collette	MC	1	105	Plaq.	Not provided	Bretton Sound Fringe Marsh Barriers.	1
American/California Bayou	N/A	Baptiste Collette	MC	1	105	Plaq.	Not provided	Baptiste Collette and Surrounding Marshes.	1
Bayou Lamoque	N/A	Caernarvon	FD	1	105	Plaq.	Not provided	American/California Bay/Bohemian Diversion.	1
Caernarvon	N/A	Fort St. Phillip	FD	1	105	Plaq.	Not provided	Bayou Lamoque Diversion.	1
Grand Bay	N/A	White Ditch	FD	1	105	Plaq.	Not provided	Caernarvon Diversion.	1
Bretton Land bridge	N/A	Baptiste Collette-Fort St. Phillip	MC	1	105	Plaq.	Not provided	Fort St. Phillip Diversion.	1
Bohemian/White's Ditch	N/A	Baptiste Collette-Fort St. Phillip	RR	1	105	Plaq.	Not provided	Grand Bay Diversion.	1
Caernarvon	N/A	Bohemian/White's Ditch	RR	1	105	Plaq.	Not provided	White's Ditch Diversion.	1
Caernarvon	N/A	Osticra-Bayou Lamoque	RR	1	105	Plaq.	Not provided	Bretton Sound Land Bridge.	1
River aux Chenes	N/A	Osticra-Bayou Lamoque	RR	1	105	Plaq.	Not provided	Baptiste Collette to Fort St. Phillip Ridge Reforestation.	1
Bretton Sound	N/A	River aux Chenes	SP	1	105	Plaq.	Not provided	Back Levee Canal Bohemia to White's Ditch Ridge Reforestation.	1
Violet	N/A	Bretton Sound	FD	1	105	Plaq.	Not provided	Caernarvon South of Caernarvon Ridge Reforestation.	1
Lake Borgne	N/A	Bretton Sound	SP, OR	1	103	StB.	Not provided	Caernarvon South of Caernarvon Ridge Reforestation.	1
Bayou Terre aux Boeufs/La Louire	N/A	Bretton Sound	MC	1	103	StB.	Not provided	Fort St. Phillip to Osticra Lock Ridge Reforestation.	1
Biloxi Marsh	N/A	Bayou Terre aux Boeufs/La Louire	MC	1	103	StB.	Not provided	Osticra Lock to Bayou Lamoque Ridge Reforestation.	1
Central Wetlands	N/A	Biloxi Marsh	MC	1	103	StB.	Not provided	Osticra Lock to Bayou la Louire Land Bridge.	1
Lake Borgne/MRGO	N/A	Central Wetlands	MC	1	103	StB.	Not provided	Marsh Creation-Bayou Terre aux Boeufs to Bayou la Louire Land Bridge.	1
Orleans Landbridge	N/A	Lake Borgne/MRGO	MC	1	103	StB.	Not provided	Marsh Creation-Bayou Terre aux Boeufs to Bayou la Louire Land Bridge.	1
Biloxi Marsh	N/A	Orleans Landbridge	MC	1	103	StB.	Not provided	Marsh Creation-Bayou Terre aux Boeufs to Bayou la Louire Land Bridge.	1
Lake Borgne	N/A	Biloxi Marsh	SP, OR	1	103	StB.	Not provided	MRGO/Lake Borgne Landbridge Marsh Creation.	1
Orleans Landbridge	N/A	Lake Borgne	SP	1	103	StB.	Not provided	Orleans Landbridge Marsh Creation.	1
Orleans Landbridge	N/A	Orleans Landbridge	SP, OR	1	103	StB.	Not provided	Orleans Landbridge Marsh Creation.	1
Bayou Dupont Sediment Delivery Expansion	NA-9	Orleans Landbridge	SP	1	103	StB.	Not provided	Biloxi Marsh Oyster Reef/Shoreline Protection.	1
Bayou Dupont Sediment Delivery Expansion	NA-9	St. Bernard Parish	OR	1	103	StB.	Not provided	Lake Borgne Shoreline Protection-MRGO Land Bridge.	1
Bayou Rigollets, Bayou Perot and Harvey Cut Channel Management	PR-1	St. Bernard Parish	HR	8	105	Jef.	\$2,770,000	Orleans Landbridge shoreline protection.	1
Dupre Cut Project (BA-26) Wetland Restoration	MG-3	St. Bernard Parish	MC	8	105	Jef.	\$45,880,000	This project would supplement a sediment delivery system 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
Bayou Rigollets, Bayou Perot and Harvey Cut Channel Management	PR-1	CMPPRA	CMPPRA	NA-9	105	Jef.	\$25,000,000	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
Dupre Cut Project (BA-26) Wetland Restoration	MG-3	CMPPRA	CMPPRA	PR-1	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

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Name	Location	Dredge Type	Dredge Number	Dredge District	Tours District	Parish	Project Summary	Planning Unit		
								Phase I	Phase II	Phase III
CWPRA	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 remove sediments from the bottom of the waterway and place them behind the existing rock arm on 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 III 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	
CWPRA	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	
CWPRA	BS-1	PPL 3 (XBA-1c) Grand Pine Island Restoration	SP	8	105	Jef.	N/A	The project would reconstruct breached shorelines, then restore interior marsh elevations and sand dune features.	2	
CWPRA	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 oiled canal breaches and shoreline erosion along surrounding water bodies. The project would construct approximately 28,000 feet of shoreline protection interspersed with viable oiled 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 ill targets would be established during project design to maximize project effectiveness and minimize oil and gas impacts.	2	
CWPRA	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	
CWPRA	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	
CWPRA	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	
CWPRA	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 on 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 reduce pathways for saltwater intrusion and extreme tidal exchange.	2	

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Number	Object Name	Project Type	Parish	State and Local	Site and Local	Local Project Number	Object Number	Project Description	Project Summary			Planning Unit
									Phase District	Phase District	Phase District	
CIA-P	Bl-5	Grand Isle Oil and Gas Pipeline Corridor Shoreline Protection - Alternative 1	SP	8	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			
CIA-P	Bl-5	Grand Isle Oil and Gas Pipeline Corridor Shoreline Protection - Alternative 2	SP	8	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			
CIA-P	LAF-3	Leeville Bridge Preliminary Design	INF	8	105	Jef.	\$1,750,000	This project would complete the preliminary design for the construction of a replacement for the Leeville Bridge. The preliminary design phase would include survey, geotechnical testing, mitigation, permits, and the preparation of a preliminary design.	2			
CRAA	PR-11	Bayou Perot/Rigolettes Peninsula Restoration	MC, SP	8	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			
CRAA	NA-8	Goose Bayou to Lafitte Levee	HP	8	105	Jef.	N/A	This project would construct flood protection from the Town of lean Lafitte southward to Goose Bayou. The flood protection system would be constructed east of LA Highway 45 at the wetland/non-wetland interface.	2			
CRAA	Bl-3	Elmer's Island Acquisition and Preservation	LA	8	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			
CRAA	CS-4	Wetland Harbor Activities Recreational Facility (WHARF)	LA	8	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			
CRAA	BB-1	North Barataria Bay Shoreline Wave Breaks	SP	8	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 Bay in the eastern portion of the project, north of Barataria Bay in the middle portion of the project, and adjacent to Bayou Cholas, Bayou Deford, 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			
CRAA	NA-1	Naomi Siphon Sediment Enrichment	FD	8	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			
NA-6	Rosehome Wetlands Sewage Effluent Diversion	WA	8	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				
CS-3	Bayou Segnette Wetlands Sewage Effluent Diversion	WA	8	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 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				
Bl-6	Grand Isle Plan - Part I - NW Grand Isle Breakwater Enhancement	SP	8	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	Bay Coquette Barrier Island	Bl	1	105	Plaq.		Not provided	Barrier Island fronting Bay Coquette east of Scofield Island.	2			
N/A	Chaland Headland	Bl	1	105	Plaq.		Not provided	Chaland Headland.	2			
N/A	Chenier Ronquille	Bl	1	105	Plaq.		Not provided	Chenier Ronquille.	2			
N/A	E. Grand Terre	Bl	1	105	Plaq.		Not provided	East Grande Terre.	2			
N/A	Pass Chaland to Grand Bayou	Bl	1	105	Plaq.		Not provided	Pass Chaland to Grande Bayou Pass.	2			
N/A	Pelican Island	Bl	1	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	Sandy Point Barrier Island	Bl	1	105	Plaq.		Not provided	Barrier Island E of Bay Coquette to Sandy Point.	2			

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Name	Local Project Number	Project Type	Sea Level Rise District	House District	Project Costs	Project Summary		Planning Unit
						Plaq.	Ter.	
Sandy Point	Bl	1	105	Plaq.	Not provided	Sandy Point/Bay Coquette.		2
Scofield Island	Bl	1	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
Shell/Anaux Island	Bl	1	105	Plaq.	Not provided	Shell/Anaux Island.		2
Baptiste College	DE	1	105	Plaq.	Not provided	Baptiste College sub-delta.		2
Venice	FD	1	105	Plaq.	Not provided	Venice: Tiger Pass to West Bay.		2
Bastian Bay/Buras	FD	1	105	Plaq.	Not provided	Buras/Bastian Bay Diversion.		2
Myrtle Grove	FD	1	105	Plaq.	Not provided	Myrtle Grove Diversion.		2
Naomi	FD	1	105	Plaq.	Not provided	Naomi Siphon.		2
Spanish Pass/Venice Diversion	FD	1	105	Plaq.	Not provided	Spanish Pass Freshwater Diversion.		2
West Pointe a la Hache	FD	1	105	Plaq.	Not provided	West Pointe a la Hache Siphon.		2
Empire-Triumph Fringe Marsh	MC	1	105	Plaq.	Not provided	Fringe Marsh Construction.		2
Myrtle Grove-Naomi	MC	1	105	Plaq.	Not provided	Myrtle Grove to Naomi Fringe Marsh.		2
Port Sulphur/West Pointe a la Hache	MC	1	105	Plaq.	Not provided	Port Sulphur to West Pointe a la Hache Fringe Marsh.		2
Venice-Triumph Fringe Marsh	MC	1	105	Plaq.	Not provided	Fringe Marsh Construction.		2
West Point a la Hache-Myrtle Grove	MC	1	105	Plaq.	Not provided	West Pointe a la Hache to Myrtle Grove Fringe Marsh.		2
Bayou Long/Bayou Fontanelle	RR	1	105	Plaq.	Not provided	Empire Channel Islands, Bayou Long/Bayou Fontanelle.		2
Lake Hermitage	RR	1	105	Plaq.	Not provided	Bayou Grande Cheniere/Lake Hermitage.		2
Nain	RR	1	105	Plaq.	Not provided	Ridge North of Bay de la Cheniere (West of Nain).		2
Bastian Bay	SP	1	105	Plaq.	Not provided	Bastian Bay.		2
Bay Coquette	SP	1	105	Plaq.	Not provided	Bay Coquette.		2
Bay Joe Wise	SP	1	105	Plaq.	Not provided	Bay Joe Wise.		2
Bay Long	SP	1	105	Plaq.	Not provided	Bay Long.		2
Bayou Grand Llard/Buras	SP	1	105	Plaq.	Not provided	Bayou Grande Llard/Buras Fringe Marsh.		2
Bayou Long	SP	1	105	Plaq.	Not provided	Empire Waterway/ Bayou Long.		2
Grand Terre (West)	SP	1	105	Plaq.	Not provided	North of West Grande Terre Island.		2
Venice	RR	1	105	Plaq.	Not provided	Ridge West of Venice along banks of Spanish Pass.		2
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 will halt saltwater intrusion into the basin, preserving the integrity of the Mermant 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
South-West Shore Lake Decade	MC	20	51	Ter.	Not provided	Description not provided.		3a
East Island Dune and Marsh Restoration	Bl	20	53	Ter.	Not provided	Description not provided.		3a
Marsh Creation to the North of Lost Lake	MC	20	51	Ter.	Not provided	Description not provided.		3a
West Shore Lake Decade	MC	20	51	Ter.	Not provided	Description not provided.		3a
Lake Decade Marsh Creation and Nourishment	MC	20	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
North Shore Lake Merchant	MC	20	51	Ter.	Not provided	Description not provided.		3a
Marsh Creation East of Lake Bourdreaux	MC	20	53	Ter.	Not provided	Description not provided.		3a

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Project Name	Concept Number	Concept Type	Scope District	Houses District	Project Status	Project Summary		Planning Unit
						Ter.	Ter.	
FD 11	Marsh Creation North Racourro Bay	MC	20	51	Ter.	Not provided	Description not provided.	3a
FD 35	Bayou Dularge to Grand Pass Ridge Restoration	RR	20	51	Ter.	Not provided	Description not provided.	3a
FD 36	Bayou Decade Ridge Restoration from Lake Decade to Racourro Bay	RR	20	51	Ter.	Not provided	Description not provided.	3a
FD 12	Marsh Creation Bush Canal	MC	20	53	Ter.	Not provided	Description not provided.	3a
FD 13	Lake Bourdeaux-Lake Quillman Shoreline Protection and Marsh Creation	MC, SP	20	53	Ter.	Not provided	Description not provided.	3a
FD 16	Terrebonne Bay Shoreline Protection/Marsh Creation	MC, SP	20	53	Ter.	Not provided	Description not provided.	3a
FD 16	Terrebonne Bay Shoreline Protection/Marsh Creation Project	MC, SP	20	51/63	Ter.	Not provided	Description not provided.	3a
FD 27	Marsh Creation East of Felix Lake	MC	20	53	Ter.	Not provided	Description not provided.	3a
FD 34	Bayou Terrebonne Ridge Restoration - Below Bush Canal	RR	20	53	Ter.	Not provided	Description not provided.	3a
FD 87	Lake Merchant South-West Dularge-Ridge Protection	SP, RR	20	51	Ter.	Not provided	Description not provided.	3a
FD 88	HNC Beneficial Use of Dredge Material (Bay Tambour and Terrebonne Bay)	MC	20	51/63	Ter.	Not provided	Description not provided.	3a
FD 89	Madison/Terrebonne Bays Marsh Creation	MC	20	53	Ter.	Not provided	Description not provided.	3a
FD 14	Marsh Creation North Shore Lake Chien	MC	20	53	Ter.	Not provided	Description not provided.	3a
FD 19	Bay Racourro Marsh Creation and Terracing Project	MC, SNT	20	51	Ter.	Not provided	Description not provided.	3a
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
FD 25	Marsh Creation North Deep Saline Point Bayou	MC	20	53	Ter.	Not provided	Description not provided.	3a
FD 26	Marsh Creation West of Four Point Bayou	MC	20	51	Ter.	Not provided	Description not provided.	3a
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 Merchant Landbridge Project to the west. Marshes both 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
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
FD 69	North Lake Bourdeaux Basin Freshwater Introduction and Hydrologic Management	FI	20	53	Ter.	Not provided	Description not provided.	3a
FD 84	Bank Stabilization along Bush Canal and Bayou Terrebonne	SP	20	53	Ter.	Not provided	Description not provided.	3a
FD 17	DULAC Bayou - Marsh Terracing	SNT	20	51/63	Ter.	Not provided	Description not provided.	3a
FD 18	South Montegut - Marsh Terracing	SNT	20	53	Ter.	Not provided	Description not provided.	3a

PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS

Program	Local Project Number	Project Name	Project Type	House District	Project Costs	Project Summary			Planning Unit
						Ter.	Not provided	Description not provided	
FD 75	Lower Grand Caillou	HR	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 76	Upper Grand Caillou	HR	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 78	Point Aux Chene	HR	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 80	Remove Constrictions/Dredge GIWW from Bayou Black to Bayou Wallace	HR	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 82	Installation of Flap Gated Culverts Under Highway 57 between Dulac and Highway 66	HR	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 3	Plugs Leaks in GIWW (Bankline Protection for GIWW)	HR	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 61	Break in Avoca Guide Levee, North of Horse Shoe to Convey Freshwater to Terrebonne Marshes	FD	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 32	Chatahoula Basin Plan	HR	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 64	Carcenco Bayou Freshwater Introduction Project	HR	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 43	Wine Island	Bl	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 44	West Timbalier Island	Bl	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 30	Beach and Back Barrier Marsh Restoration, East and Trinity Islands	Bl	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 36	Barrier Shoreline Restoration Point Au Fer Island	Bl	20	51	Ter.	Not provided	Not provided	Description not provided	3a
FD 46	Wine Island Rookery	Bl	20	53	Ter.	Not provided	Not provided	Description not provided	3a
FD 48	West Raccoon Island Shoal Enhancement and Protection Rock (Breakwaters) for Whiskey Island	Bl	20	53	Ter.	Not provided	Not provided	Description not provided	3a
N/A	Franklin Canal Closure and Levee Improvements	HP	21	50	SM.	\$5,775,000	\$16,000,000 - \$20,000,000	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 Hurricane 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	Morgan City Levee Improvements	HP	21	50	SM.			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 2006, 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 Calcasieu. 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	Amelia Flood Protection Improvements - Initial Phase (Parish Miller Plan Alternative 2E)	HP	21	50	SM.	\$2,260,350		Amelia flood protection presently consists of a somewhat disparate, non-certifiable levee system which offers minimal backwater protection from Bayou Boeuf and Lake Calcasieu. 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

Project Number	Project Type	State District	House District	Parish	Project Summary				Planning Unit
					Project Cost (\$)	Cost (\$M)	HP	IM	
N/A	N/A	Hanson Canal and Yellow Bayou - Flood Control Structures	HP	21	50	\$IM.	\$6,200,000		3b
✓/N	N/A	Yokelby Levee Improvements	HP	21	50	\$IM.	\$5,000,000		3b
N/A	N/A	Charenton Canal - Flood Control Structure and Levee - Alternative 1	HP	21	50	\$IM.	\$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 from upgrading and proposed federal and/or State funded levees. The timeline 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 Cypremon Ridge tying in to highlands of the Teche Ridge near the parish line.	3b
✓/N	N/A	Charenton Canal - Flood Control Structure and Levee - Alternative 2	HP	21	50	\$IM.	\$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 Cypremon Ridge. A short levee extension extending northward from the westernmost end of the Bayou Teche Levee reach will be required.	3b
✓/N	N/A	Berwick Levee Improvements - Reach W-124 South	HP	21	50	\$IM.	\$200,000	Reach W-124 near Turle'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	N/A	West of Wax Lake Outletto Charenton Canal - Continued Levee Improvements	HP	21	50	\$IM.	\$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 18 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	N/A	Amelia Area - Continuation of Millie P Plan Alternative 2E	HP	21	50	\$IM.	\$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	N/A	Berwick Lock Elevation	HP	21	50	\$IM.	\$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 agricultural land situated between Berwick and Calumet as a direct function of Atchafalaya River flows, both inverte and surge. The USACE is aware of the lock elevation deficiency and has the responsibility to elevate the height as needed.	3b
✓/N	N/A	WHLO East, Wax Lake East, and W-124 Levee Reach Improvements	HP	21	50	\$IM.	\$22,000,000	The reaches currently protecting 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	N/A	SMLD Backwater Plan Reconnaissance and Feasibility Analysis	HP	21	50	\$IM.	\$100,000	Reconnaissance Study and possible feasibility analysis	3b
✓/N	N/A	Amelia Area - Miller Plan Alternative 3E	HP	21	50	\$IM.	\$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 Paourds, 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	N/A	Amelia Area - Louisiana State Master Plan Alignment 1E	HP	21	50	\$IM.	\$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 on the Amelia side southwest 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	N/A	Amelia Area - SMLD Backwater Prevention Plan 4E	HP	21	50	\$IM.		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 GWW 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

Project	Concept Number	Project Name	Project Type	Flood District	Parish	Project Costs	Project Summary		Planning Unit
							Benefit	Impact	
A/N/A	N/A	Bayou Choupique - Levee Improvements and Flood Control Structure	HP	21	50	\$IM.	\$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. The levees along Bayou Sale are proposed for elevation to 18 feet MSL to ensure adequate storm surge protection. Gandy and Ellerlie reaches are included.	3b
A/N/A	N/A	Bayou Sale - Levee Improvements	HP	21	50	\$IM.	\$32,700,000	This Millar 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 Cybrenmont Ridge, crosses Bayou Cybrenmont 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
A/N/A	N/A	West of Charenton Drainage Canal - Levee Construction - Louisiana State Master Plan (SMILD Alternative 2W)	HP	21	50	\$IM.	\$66,250,000	The Louisiana State Master Plan proposes a levee alignment which generally follows the alignment of the Millar Plan's western levee routing, but instead of turning south at the Cybrenmont Ridge, it continues westward crossing the ridge and extends to and beyond the parish line into Iberville Parish.	3b
A/N/A	N/A	West of Charenton Drainage Canal - Levee Construction - Louisiana State Master Plan (SMILD Alternative 1W)	HP	21	50	\$IM.	\$35,000,000	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
A/N/A	N/A	Scott Canal - Flood Control Structure	HP	21	50	\$IM.	\$500,000	Kelley Canal acts as a conduit for storm surges similar to others noted. A flood control structure is proposed to ensure a adequate flood protection for the west end of the parish.	3b
A/N/A	N/A	Kelley Canal - Flood Control Structure	HP	21	50	\$IM.	\$500,000	The Vacherie Canal acts as a conduit for storm surge similar to others noted. A flood control structure is proposed to ensure a adequate flood protection for the west end of the parish.	3b
A/N/A	N/A	Vacherie Canal - Flood Control Structure	HP	21	50	\$IM.	\$500,000	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 Iberville Parish.	3b
A/N/A	N/A	Bayou Tigue Watershed/Flood Protection	HP	26	49	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
A/N/A	N/A	Flood Control Structure at Boston Canal	HP	26	50	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 its south side of the GIWW is proposed.	3b
A/N/A	N/A	Four Mile Canal Structure	HP	26	47	Ver.	Not provided	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
A/N/A	N/A	Hebert Canal Watershed/Storm Protection	HP	26	47	Ver.	\$3,000,000	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
A/N/A	N/A	Protection Levee on the Marsh/Upland Interface	HP	26	47/50	Ver.	Not provided	Armor the south side of the east/west side of LA 330.	3b
A/N/A	N/A	LA Hwy. 330 Hurricane Protection	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
A/N/A	N/A	Flood Control Structure at Oaks Canal	HP	26	50	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 and 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 Vermillion Bay.	3b/4
A/N/A	N/A	Freshwater Bayou Bank Stabilization	SP	26	47	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 debirs.	3b/4
A/N/A	N/A	Utilization of Existing Oil Field Canals	HP	26	47/50	Ver.	Not provided		

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 and Nutrient Trapping; SP=Shoreline Protection; VP=Vegetation Planting; WA=Wastewater Assimilation.
 Parish: Asc.=Ascension, Asu.=Assumption, Cal.=Calcasieu, Cam.=Cameron, Ibe.=Iberia, Jef.=Jefferson, Laf.=Lafourche, Liv.=Livingston, Ort.=Orleans, Plaq.=Plaquemines, StB.=St. Bernard, SIC.=St. Charles, StLa.=St. James, Sto.=St. John the Baptist, StM.=St. Mary, StMt.=St. Martin, StT.=St. Tammany, Tan.=Tangipahoa, Ter.=Terrebonne, Ver.=Vermillion.

PARISH CONCEPTS FROM COASTAL MASTER PLANS

Program	Local Project Number	Project Name	Project Type	House District	Project Cost*	Factsheet	Project Summary		Planning Unit
							Not provided	Not provided	
A/N	CPCS13	Calcasieu Ship Channel Salinity Control Measure Hydrologic Restoration	HR	25	47	Cam.	\$404,198,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS14	Cameron Creole Freshwater Introduction	HR	25	47	Cam.	\$12,482,434	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS19	Constriction of Sabine Lake at Hwy 82 Causeway	HR	25	47	Cam.	\$1,083,514	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS20	East Calcasieu Lake Hydrologic Restoration	HR	25	47	Cam.	\$5,495,089	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS22	East Calcasieu Lake Marsh Creation & Hydrologic Restoration (A)	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS23	East Calcasieu Lake Marsh Creation & Hydrologic Restoration (B)	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS29	First Bayou Freshwater Introduction	HR	25	47	Cam.	\$3,772,082	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS31	Gulf Intracoastal Water Way Calcasieu Locks Expansion	HR	25	47	Cam.	\$300,000,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS34	Gum Cove Ridge Hydrologic Restoration	HR	25	47	Cam.	\$307,820,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS39	Maintain Sabine River Flows into Sabine Lake	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS10	Calcasieu Ship Channel Sediment By Pass	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS70	Plug West Cove Canal	HR	25	47	Cam.	\$1,033,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS53	Sabine River Hydrologic Restoration	HR	25	47	Cam.	\$47,768,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS54	Salinity Reduction at Sabine Lake Causeway	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS59	Tripod Bayou Control Structure	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME09	Humble Canal Hydrologic Restoration (Spillway)	HR	25	47	Cam.	\$3,878,382	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME10	Humble Canal Spillway	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME11	Improved Drainage East Grand Chenier	HR	25	47	Cam.	\$5,000,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME12	Kings Bayou Hydrologic Restoration	HR	25	47	Cam.	\$1,200,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME14	Little Pecan Bayou Hydrologic Restoration	HR	25	47	Cam.	\$8,778,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME18	Mermertau River Hydrologic Restoration	HR	25	47	Cam.	\$76,040,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME20	Mermertau Spillway (Big Burn) Humble Canal	HR	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME21	Muria & Kings Bayou Drainage Improvements	HR	25	47	Cam.	\$1,281,040	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME23	Oak Grove Hydrologic Restoration	HR	25	47	Cam.	\$877,800	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME24	Reconditioning of East End Locks	HR	25	47	Cam.	\$20,000,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME27	Rockefeller Wildlife Refuge Spillway & Hwy 82 Modification	HR	25	47	Cam.	\$12,000,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME30	South Oak Grove Hydrologic Restoration	HR	25	47	Cam.	\$877,800	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME33	West Club Hydrologic Restoration	HR	25	47	Cam.	\$458,407	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME35	Woods Tract Hydrologic Restoration	HR	25	47	Cam.	\$219,450	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS01	Beneficial Use of Dredge Spoil at Sabine National Wildlife Refuge	MC	25	47	Cam.	\$25,939,077	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS02	Black Bayou Marsh Creation	MC	25	47	Cam.	\$1,189,334,181	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS03	Black Bayou Terraces	MC	25	47	Cam.	\$8,532,094	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS04	Black Bayou Terracing Project	SNT	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS05	Black Lake Marsh Restoration	MC	25	47	Cam.	\$4,382,606	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS06	Black Lake Restoration Project	Not Avail.	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS08	Black Lake/Gum Cove Terracing	MC	25	47	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	House District	Parish	Project Costs	Project Summary		Planning Unit
							Cam.	\$620,658,248	
A/N/A	CPCS09	Calcasieu Ship Channel Marsh Creation	MC	25	47	Cam.	\$774,465,811	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS15	Cameron Meadows Marsh Creation	MC	25	47	Cam.	\$2,580,279,941	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS16	Cameron Meadow's Wetland Restoration	MC	25	47	Cam.	\$893,862,252	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS17	Central Canal I/Marsh Creation	MC	25	47	Cam.	\$78,427,828	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS18	Commissionary Point Marsh Creation	MC	25	47	Cam.	\$3,477,117,831	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS21	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$12,979,029	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS22	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$8,847,720	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS23	East Calcasieu Lake Marsh Creation	MC	25	47	Cam.	\$11,977,646	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS24	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
A/N/A	CPCS23	East Cove Marsh Creation	MC	25	47	Cam.	\$13,832,088	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS24	East Cove Marsh Creation	MC	25	47	Cam.	\$26,566,711	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS26	East Prong Grand Bayou Marsh Creation Project	MC	25	47	Cam.	\$780,218,832	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS33	Gum Cove Marsh Creation	MC	25	47	Cam.	\$12,040,467	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS37	Kelso Bayou Marsh Creation	MC	25	47	Cam.	\$24,007,981	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS38	Lake Calcasieu Beneficial Use	MC	25	47	Cam.	\$11,022,316	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS40	Marsh Creation in Calcasieu Lake - Beneficial Use	MC	25	47	Cam.	\$918,359,223	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS41	Mud Lake Marsh Creation	MC	25	47	Cam.	\$39,478,302	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS42	No Name Bayou Marsh Creation	MC	25	47	Cam.	\$87,470,645	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS43	North Cameron Meadows Restoration	MC	25	47	Cam.	\$38,723,287	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS44	North Mud Lake Marsh Creation & Nourishment	MC	25	47	Cam.	\$3,093,080,570	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/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
A/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
A/N/A	CPCS47	Northwest Calcasieu Lake (North of Hackberry) Marsh Creation	MC	25	47	Cam.	\$934,629,690	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS07A	Northwest Calcasieu Lake (North of Hackberry) Component A Marsh Creation	MC	25	47	Cam.	\$1,274,052,035	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS47B	Northwest Calcasieu Lake (South of Hackberry) Component B Marsh Creation	MC	25	47	Cam.	\$2,569,391,271	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS47C	Northwest Calcasieu Lake (South of Hackberry) Component C Marsh Creation	MC	25	47	Cam.	\$1,136,005,097	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS48	Northwest Calcasieu Lake (South of Hackberry) Marsh Creation	MC	25	47	Cam.	\$1,442,245,190	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS48A	Northwest Calcasieu Lake (South of Hackberry) Component A Marsh Creation	MC	25	47	Cam.	\$10,217,288	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS48B	Northwest Calcasieu Lake (South of Hackberry) Component B Marsh Creation	MC	25	47	Cam.	\$53,031,969	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS50	Rabbit Island Marsh Creation	MC	25	47	Cam.	\$22,051,574	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS51	Sabine Marsh Creation Browns Lake Area	MC	25	47	Cam.	\$1,783,258,033	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS52	Sabine Refuge Marsh Creation & Nourishment	MC	25	47	Cam.	\$79,094,433	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS53	Sabine Refuge Marsh Creation Project Cycles 6 & 7	MC	25	47	Cam.	\$604,964,269	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N/A	CPCS56	Southeast Calcasieu Lake Marsh Creation	MC	25	47	Cam.			
A/N/A	CPCS58	Sweet Lake Land & Oil Shorline Protection & Marsh Creation	MC	25	47	Cam.			
A/N/A	CPCS59	Sweet Lake Marsh Creation	MC	25	47	Cam.			

PARISH CONCEPTS FROM COASTAL MASTER PLANS

Program	Local Project Number	Project Name	Project Type	House District	Project Cost*	Project Cost*	Project Summary		Planning Unit
							Phase	Cost	
A/N	CPCSG1A	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
A/N	CPCSG1B	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
A/N	CPCSG1C	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
A/N	CPCSG1D	Vincent and Chinaberry Island Cameron Parish Marsh Creation	MC	25	47	Cam.	\$27,370,884	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS62	West Cove Marsh Creation & Nourishment	MC	25	47	Cam.	\$31,831,587	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	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
A/N	CPME16	Lower Mud Lake Sediment Trapping	MC	25	47	Cam.	\$932,469	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	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
A/N	CPMF28	South Grand Chenier Marsh Creation	MC	25	47	Cam.	\$22,325,704	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF29	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
A/N	CPME34	Willow Cutoff Wetland Restoration	SP	25	47	Cam.	\$774,713	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS07	Black Lake Shoreline Restoration	SP	25	47	Cam.	\$13,668,024	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS11	Calcasieu-Sabine Bank Stabilization	SP	25	47	Cam.	\$25,412,000	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	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
A/N	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
A/N	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
A/N	CPCS32	Gulf Shoreline Protection (Calcasieu River to Freshwater Bayou)	SP	25	47	Cam.	\$452,469,502	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPML19	Mermenau Ship Channel Sediment By Pass	OT	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPCS2A	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
A/N	CPCS2B	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
A/N	CPCS6	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
A/N	CPMF01	Chenier du Fond Restoration & Shoreline Protection	SP	25	47	Cam.	\$31,630,947	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF03	GIWW at Anoco Bank Stabilization	SP	25	47	Cam.	\$1,354,393	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPME05	Grand Lake Shoreline Protection	SP	25	47	Cam.	\$14,085,683	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF06	Grand Lake Shoreline Protection at Umbrella Bay and Larassine Point	SP	25	47	Cam.	\$29,986,251	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF13	Larassine Pool South Levee Protection	SP	25	47	Cam.	\$17,932,158	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF22	North Little Chenier Levee Protection	OT	25	47	Cam.	Not provided	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF25	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
A/N	CPMF26	Rockefeller Refuge Shoreline Protection	SP	25	47	Cam.	\$97,820,948	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF31	Southwest White Lake Shoreline Protection	SP	25	47	Cam.	\$21,077,340	Factsheet, economic benefit, construction cost breakdown available from Parish upon request.	4
A/N	CPMF32	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; INF=Infrastructure; LA=Land Acquisition; MC=Marsh Creation; MM=Marsh Management; OM=Outfall; PIAQ=Plaquemines, St.=St. Bernard, SIC=St. Charles, STA=St. James, Sto=St. John the Baptist, STM=St. Mary, STMT=St. Martin, STT=St. Tammany, WA=Wastewater Assimilation.

Parish: Asc=Ascension, Asu=Assumption, Cal=Catastieu, Cam=Cameron, Ibe=Iberia, Jef=Jefferson, Laf=Lafourche, Liv=Livingston, Orl=Orleans, HR=Hydrologic Restoration; INF=Infrastructure; LA=Land Acquisition; MC=Marsh Creation; MM=Marsh Management; OM=Outfall; PIAQ=Plaquemines, Sta=St. Charles, Sta=St. James, Sto=St. John the Baptist, STM=St. Mary, STMT=St. Martin, STT=St. Tammany, Management; OT=Other project types (infrastructure, etc.); PA=Public Access; PL=Planning; TRR=Ridge Restoration; SD=Sediment Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; TE=Terraces; VP=Vegetation Planting.

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Appendix E

Inventory of Non-State Projects

D. 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 Merchant Landbridge completion	Conoco Phillips	\$30,000	\$5,000
FY2012	LaBranche Wetlands Hydrologic Restoration	Coalition to Restore Coastal Louisiana	\$350,000	\$330,000
FY2012	Reforesting 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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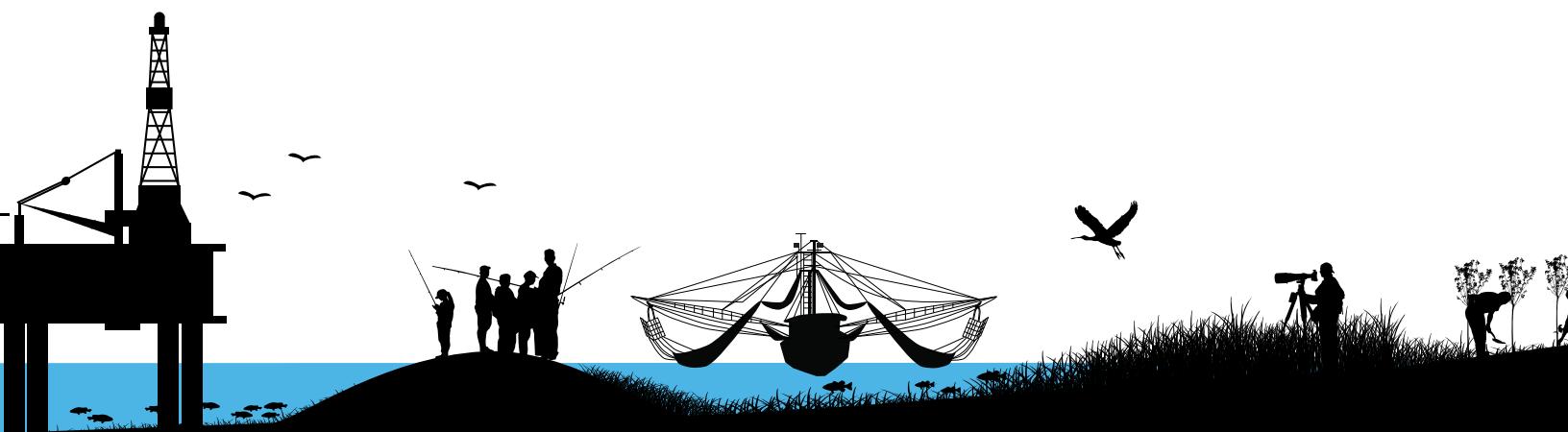
Appendix F

CPRA FY 2018 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 2018

Agency Priority	Department Priority	Agency Number	Project Request Title	Funding Source	(Year 1) FY2018	(Year 2) FY2019	(Year 3) FY2020	(Year 4) FY2021	(Year 5) Outlying Years	Total by Project
1 of 13	1 of 13	109	CPRA Projects	IAT FED NRR STATED CPR STATED	\$2,50,000 \$35,250,000 \$24,000,000 \$200,377,888					\$250,000 \$55,250,000 \$24,000,000 \$200,377,888
2 of 13	2 of 13	109	West Bank and Vicinity, New Orleans, LA Hurricane Protection (BA-66)	GO Bonds	\$0	\$50,000,000	\$50,000,000	\$50,000,000	\$1,350,000,000	\$1,500,000,000
3 of 13	3 of 13	109	Lake Pontchartrain, LA & Vicinity Hurricane Protection Project (PO-63)	GO Bonds	\$0	\$48,000,000	\$48,000,000	\$48,000,000	\$1,296,000,000	\$1,440,000,000
4 of 13	4 of 13	109	Morganza, LA, to the Gulf of Mexico Hurricane Protection Project (TE-64)	GO Bonds	\$33,000,000	\$25,000,000	\$32,000,000	\$35,000,000	\$77,845,000	\$222,845,000
5 of 13	5 of 13	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	\$222,148,000	\$251,432,000
6 of 13	6 of 13	109	Lafitte Area Tidal Protection (BA-75)	GO Bonds	\$13,500,000	\$5,000,000	\$3,500,000	\$0	\$0	\$22,000,000
7 of 13	7 of 13	109	Western St. Charles Flood Protection	GO Bonds	\$5,100,000	\$0	\$0	\$0	\$0	\$5,100,000
8 of 13	8 of 13	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
9 of 13	9 of 13	109	North Shore, Lake Pontchartrain Flood Protection (PO-74)	GO Bonds	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
10 of 13	10 of 13	109	St. Mary Backwater Flooding Protection (AT-024)	GO Bonds	\$5,000,000	\$60,000,000	\$60,000,000	\$0	\$0	\$125,000,000
11 of 13	11 of 13	109	Delcambre-Avery Canal Storm Surge Protection (TV-57)	GO Bonds	\$3,000,000	\$15,000,000	\$8,000,000	\$0	\$0	\$26,000,000
12 of 13	12 of 13	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	\$1,136,890,600
13 of 13	13 of 13	109	South Central Coastal Plan (TV-54)	GO Bonds	\$5,000,000	\$34,247,317	\$34,247,317	\$34,247,317	\$1,952,289,7049	\$2,060,959,000
TOTALS:					\$377,152,888	\$265,847,317	\$286,626,817	\$218,126,817	\$6,052,230,649	\$7,199,984,488







Coastal Protection and Restoration Authority
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